



सत्यमेव जयते

NATIONAL SHIPPING BOARD

MINISTRY OF PORTS, SHIPPING AND WATERWAYS

GOVERNMENT OF INDIA

REPORTS OF THE SUB COMMITTEES

— 2025-26 —

VOLUME I

— Sub-Committees 1-5 —



WISDOM IN THE OCEAN, PROGRESS IN THE NATION



SHIPPING
TONNAGE



GREEN
SHIPBUILDING



SHIP
RECYCLING



SEAFARERS



INLAND
WATERWAYS



पत्तन, पोत परिवहन
एवं जलमार्ग मंत्रालय
MINISTRY OF
**PORTS, SHIPPING
AND WATERWAYS**

**NATIONAL SHIPPING BOARD
ANNUAL REPORT
OF THE
SUB-COMMITTEES OF THE NSB
2025-26
Volume I**

Submitted
under
“Rule 10 of Procedure of National Shipping Board”
as specified under
Schedule II
of the
“National Shipping Board Rules, 2026”



WISDOM IN THE OCEAN, PROGRESS IN THE NATION

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Prepared by:

National Shipping Board Secretariat, New Delhi



**NATIONAL SHIPPING BOARD
MINISTRY OF PORTS, SHIPPING AND WATERWAYS
GOVERNMENT OF INDIA
NATIONAL SHIPPING BOARD
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Foreword by Chairperson, NSB



Sameer Kumar Khare IAS (Retd.)
Chairperson National Shipping Board

The working year 2025–26 has been a significant milestone for India's maritime sector, marked by transformative policy reforms, evolving global challenges, and renewed national commitment towards strengthening the country's maritime capabilities. The geopolitical developments in the Strait of Hormuz, a vital global shipping corridor, underscored the importance of resilient maritime infrastructure, secure supply chains, and a robust national shipping ecosystem.

During the working year 2025-26, the Government of India continued to advance its vision of making India a leading global maritime nation through several landmark initiatives. The enactment of the ***Merchant Shipping Act 2025, the Coastal Shipping Act 2025, the Indian Ports Act, 2025, the Bills of Lading Act 2025 and the Carriage of the Goods by Sea Act 2025*** along with focused efforts towards promoting indigenous shipbuilding, fleet expansion, green shipping, digital transformation, ease of doing business / ease of living reforms, etc., reflect the Government's commitment to creating a modern, sustainable, and globally competitive maritime sector.

A key development during the working year 2025-26 was the reconstitution of the ***National Shipping Board (NSB)*** by the Government of India. The reconstituted Board brings together distinguished representatives from Government, industry, ports, academia, seafarers and other maritime stakeholders to provide informed and inclusive policy advice for the growth of the shipping sector.

India's maritime domain stands at a historic inflection point. As the nation charts its journey toward becoming a developed economy under **Viksit Bharat 2047**, the maritime sector serves as the vital artery of national sovereignty, economic resilience, energy security, and global trade competitiveness. While over 95 percent of India's trade volume and 70 percent of its trade value move across the seas, India's strategic footprint in fleet ownership, domestic shipbuilding, high-value maritime services, and logistics efficiency has historically remained constrained by domestic policy asymmetries, infrastructure bottlenecks, and regulatory fragmentation.

Recognising the diverse opportunities and emerging challenges before the maritime industry, the Board adopted a collaborative approach by engaging extensively with stakeholders across the sector. Based on these consultations and to translate the vision of the **Maritime Amrit Kaal Vision 2047 (MAKV-2047)** into actionable, time-bound, and grounded policy measures, the National Shipping Board (NSB) constituted **15 specialized Sub-Committees** to deliberate on critical areas including maritime legislation, shipping development, shipbuilding, seafarers' welfare, maritime safety, green shipping, digitalisation, coastal shipping, and other strategic issues. The recommendations of these Sub-Committees will play an important role in shaping India's maritime policy framework and strengthening the sector's global competitiveness. Each Sub-Committee was entrusted with a mandate to conduct an in-depth, evidence-based diagnostic study and formulate a practical roadmap in consultation with industrial, technical, and governmental stakeholders.

This compendium presents the consolidated findings, stakeholder submissions, and strategic recommendations across the Sub-Committees. (Note: The reports of Sub-Committee No. 9 and Sub-Committee No. 12 are undergoing final stakeholder consultations and will be submitted separately in due course). The specific strategic domains addressed by the Sub-Committees include:

Sub-Committee No. 1 (Augmentation of Indian Shipping Tonnage):

Formulating a roadmap to expand the national merchant fleet and retain a significant portion of the ~USD 75 billion annual freight drain to foreign flags, targeting the addition of ~100 vessels by 2030 through the removal of fiscal asymmetries (IGST, seafarer TDS), reform of the Right of First Refusal (RoFR), withdrawal of General Orders 1–3 of 2018, and enforcement of the 1957 FoB / CIF Cargo Transportation Policy.

Sub-Committee No. 2 (Promotion of Shipbuilding & Ship Repair Facilities):

Giving substantive effect to infrastructure status by amending Section 80-IA of the Income Tax Act, resolving the inverted GST structure on inputs and services, establishing 24-hour fast-track customs clearance for repair spares, supporting indigenous ship design, and securing IACS-certified domestic steel.

Sub-Committee No. 3 (Promotion of Ship Recycling Industries):

Building upon the entry into force of the Hong Kong Convention (HKC) to transition from plot-level compliance to cluster-level performance, establishing end-to-end digital waste traceability ("One Vessel–One Digital Record"), preparing yards for EU-SRR inclusion, and implementing a comprehensive worker welfare and safety framework.

Sub-Committee No. 4 (Resolution of Seafarers' Issues & Global Market Share):

Charting a course to raise India's share of global seafarers to 20% by 2030, curbing recruitment malpractices and seafarer abandonment through direct ICP–DGMA portal integration, instituting a 5% TDS slab for Indian-flag seafarers, ensuring unrestricted domestic shore leave, and expanding gender diversity in cruise and coastal shipping.

Sub-Committee No. 5 (Development of Inland Waterways & Regional Connectivity): Adopting a feasibility-based approach to ensure assured Least Available Depth (LAD of 2.0–2.5m) and 24/7 River Information Services (RIS) on high-density stretches of NW-1, NW-2, and the Indo-Bangladesh Protocol Route (IBPR), while integrating multimodal connectivity via the Kaladan Project.

Sub-Committee No. 6 (Promotion of Coastal Shipping & Domestic Waterways): Enhancing the domestic coastal freight share from 6% to 12% by bringing coastal bunker fuel (LSHF-HSD) under 5% GST, notifying a legally backed *Domestic Multimodal Transport Document*, establishing Coastal Cargo Complexes, de-notifying coastal berths from customs controls, and signing regional coastal agreements under BIMSTEC.

Sub-Committee No. 7 (Promotion of Cruise & Houseboat Tourism): Driving the Cruise Bharat Mission through a 5-year stable tariff policy, rationalized presumptive taxation (7.5% under Section 44B), and airport-style passenger facilitation, alongside enforcing scientific carrying capacity limits, GIS registries, and GPS-tracked sewage disposal for Kerala's houseboat sector.

Sub-Committee No. 8 (Maritime Emergency Preparedness & Response Ecosystem): Proposing a unified, statutory apex maritime contingency management authority under Ministry of Ports Shipping & Waterways (on the UK SOSREP model) with overriding decision-making powers during major casualties, while integrating surveillance into NMDA and developing indigenous salvage, towing, and chemical/oil spill recovery capabilities.

Sub-Committee No. 9 (Documenting Indian Maritime Heritage): (Report under finalization; to be submitted in due course).

Sub-Committee No. 10 (Creation of an Integrated National Single Maritime Window): Resolving core operational defects in MSW 2.0 (Sagar Setu), locking

a joint technical standard with ICEGATE 2.0 and the Bureau of Immigration, recognizing LCL cargo consolidation manifests as first-class data objects, establishing federated data governance under the DPDP framework, and pursuing global-first ISO/IEC 42001 certification for AI in port operations.

Sub-Committee No. 11 (Skilling Ecosystem for Future-Ready Shipping):

Establishing a dedicated Maritime Sector Skill Council under NSDC, developing NCVET-certified Qualification Packs for critical shipyard and recycling trades, creating regional skilling hubs (Visakhapatnam, Alang, Kolkata), expanding CEMS, and scaling HKC-aligned Recognition of Prior Learning (RPL).

Sub-Committee No. 12 (Development of Regional Maritime Hub & Linkages with Neighbourhood): (Report under finalization; to be submitted in due course).

Sub-Committee No. 13 (Emerging Technologies, Alternative Fuels & Autonomous Vessels): Formulating a National Maritime Alternative Fuel Roadmap (LNG, green methanol, ammonia, hydrogen, and nuclear propulsion), establishing port bunkering infrastructure, and creating a National Autonomous Maritime Transition Committee with a "Simulation-First" validation framework and STCW cyber-maritime training aligned with the IMO MASS Code.

Sub-Committee No. 14 (Reduction of Logistics Cost & Integrated Multimodal Logistics): Operationalizing a *National Cargo First Policy* evaluated across 10 commodity-corridor pilots, registering Domestic MTOs, establishing Port-Rail Control Towers, ensuring mode-neutral GST treatment with seamless ITC, and creating digital load/container exchanges via ULIP.

Sub-Committee No. 15 (Roadmap for Taxation Reforms in the Maritime Sector): Eliminating the 5% GST on ship acquisition, removing double taxation on overseas MRO, reducing seafarer salary TDS to 5%, setting a uniform 5% GST rate with full ITC for multimodal transport, lowering withholding tax on Fees for Technical Services (Section 115A), and extending the Tonnage Tax Scheme to passenger cruise vessels.

A fundamental premise emerges from these collective deliberations: Indian shipping does not require protectionism; it requires a level playing field, the removal of domestic fiscal and procedural penalties, long-term cargo visibility, and seamless inter-ministerial coordination.

I place on record my sincere appreciation to the Chairpersons, Members, and Contributors of all 15 Sub-Committees for their rigorous analysis and dedication. I also thank the Ministry of Ports, Shipping and Waterways, the Directorate General of Shipping, the Indian Navy, the Indian Coast Guard, the Indian Ports Association, the Inland Waterways Authority of India, classification societies, trade associations, seafarer unions, and port authorities for their continuous guidance and support.

It is our firm conviction that the timely, coordinated, and monitored implementation of these recommendations by the Government of India will unlock immense economic value, generate sustainable skilled employment, protect our marine ecology, and firmly position India among the world's top maritime powers by 2047.

Sameer Kumar Khare IAS (Retd.)
Chairperson, National Shipping Board
Ministry of Ports, Shipping and Waterways
Government of India

Acknowledgments

The Annual Report 2025–26 of the Sub-committees of the National Shipping Board has been prepared by the respective Chairmans of the Sub-committees National Shipping Board under the overall guidance of Shri Sameer Kumar Khare, IAS (Retd.), Chairperson, National Shipping Board, Ministry of Ports, Shipping and Waterways, Government of India.

The National Shipping Board expresses its sincere gratitude to **Shri Sarbananda Sonowal ji**, Hon'ble Minister of Ports, Shipping and Waterways, for his visionary leadership and steadfast guidance in advancing India's maritime sector. His continued emphasis on maritime reforms, sustainable growth, and the vision of *Viksit Bharat 2047* has provided strategic direction to the Board's deliberations and initiatives.

The Board also conveys its heartfelt appreciation to **Shri Shantanu Thakur ji**, Hon'ble Minister of State for Ports, Shipping and Waterways, for his constant encouragement and valuable support in promoting inclusive growth and strengthening stakeholder engagement across the maritime sector. His guidance has been instrumental in furthering the Government's maritime priorities.

The Report reflects the collective efforts of the Members of the National Shipping Board, whose valuable deliberations, recommendations, and expert insights have significantly contributed to the advancement of India's maritime sector. The Board gratefully acknowledges their continued support and commitment.

The Secretariat acknowledges with gratitude the guidance and support received from the Ministry of Ports, Shipping and Waterways, the Directorate General of Shipping, Mumbai and various Central and State Government organizations, maritime institutions, port authorities, industry associations, and other stakeholders who contributed immensely during the Boards's deliberations.

The National Shipping Board Secretariat extends its special appreciation to Captain Nitin Mukesh, Secretary, National Shipping Board, for his guidance,

leadership, and overall supervision in the preparation of this Report. The Secretariat also gratefully acknowledges the valuable contributions of Shri Shubham Kumar Jain, the Executive Staff attached with NSB Secretariat at DG Shipping Mumbai & the Office Staff of the respective Chairman of the Sub-committees of the National Shipping Board whose dedicated efforts in the compilation, coordination, review, and production of this Report were instrumental in its successful completion.

This publication has benefited immensely from the collective efforts and cooperation of all stakeholders associated with India's maritime sector. Their continued support is deeply appreciated.

The views and observations contained in this Report are intended to facilitate informed discussion and policy deliberation on maritime matters. Any errors or omissions that may remain are purely inadvertent and the responsibility of the Secretariat alone.

List of Contributors

Captain Vikas Anand, Indian Navy

Member, National Shipping Board

Captain Vikas Anand provided valuable insights into dynamic impacts of changing geo-economic and geo-strategic situation on Indian maritime environment, as well as overall Maritime Security, including Coastal and Offshore Security. His contributions enhanced the Board's understanding of maritime security operations, towards ensuring safety & security of mariners and trade at sea, whilst conforming to international marine environmental and safety standards.

DIG Pankaj Verma

Principal Director, Indian Coast Guard; Member, National Shipping Board

DIG Pankaj Verma contributed valuable expertise on maritime safety, security, and regulatory coordination. His guidance strengthened the Board's deliberations on ensuring a secure, resilient, and efficient maritime ecosystem.

Shri Rakesh Singh

President, Indian Coastal Conference Shipping Association (ICCSA); Member, National Shipping Board

Shri Rakesh Singh made valuable contributions towards promoting coastal shipping and strengthening multimodal maritime logistics. His practical perspectives from the industry helped the Board deliberate on measures to enhance the efficiency and competitiveness of India's coastal shipping sector.

List of Contributors

Shri Anil Laxman Devli

*Chief Executive Officer, Indian National Shipowners' Association (INSA);
Member, National Shipping Board*

Shri Anil Laxman Devli brought extensive industry experience and strategic insights to the deliberations of the National Shipping Board. His valuable inputs on shipping policy, fleet development, and the growth of the Indian shipping industry significantly enriched the work of the Board and its Sub-Committees.

Shri Rahul Modi

President, CCTA; Member, National Shipping Board

Shri Rahul Modi provided valuable inputs on maritime trade facilitation, container transport, and logistics. His industry experience helped the Board formulate recommendations aimed at improving efficiency and enhancing India's competitiveness in the maritime logistics sector.

Shri Milind Kandalgaonkar

*General Secretary, National Union of Seafarers of India (NUSI); Member,
National Shipping Board*

Shri Milind Kandalgaonkar provided important perspectives on seafarers' welfare, skill development, and maritime labour issues. His contributions supported the Board's commitment to promoting safe, inclusive, and globally competitive employment standards for Indian seafarers.

List of Contributors

Capt. Savio Ramos

General Secretary, Maritime Union of India (MUI); Member, National Shipping Board

Capt. Savio Ramos offered practical perspectives on seafarers' interests, maritime training, and workforce development. His experience contributed significantly to the Board's deliberations on strengthening India's maritime human resource ecosystem.

Shri Arun Sharma

Executive Chairman, Indian Register of Shipping (IRS); Member, National Shipping Board

Shri Arun Sharma contributed technical expertise in ship classification, maritime standards, and quality assurance. His insights supported the Board's efforts towards promoting safe, sustainable, and internationally compliant shipping practices.

Ms. Sanjam Sahi Gupta

Director, Sitara Shipping; Member, National Shipping Board

Ms. Sanjam Sahi Gupta brought valuable industry insights on commercial shipping, operational efficiency, and sustainable maritime growth. Her contributions enriched discussions on policy reforms and industry best practices.

Executive Summary

The Annual Report 2025-26 of the Sub-committees of the National Shipping Board captures the first working year of the Sub-committees constituted by the present National Shipping Board, from its constitution on 30 April 2025 to 31 March 2026. The year coincided with a significant phase of reform in India's maritime sector, including the modernisation of its legislative framework and a renewed emphasis on building domestic maritime capacity. Guided principally by Maritime India Vision 2030 and Maritime Amrit Kaal Vision 2047, the Sub-committees of the Board sought to connect these long-term national objectives with the operational experience of maritime stakeholders and translate them into practical policy advice.

The defining feature of the work of the Sub-committees during the year was the scale and diversity of its engagement. The meetings were held by the Sub-committees with the ports, shipyards, ship-recycling facilities, maritime training institutions and other operational establishments. This enabled the Sub-committees to engage directly with shipping companies, port and State maritime authorities, coastal and inland-waterway operators, seafarers' organisations, logistics providers, industry associations, academia and maritime security agencies. By taking its deliberations closer to the centres of maritime activity, the Sub-committees were able to obtain a more grounded understanding of the constraints faced by the sector and provide a platform to stakeholders beyond its formal membership.

The work undertaken by the Sub-committees during 2025-26 has thus created a broad consultative and institutional foundation for the present tenure of the Board. The next phase must be directed towards converting the issues identified through meetings, field visits and stakeholder interactions into a limited set of prioritised, evidence-based and implementable recommendations. Expansion of Indian tonnage, development of domestic maritime capabilities, greater use of coastal and inland waterways, reduction of logistics and regulatory frictions, digital and green transformation and the welfare and future-readiness of Indian seafarers will remain central to this endeavour.

The Report is organised into sixteen parts covering three volumes. The Part I covers the mandate & purpose behind the constitution of these Sub-committees while Part II to Part XVI cover the work of fifteen Sub-committees respectively from Sub-committee 1 to 15. Volume I captures the mandate & purpose behind the constitution of the Sub-committees (Part I) & Sub-committee Reports 1 to 5 (Part II to VI). Similarly, Volume II covers Sub-Committee Reports 6-10 (excluding Sub-Committee Report 9) (Part VII to XI) while Volume III collates Sub-Committee Reports 11-15 (excluding Sub-Committee Report 9) (Part XII to XVI).

Sub-Committee 1: Augmentation of Indian Shipping Tonnage

India's seaborne merchandise trade involves an annual freight payout of approximately USD 75 billion to foreign carriers, with foreign-flagged ships transporting around 94% of origin-destination cargo. Domestic vessels operate at a 16–20% cost disadvantage caused primarily by cumulative domestic tax levies—such as 5% Integrated Goods and Services Tax (IGST) on vessel imports and overseas maintenance, repair, and overhaul (MRO) on a reverse-charge basis, high tax deduction at source (TDS) on crew wages, and Goods and Services Tax (GST) on freight—alongside higher capital costs. The Sub-Committee recommends establishing fiscal parity by removing IGST on vessel imports and foreign MRO for ships above 6,000 Gross Tonnage (GT), rationalising seafarer TDS, strictly enforcing the 1957 Cargo Transportation Policy to secure 70% of public sector undertaking (PSU) imports on a Free on Board (FoB) basis, eliminating the 20% Right of First Refusal (RoFR) price cap, withdrawing General Orders 1, 2, and 3 of 2018 to restore container RoFR, and extending the Maritime Investment Fund to second-hand ship acquisitions to add roughly 100 vessels to the fleet by 2030.

Sub-Committee 2: Promotion of Shipbuilding, Ship Repair & Marine Ancillaries

While shipyards have been granted infrastructure status in principle, they are excluded from the definition of an infrastructure facility under Section 80-IA of

the Income Tax Act, 1961, and suffer from an inverted GST duty structure where 5% output tax conflicts with 12–18% rates on input materials and services. The sector also contends with lengthy customs clearance timelines for repair components, a lack of indigenous ship design capabilities, and heavy reliance on imported classification-approved steel. The report proposes amending Section 80-IA to deliver practical tax relief, rationalising GST across all inputs and services to 5% or introducing an Essentiality Certificate mechanism, reclassifying dry docks and slipways as plant and machinery for Input Tax Credit (ITC) eligibility, establishing a 24-hour fast-track customs clearance channel for spares, lowering the infrastructure eligibility threshold to vessels of 24 metres or 500 GT, incorporating Diesel Electric Propulsion into standard tug specifications, regulating the import of older vessels below 6,000 GT, and constituting a Joint Working Group to facilitate domestic production of certified shipbuilding steel.

Sub-Committee 3: Promotion of Ship Recycling Industries

Following the entry into force of the Hong Kong International Convention (HKC) in June 2025, Indian ship recycling facilities at Alang and Sachana require a transition from plot-level compliance to cluster-wide operational standards, transparent downstream hazardous waste tracking, and structured workforce stability. The Sub-Committee recommends launching the *National Sustainable Ship Recycling Mission 2026–2030*, building a single digital platform to link vessel Inventories of Hazardous Materials (IHM) to final waste destinations, and operationalising a verifiable digital Shipbreaking Credit Note registry. Additionally, it calls for an India European Union Ship Recycling Regulation (EU-SRR) Readiness Cell, cluster-level emergency and health facilities, and a dedicated worker welfare framework covering verifiable employment records, wage transparency, and portable safety passports.

Sub-Committee 4: Seafarers' Issues & Global Market Share

India provides approximately 12% of the global seafarer workforce, yet ranks low in the proportion of seafarers relative to its population, faces an acute /severe shortage of operational and management officers on coastal vessels,

con(tends with persistent shore leave restrictions at domestic ports, and accounts for a disproportionate share of globally abandoned seafarers. Recommended measures include integrating Bureau of Immigration Check Posts with Directorate General (of Maritime Administration (DGMA) digital systems to eliminate illegal recruitment and abandonment, establishing a 5% TDS rate for seafarers on Indian-flag vessels to prevent migration to foreign flags, enforcing standard immigration exemptions for domestic coastal vessels, expanding examination frequency and digital licensing, and promoting specialized training to expand female representation and capture employment opportunities in the cruise industry.

Sub-Committee 5: Development of Inland Waterways & Regional Connectivity

Inland water transport is constrained by significant seasonal water discharge variations, high siltation—such as National Waterway 1's annual silt load of 1,600 million metric tonnes—insufficient night navigation aids, and low overhead bridge clearances that disrupt year-round operations. The Sub-Committee advises adopting a pragmatic feasibility-based approach by focusing investments on viable stretches capable of maintaining an assured Least Available Depth (LAD) of 2.0 to 2.5 metres. It also proposes standardising shallow-draft vessels (600–800 MT), deploying tug-barge combinations and small container carriers, expanding round-the-clock River Information Services (RIS), deploying flexible floating jetties, and developing strategic cargo corridors along the Indo-Bangladesh Protocol Route and the Kaladan Multimodal Transit Transport Project.

Sub-Committee 6: Promotion of Coastal Shipping & Domestic Waterways

Coastal shipping currently accounts for only 6% of national domestic freight, hindered by the absence of assured cargo visibility, higher overall delivered costs relative to road and rail, non-standardized port charges, and excessive regulatory compliance on purely domestic runs. Key policy recommendations also include bringing Low Sulphur High Flash High Speed Diesel (LSHF-HSD) for coastal vessels under a 5% GST regime, enacting a legally backed *Domestic*

Multimodal Transport Document to establish single-through liability, implementing clear priority berthing guidelines backed by dedicated Coastal Cargo Complexes, denotifying nominated coastal berths from unnecessary customs procedures, and establishing bilateral coastal shipping agreements with BIMSTEC partners such as Sri Lanka and Myanmar.

Sub-Committee 7: Promotion of Cruise & Houseboat Tourism

India captures only about 1.5% of global cruise passengers due to complex tax rules, a 20% presumptive tax on foreign operators under Section 44BBC, unbundled port tariffs, and fragmented clearances, while Kerala's backwater houseboat sector faces environmental congestion and inconsistent safety enforcement. The Sub-Committee recommends establishing a National Cruise Facilitation Council, notifying a five-year stable tariff policy with bundled port packages, bringing cruise operations under Section 44B at a 7.5% presumptive tax rate, reducing ship-leasing GST to 5%, and enacting a Cruise Passenger Bill of Rights. For Kerala, the report proposes deploying a Geographic Information System (GIS) live registry, mandating electronic passenger manifests, enforcing scientific carrying capacity limits on Vembanad and Ashtamudi lakes, and tracking sewage disposal via Global Positioning System (GPS).

Sub-Committee 8: Maritime Emergency Preparedness & Response

Recent maritime casualties, such as *MSC ELSA-3* and *WAN HAI-503*, have underscored institutional coordination gaps among the Navy, Coast Guard, DG Shipping, and Ports, as well as a critical shortage of indigenous heavy salvage equipment, Emergency Towing Vessels, and specialized pollution recovery gear. The report recommends establishing a statutory apex decision-making authority under the Ministry of Ports, Shipping and Waterways—modelled on the United Kingdom's Secretary of State's Representative (SOSREP)—empowered to make overriding operational decisions during emergencies. It further advises integrating coastal surveillance feeds into the National Maritime Domain (NMD) Awareness project and Information Fusion Centre – Indian Ocean Region (IFC-IOR), while building domestic towing, heavy-lift salvage, and chemical spill response capabilities.

Sub-Committee 10: Integrated National Single Maritime Window (MSW 2.0)

Following the transition to MSW 2.0 on the Sagar Setu platform, Facilitation (FAL) form compliance dropped sharply to approximately 3% in April 2026 before recovering to 63.9% in June 2026, driven by persistent technical bottlenecks such as missing PDF uploads for Forms 3 and 4, the lack of partial-submission functionality, date validation errors, incomplete Customs and Immigration integration, and certificate verification risks. The Sub-Committee outlines a prioritized roadmap to immediately resolve core portal defects, establish an open joint technical standard with ICEGATE 2.0 and the Bureau of Immigration, treat Less-than-Container-Load (LCL) consolidation manifests as first-class data objects, designate the platform as Critical Information Infrastructure, adopt a federated data governance model (Portbase precedent) ahead of Digital Personal Data Protection (DPDP) deadlines, and pursue global-first ISO/IEC 42001 certification for artificial intelligence in port clearances.

Sub-Committee 11: Skilling Ecosystem for Future-Ready Shipping

Shipbuilding, repair, and recycling facilities face widespread shortages in critical trades—including specialist welders, pipe fitters, electricians, and non-destructive testing technicians—exacerbated by a lack of marine-specific Industrial Training Institute (ITI) curricula, overseas labor migration, and split administrative oversight between Sector Skill Councils. The Sub-Committee recommends constituting a dedicated Maritime and Shipbuilding Sector Skill Council under the National Skill Development Corporation, developing fast-tracked National Council for Vocational Education and Training (NCVET) Qualification Packs for specialized shipyard trades, establishing regional skilling hubs at Visakhapatnam, Alang, and Kolkata, expanding the Centre of Excellence in Maritime and Shipbuilding (CEMS), formalizing structured on-the-job training with independent assessments, and scaling Recognition of Prior Learning campaigns across recycling yards.

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Sub-Committee 13: Emerging Technologies, Alternative Fuels & Autonomous Vessels

To meet International Maritime Organization (IMO) decarbonisation targets and prepare for the mandatory Maritime Autonomous Surface Ships (MASS) Code by roughly 2032, the Indian maritime sector must address technological, infrastructure, and regulatory readiness for alternative fuels (LNG, methanol, ammonia, hydrogen, and nuclear propulsion) and automated ship operations. The report proposes formulating a National Maritime Alternative Fuel Roadmap, developing port-level bunkering and shore power infrastructure, providing up to 35% capital assistance for zero-emission vessels, establishing the National Autonomous Maritime Transition Committee, adopting a simulation-first testing regime for automated navigation, and creating stratified Standards of Training, Certification and Watchkeeping (STCW) cyber-maritime modules for shipboard and Remote Operations Centre personnel.

Sub-Committee 14: Reduction of Logistics Cost & Multimodal Integration

India's delivered logistics costs remain inflated due to isolated modal planning, high empty running in road transport, terminal dwell delays, non-neutral GST structures, and fragmented documentation. The Sub-Committee recommends adopting a *National Cargo First Policy* evaluated across ten commodity-corridor pilots, registering Domestic Multimodal Transport Operators supported by a standardized *Domestic Multimodal Transport Document*, ensuring mode-neutral GST treatment with seamless ITC for multimodal shipments, establishing Port-Rail Control Towers to synchronize container evacuation, and creating digital load and container exchanges via the Unified Logistics Interface Platform (ULIP).

Sub-Committee 15: Taxation Reforms in the Maritime Sector

Indian shipping bears a significantly higher tax burden than foreign competitors across acquisition, MRO, bunker procurement, seafarer employment, multimodal transport, and cruise operations. The Sub-Committee recommends abolishing the 5% GST on ship acquisitions, removing double taxation on

overseas MRO, reducing seafarer salary TDS to 5% under Section 197A of the Income Tax Act, setting a uniform 5% GST rate with full ITC for multimodal transport involving coastal or inland waterway legs, lowering the Fees for Technical Services withholding rate to 10% under Section 115A, including ship sale profits as core shipping income under Section 115VL, and extending the Tonnage Tax Scheme to passenger cruise vessels.

(Note: Sub-Committees 9 and 12 are conducting ongoing stakeholder consultations and will submit their reports subsequently.)

Taken together, the Report reflects a year of institution-building, extensive consultation and focused examination of the structural issues affecting Indian shipping. It also sets the direction for a more outcome-oriented phase in which the Board's deliberations are translated into clear and actionable advice. Through sustained engagement with Government and maritime stakeholders, the Board seeks to contribute to the development of a stronger, more self-reliant, sustainable and globally competitive maritime India.

PART I

Constitution of the Sub Committees

CONSTITUTION OF THE SUB-COMMITTEES

1.1. The National Shipping Board (NSB) is a permanent statutory body established under Section 4 of the Merchant Shipping Act, 2025 (previously the Merchant Shipping Act, 1958). The Board derives its mandate, composition, and procedural framework from the Merchant Shipping Act, 2025 and the National Shipping Board Rules, 2026 (previously National Shipping Board Rules, 1960, as amended in 1991).

1.2. As per section 4 (6) of the Merchant Shipping Act, 2025:

“The Shipping Board shall advise the Central Government, —

(a) on matters relating to Indian shipping including the development thereof; and

(b) on such other matters arising out of this Act as the Central Government may refer to it for advice.”

1.3. The Present National Shipping Board has been constituted for a period of two years vide Gazette Notification No. S.O. 1935(E) dated 30th April 2025 [Annexure-I], issued by the Ministry of Ports, Shipping and Waterways in exercise of the powers conferred by Section 4 of the Merchant Shipping Act, 2025 read with Rule 4 of the National Shipping Board Rules, 1960. Subsequently, a Corrigendum Notification No. S.O. 4353(E) dated 23rd September 2025 [Annexure-II] was issued. The Board stands constituted with effect from 30th April 2025 for a period of two years.

1.4. The following board members have served / have been serving the Board since its inception on 30.04.2025.

- ❖ Sameer Kumar Khare IAS (retired) Chairperson
- ❖ Ajith Sukumaran Member
- ❖ Mandeep Singh Randhawa IPS
- ❖ Esha Shrivastava IFS
- ❖ Commodore Raghu Nair IN / Captain Vikas Anand IN

- ❖ Pankaj Verma DIC ICG
- ❖ Rakesh Singh
- ❖ Anil Devli
- ❖ Rahul Modi
- ❖ Milind Kandalgaonkar
- ❖ Captain Tushar Pradhan / Captain Savio Ramos
- ❖ Arun Sharma
- ❖ Prof. K. Murali
- ❖ Sanjam Sahi Gupta
- ❖ Shantanu Kalita

1.4. The Board is authorized to constitute Sub-committees in accordance with Rule 8 of the Rules of Procedure specified under Schedule II of the NSB Rules 2026 as under:

“8. Sub-committees — The Board may appoint one or more sub-committees, standing or otherwise, to facilitate the functioning of the Board.”

1.5. Based on the consultations with the stakeholders, the Board during the working year 2025-26 constituted fifteen (15) sub-committees (see Rule 8 of the Rules of Procedure specified under Schedule II of the NSB Rules 2026) to prepare roadmap for achieving the Goals of MAKV 2047 vide NSB order no. NSB-13/14/2025-NSB dated 06.02.2026. [Annexure III] and NSB order no. NSB-13/14/2025-NSB dated 05.05.2026. [Annexure IV]. The brief details of the sub-committees are as under:

Sub-Committee No. 1:

Task assigned to the Sub-Committee: **To prepare a roadmap for Augmentation of the Indian Shipping Tonnage to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Anil Devli

Members of the Sub-Committee- Rakesh Singh, Rahul Modi, Shantanu Kalita

Sub-Committee No. 2:

Task assigned to the Sub-Committee: **To prepare a roadmap for Promotion of Shipbuilding/Ship Repair facilities in India with focus on green & sustainable shipping to achieve MAKV-2047 Goals (incl. container manufacturing)**

Chairperson of the Sub-Committee- Anil Devli

Members of the Sub-Committee- Rakesh Singh, Rahul Modi , Arun Sharma,
CMD CSL

Sub-Committee No. 3:

Task assigned to the Sub-Committee: **To prepare a roadmap for Promotion of the Ship Recycling Industries in India to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Rahul Modi

Members of the Sub-Committee- Rakesh Singh, Anil Devli, Sanjam Sahi Gupta,
Arun Sharma

Sub-Committee No. 4:

Task assigned to the Sub-Committee: **To prepare a roadmap for resolution Seafarers' issues including increasing share of Indian seafarers in the global shipping market to achieve MAKV-2047 Goals (incl. examination, recruitment, training, curriculum reforms)**

Chairperson of the Sub-Committee- Rakesh Singh

Members of the Sub-Committee- Anil Devli, Sanjam Sahi Gupta, Milind Kandalgaonkar, Captain Savio Ramos

Sub-Committee No. 5:

Task assigned to the Sub-Committee: **To prepare a roadmap for Development of inland waterways, including Improving regional connectivity to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Rakesh Singh

Members of the Sub-Committee- Rahul Modi, Anil Devli, Shantanu Kalita

Sub-Committee No. 6:

Task assigned to the Sub-Committee: **To prepare a roadmap for Promotion of Coastal Shipping & Domestic waterways (coastal & inland) including policy, infrastructure and operational measures to increase coastal cargo share to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Rakesh Singh

Members of the Sub-Committee- Rahul Modi, Anil Devli, Shantanu Kalita

Sub-Committee No. 7:

Task assigned to the Sub-Committee: **To prepare a roadmap for Promotion of Cruise & House Boat Tourism to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Rahul Modi

Members of the Sub-Committee- Rahul Modi, Anil Devli, Shantanu Kalita, Sanjam Gupta

Sub-Committee No. 8:

Task assigned to the Sub-Committee: **To prepare a roadmap for development of a robust Maritime Emergency Preparedness and Response ecosystem to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Rep from Navy

Members of the Sub-Committee- Rep from ICG, Anil Devli, Shantanu Kalita

Sub-Committee No. 9:

Task assigned to the Sub-Committee: **To prepare a roadmap for documenting Indian Maritime Heritage to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Shantanu Kalita

Members of the Sub-Committee- Rep from Navy, Sanjam Gupta, Prof. K Murali

Sub-Committee No. 10:

Task assigned to the Sub-Committee: **To prepare a roadmap for Creation of an Integrated National Single Maritime Window that is Globally Compliant to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Nitin Mukesh

Members of the Sub-Committee- Anil Devli, Rakesh Singh, Rahul Modi, Shantanu Kalita

Sub-Committee No. 11:

Task assigned to the Sub-Committee: **To prepare a roadmap for development of Skilling eco-system for future ready shipping sector (ship building, ship repairs, and ship recycling) to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Arun Sharma

Members of the Sub-Committee- Reps from MUI and NUSI, ICCSA, DGS, INSA, CCTA, CSL, Sanjam Gupta, K. Murali

Sub-Committee No. 12:

Task assigned to the Sub-Committee: **To prepare a roadmap for development of Regional Maritime Hub and Maritime Linkages with the Neighborhood to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Shantanu Kalita

Members of the Sub-Committee- Anil Devli, Rakesh Singh, Rahul Modi

Sub-Committee No. 13:

Task assigned to the Sub-Committee: **To prepare a roadmap for Emerging Technologies like Autonomous vehicles/advance navigation and Engine Systems/Alternate Fuels and propulsion technologies (including Nuclear)/Green Technologies/Climate Adaption & Mitigation Strategies to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Arun Sharma

Members of the Sub-Committee- Anil Devli, Rakesh Singh, Rahul Modi, Shantanu Kalita, K. Murali

Sub-Committee No. 14:

Task assigned to the Sub-Committee: **To prepare a roadmap for reducing the logistic cost in the Maritime Sector including promotion and examination of modal shift from road and rail to coastal shipping, inland waterways, other waterborne transport to achieve MAKV-2047 Goals in line with National Logistics Policy (incl. development of a single Multimodal transshipment document)**

Chairperson of the Sub-Committee- Rahul Modi

Members of the Sub-Committee- Anil Devli, Rakesh Singh, Shantanu Kalia

Sub-Committee No.—15:

Task assigned to the Sub-Committee: **To prepare a roadmap for the Taxation Reforms in the Maritime Sector to achieve MAKV-2047 Goals**

Chairperson of the Sub-Committee- Anil Devli
Members of the Sub-Committee- Rakesh Singh, Rahul Modi

1.6. The Board is mandated to submit its Annual Report including that of its sub-committees in accordance with Rule 9 & 10 of the Rules of Procedure specified under Schedule II of the NSB Rules 2026. The Rule 9 defines the “***Working year of Board***” as “***The working year of the Board shall commence on 1st April of every year and end on 31st March of the following year***” while the Rule 10 mandates that “***The Board shall submit an annual report to the Central Government detailing its work during the year.***”

1.7. The Annual Report of the sub-committees of the board serves as the primary instrument through which the sub-committees of the board place on record their work, engagements, and advisory contributions during the financial year under review. It encompasses the following:

- (a) A comprehensive account of the meetings of the sub-committees of the board held during the year, including the dates, venues, and agenda of each meeting.
- (b) Details of the stakeholder consultations undertaken by the sub-committees of the board, including the issues raised by stakeholders and the responses sub-committees of the board and recommendations thereto.
- (c) A record of the constitution and progress of Sub-Committees formed by the Board to examine specific thematic areas of maritime policy and regulation.
- (d) The key deliberations, findings, and advisory recommendations of sub-committees of the board on the matters referred to it by the Board or taken up Suo-moto by sub-committees of the board in the public interest.
- (e) Achievements and contributions of the members of the sub-committees of the board during the financial year, highlighting their engagement with the maritime sector in their respective domains of expertise.
- (f) The recommendations of the sub-committees of the board and strategic priorities for the forthcoming financial year, providing a forward-looking perspective on maritime policy and development.

1.8. This Annual Report of the sub-committees of the board covers the Working Year of the Board 2025–2026. The Annual Report of the sub-committees of the board holds significance not only as a statutory document but also as a public

record of sub-committees' advisory role in shaping India's maritime policy landscape. It provides transparency and accountability in the functioning of the sub-committees of the board, enabling the Government of India, maritime stakeholders, industry, academia, and the public to assess the sub-committees' contributions and the outcomes of its deliberations. The Report also serves as an institutional memory of the sub-committees' work, ensuring continuity of policy engagement and building upon the recommendations and directions established in previous years. It reflects the sub-committees' commitment to evidence-based, inclusive, and forward-looking maritime governance, aligned with national priorities such as Maritime India Vision 2030, Maritime Amrit Kaal 2047, Atma-Nirbhar Bharat, PM Gati Shakti, Ease of doing Business / Ease of Living and the vision of Viksit Bharat 2047.

1.9. The work carried out by each of the sub-committee is given in Part II to Part XVI of this report.

भारत का राजपत्र
The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

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सं. 1892]	नई दिल्ली, बुधवार, अप्रैल 30, 2025/ वैशाख 10, 1947
No. 1892]	NEW DELHI, WEDNESDAY, APRIL 30, 2025/ VAISAKHA 10, 1947

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय
अधिसूचना

नई दिल्ली, 30 अप्रैल, 2025

का.आ. 1935(अ).—राष्ट्रीय नौवहन बोर्ड नियम, 1960 के नियम 4 के साथ पठित, वाणिज्य पोत परिवहन अधिनियम, 1958 (1958 का 44) की धारा 4 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार एतद्वारा भारत के आधिकारिक राजपत्र में प्रकाशन की तिथि से दो वर्ष की अवधि के लिए राष्ट्रीय नौवहन बोर्ड का गठन करती है।

राष्ट्रीय नौवहन बोर्ड में निम्नलिखित सदस्य शामिल होंगे:-

1. श्री समीर कुमार खरे, सेवानिवृत्त आईएएस (अध्यक्ष)।
2. श्री अजितकुमार सुकुमारन, मुख्य सर्वेक्षक, नौवहन महानिदेशालय, मुंबई।
3. समुद्री प्रशासन स्कंध के प्रभारी, पत्तन, पोत परिवहन और जलमार्ग मंत्रालय।
4. पेट्रोलियम और प्राकृतिक गैस मंत्रालय के एक प्रतिनिधि (संयुक्त सचिव रैंक से नीचे नहीं)।
5. भारतीय नौसेना के एक प्रतिनिधि (निदेशक रैंक से नीचे नहीं)।
6. भारतीय तटरक्षक के एक प्रतिनिधि (निदेशक रैंक से नीचे नहीं)।
7. श्री राकेश सिंह, सचिव, इंडियन कोस्टल कॉन्फ्रेंस शिपिंग एसोशिएशन (आईसीसीएसए) के प्रतिनिधि।
8. श्री अनिल लक्ष्मण देवली, सीईओ, इंडियन नेशनल शिप-ओनर्स एसोशिएशन (आईएनएसए) के प्रतिनिधि।

9. श्री राहुल मोदी, कोस्टल कंटेनर ट्रांसपोर्ट्स एसोशिएशन (सीसीटीए) के प्रतिनिधि।
10. श्री मिलिंद कंडलगांवकर, महासचिव-सह-कोषाध्यक्ष, भारतीय राष्ट्रीय नाविक संघ (एनयूएसआई)।
11. कैप्टन तुषार प्रधान, मैरीटाइम यूनियन ऑफ इंडिया (एमयूआई) के महासचिव।
12. श्री अरुण शर्मा, कार्यकारी अध्यक्ष, इंडियन रजिस्ट्रार ऑफ शिपिंग (आईआरएस), मुंबई।
13. सीएमडी, कोचीन शिपयार्ड लिमिटेड।
14. डॉ. के. मुरली, प्रोफेसर, महासागर इंजिनियरिंग विभाग, आईआईटी, मद्रास।
15. सुश्री संजम साही गुप्ता, निदेशक, सितारा शिपिंग लिमिटेड।
16. श्री शांतनु कलिता, सलाहकार, आईपीए।

[फा.सं. एसटी-16011/4/2016-एमए]

राजेश कुमार सिन्हा, विशेष सचिव

MINISTRY OF PORTS, SHIPPING AND WATERWAYS

NOTIFICATION

New Delhi, the 30th April, 2025

S.O. 1935(E).—In exercise of the powers conferred by Section 4 of the Merchant Shipping Act, 1958 (44 of 1958) read with Rule 4 of the National Shipping Board Rules, 1960, the Central Government hereby constitutes the National Shipping Board for a period of two years from the date of publication in the official Gazette of India.

The National Shipping Board shall consist of the following members: —

1. Shri Sameer Kumar Khare, Retired IAS, Chairperson.
2. Shri Ajithkumar Sukumaran, Chief Surveyor, Directorate General of Shipping, Mumbai.
3. In-charge of Marine Administration Wing, Ministry of Ports Shipping and Waterways.
4. A representative of Ministry of Petroleum and Natural Gas (not below the rank of Joint Secretary)
5. A representative of Indian Navy (Not below the rank of Director).
6. A representative of Indian Coast Guard (Not below the rank of Director).
7. Shri Rakesh Singh, Secretary, representative of Indian Coastal Conference Shipping Association (ICCSA)
8. Shri Anil Laxman Devli, CEO, representative of Indian National Ship-owners Association (INSA)
9. Shri Rahul Modi, representative of Coastal Container Transports Association (CCTA)
10. Shri Milind Kandalgaonkar, General Secretary-cum-Treasurer, National Union of Seafarers of India (NUSI).
11. Captain Tushar Pradhan, General Secretary of the Maritime Union of India (MUI),
12. Mr. Arun Sharma, Executive Chairman Indian Registrar of Shipping (IRS) Mumbai.
13. CMD, Cochin Shipyard Limited
14. Dr. K. Murali, Professor, Department of Ocean Engineering, IIT, Madras,
15. Ms. Sanjam Sahi Gupta, Director, Sitara Shipping Ltd.
16. Shri Shantanu Kalita, Advisor, IPA

[F. No. ST-16011/4/2016-MA]

RAJESH KUMAR SINHA, Special Secy.

भारत का राजपत्र
The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
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नई दिल्ली, बुधवार, सितम्बर 24, 2025/आश्विन 2, 1947

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NEW DELHI, WEDNESDAY, SEPTEMBER 24, 2025/ASVINA 2, 1947

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय

शुद्धिपत्र अधिसूचना

नई दिल्ली, 23 सितम्बर, 2025

का.आ. 4353(अ).— भारतीय नौवहन बोर्ड नियम, 1960 के नियम 4 के साथ पठित वाणिज्य पोत परिवहन अधिनियम, 1958 (1958 का 44) की धारा 4 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार एतद्वारा भारत के राजपत्र, असाधारण, भाग-II, खंड-3, उप-खंड (ii) में प्रकाशित का.आ. 1935 (अ) दिनांक 30 अप्रैल, 2025 के तहत अधिसूचना में निम्नलिखित संशोधन करती है। उक्त अधिसूचना और इससे संबंधित प्रविष्टियों में निम्नलिखित क्रम संख्या और प्रविष्टि विशेष रूप से प्रतिस्थापित की जाएगी, अर्थात्:

“क्रम संख्या 11 और उससे संबंधित प्रविष्टि के लिए, सदस्य के रूप में कैप्टन तुषार प्रधान के स्थान पर कैप्टन सावियो रामोस, महासचिव, भारतीय समुद्री संघ (एमयूआई) पढ़ा जाए”

2. का. आ. 1935 (अ) द्वारा दिनांक 30 अप्रैल, 2025 की अधिसूचना की शेष शर्तें समान रहेंगी।

[फा. सं. एसटी-16011/4/2016-एमए]

राजेश कुमार सिन्हा, विशेष सचिव

MINISTRY OF PORTS, SHIPPING AND WATERWAYS**CORRIGENDUM NOTIFICATION**

New Delhi, the 23rd September, 2025

S.O. 4353(E).— In exercise of the powers conferred by Section 4 of the Merchant Shipping Act, 1958(44 of 1958) read with Rule 4 of the National Shipping Board Rules, 1960, the Central Government hereby makes the following amendment in the notification vide S.O.1935(E) dated the 30th April, 2025 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section(ii). In the said notification, and entries relating thereto, the following serial number and entry shall in particular be substituted, namely:

"For serial number 11 and entry relating thereto, may be read as Captain Savio Ramos, General Secretary of the Maritime Union of India (MUI) in place of Captain Tushar Pradhan as Member."

2. The remaining terms of the Notification vide S.O.1935 (E) dated the 30th April 2025 will remain same.

[F. No. ST-16011/4/2016-MA]

RAJESH KUMAR SINHA, Special Secy.

F. No. NSB-13/14/2025-NSB
Government of India
Ministry of Ports, Shipping and Waterways
National Shipping Board New Delhi

1, Parliament Street,
Transport Bhawan,
New Delhi – 110 001
Dated: 06.02.2026

APPOINTMENT OF SUB-COMMITTEES
(UNDER RULE 8 OF RULES OF PROCEDURE OF THE NSB)

In pursuance of the power vested vide Rule 8 of "Rules of procedure of National Shipping Board", the National Shipping Board hereby appoints following sub-committees with immediate effect:

Sub-Committee No.	Task assigned to the Sub-Committee	Chairperson of the Sub-Committee	Members of the Sub-Committee
1	To prepare a roadmap for Augmentation of the Indian Shipping Tonnage to achieve MAKV-2047 Goals	Anil Devli	Rakesh Singh Rahul Modi Shantanu Kalita
2	To prepare a roadmap for Promotion of Shipbuilding/Ship Repair facilities in India with focus on green & sustainable shipping to achieve MAKV-2047 Goals (incl. container manufacturing)	Anil Devli	Rakesh Singh Rahul Modi Arun Sharma CMD CSL
3	To prepare a roadmap for Promotion of the Ship Recycling Industries in India to achieve MAKV-2047 Goals	Rahul Modi	Rakesh Singh Anil Devli Sanjam Sahi Gupta Arun Sharma
4	To prepare a roadmap for resolution Seafarers' issues including increasing share of Indian seafarers in the global shipping market to achieve MAKV-2047 Goals (incl. examination, recruitment, training, curriculum reforms)	Rakesh Singh	Anil Devli Sanjam Sahi Gupta Milind Kandalgaonkar Captain Savio Ramos
5	To prepare a roadmap for Development of inland waterways, including Improving regional connectivity to achieve MAKV-2047 Goals	Rakesh Singh	Rahul Modi Anil Devli Shantanu Kalita
6	To prepare a roadmap for Promotion of Coastal Shipping & Domestic waterways (coastal & inland) including policy, infrastructure and operational measures to increase coastal cargo share to achieve MAKV-2047 Goals	Rakesh Singh	Rahul Modi Anil Devli Shantanu Kalita



7	To prepare a roadmap for Promotion of Cruise & House Boat Tourism to achieve MAKV-2047 Goals	Rahul Modi	Rahul Modi Anil Devli Shantanu Kalita Sanjam Gupta
8	To prepare a roadmap for development of a robust Maritime Emergency Preparedness and Response ecosystem to achieve MAKV-2047 Goals	Rep from Navy	Rep from ICG Anil Devli Shantanu Kalita
9	To prepare a roadmap for documenting Indian Maritime Heritage to achieve MAKV-2047 Goals	Shantanu Kalita	Rep from Navy Sanjam Gupta Prof. K Murali
10	To prepare a roadmap for Creation of an Integrated National Single Maritime Window that is Globally Compliant to achieve MAKV-2047 Goals	Nitin Mukesh	Anil Devli Rakesh Singh Rahul Modi Shantanu Kalita
11	To prepare a roadmap for development of Skilling eco-system for future ready shipping sector (ship building, ship repairs, and ship recycling) to achieve MAKV-2047 Goals	Arun Sharma	Reps from MUI and NUSI, ICCSA, DGS, INSA, CCTA, CSL, Sanjam Gupta, K. Murali
12	To prepare a roadmap for development of Regional Maritime Hub and Maritime Linkages with the Neighbourhood to achieve MAKV-2047 Goals	Shantanu Kalita	Anil Devli Rakesh Singh Rahul Modi
13	To prepare a roadmap for Emerging Technologies like Autonomous vehicles/advance navigation and Engine Systems/Alternate Fuels and propulsion technologies (including Nuclear)/Green Technologies/Climate Adaption & Mitigation Strategies to achieve MAKV-2047 Goals	Arun Sharma	Anil Devli Rakesh Singh Rahul Modi Shantanu Kalita K. Murali
14	To prepare a roadmap for reducing the logistic cost in the Maritime Sector including promotion and examination of modal shift from road and rail to coastal shipping, inland waterways, other waterborne transport to achieve MAKV-2047 Goals in line with National Logistics Policy (incl. development of a single Multimodal transshipment document)	Rahul Modi	Anil Devli Rakesh Singh Shantanu Kalita

2. Each of the Sub-Committees is expected to complete the assigned task within 100 days from the date of their appointment and submit its roadmap along with its findings and recommendations to the Board on expiry of 100 days from the date of their appointment.

3. Each of the Sub-Committees may co-opt any of the institutional representatives or the individual domain experts related to the assigned task as per the need of the Sub-Committee on an honorary basis and based on consensus among its members. The Chairperson of the Sub-Committee may invite such co-opted members during the meetings of the sub-committee as and when held.
4. Each of the Sub-Committees may devise their own procedure for conduct of their meetings.
5. Each of the Sub-Committees may split the assigned task into sub tasks as per need for ease of its functioning. The Chairperson of the Sub-Committee may appoint such sub task committees based on the consensus amongst its members.
6. Each of the Sub-Committees may
 - (a) engage with the Stakeholder's Associations which are working in area of operations related to the assigned task to assess the strength, weaknesses, opportunities and threats prevailing in the area of operations related to the assigned task;
 - (b) engage with the individual player (in public or private sector) working in area of operations related to the assigned task to assess the strength, weaknesses, opportunities and threats prevailing in the area of operations related to the assigned task;
 - (c) review the past schemes of the Government launched in area of operations related to the assigned task and to assess their efficacy in the current circumstances.
 - (d) review the ongoing schemes of the Government in area of operations related to the assigned task and to assess their efficacy in the current circumstances.
 - (e) devise any new scheme in area of operations related to the assigned task to fulfill the assigned task.
7. Each of the Sub-Committee may submit its findings and suggestions with a 5 years time horizon keeping in mind the Government vision as envisaged in
 - (a) MAKV-2047 (b) MIV-2030 (c) Ease of doing business/Ease of living (d) Atmanirbhar Bharat (e) PM Gati Shakti and (f) Budget announcement made in the budget for the year 2026-27.
8. Each of the sub-committee may take up any other assigned task as per the directions given by the Board from time to time.
9. This order issued as per the deliberations made in the NSB meeting dated 18-19/12/2025 held at Visakhapatnam.

Under the signature of,



Sameer Kumar Khare IAS(Retd.)
 Chairperson, National Shipping Board
 New Delhi
 Mobile +91 9968096476
 Email: chairperson.nsb@gov.in

Copy to;

1. All the members of the National Shipping Board.
2. Secretary, National Shipping Board

समीर कुमार खरे, आई.एस.एस. (सेवानिवृत्त)
Sameer Kumar Khare, IAS (Retired)
 अध्यक्ष, राष्ट्रीय नौवहन बोर्ड/Chairperson, National Shipping Board
 नौवहन, पोत परिवहन और जलमार्ग मंत्रालय
 Ministry of Ports, Shipping & Waterways
 नई दिल्ली/New Delhi

F. No. NSB-13/14/2025-NSB
Government of India
Ministry of Ports, Shipping and Waterways
National Shipping Board New Delhi

1, Parliament Street,
Transport Bhawan,
New Delhi – 110 001
Dated: 05.05.2026

APPOINTMENT OF SUB-COMMITTEE
(UNDER RULE 8 OF RULES OF PROCEDURE OF THE NSB)

In continuation of NSB order no. NSB-13/14/2025-NSB dated 06.02.2026 regarding appointment of 14 sub-committees under rule 8 of rules of procedure of the NSB, NSB hereby appoint an additional sub-committee as under;

Sub-Committee No.	Task assigned to the Sub-Committee	Chairperson of the Sub-Committee	Members of the Sub-Committee
15	To prepare a roadmap for the Taxation Reforms in the Maritime Sector to achieve MAKV-2047 Goals	Anil Devli	Rakesh Singh Rahul Modi

2. The Sub-Committee is expected to complete the assigned task by 30th June, 2026 and submit its roadmap along with its findings and recommendations to the Board by 30th June, 2026.

3. The Sub-Committee may co-opt any of the institutional representatives or the individual domain experts related to the assigned task as per the need of the Sub-Committee on an honorary basis and based on consensus among its members. The Chairperson of the Sub-Committee may invite such co-opted members during the meetings of the sub-committee as and when held.

4. The Sub-Committees may devise its own procedure for conduct of its meetings.

5. The Sub-Committees may split the assigned task into sub tasks as per need for ease of its functioning. The Chairperson of the Sub-Committee may appoint such sub task committees based on the consensus amongst its members.

6. The Sub-Committees may

(a) engage with the Stakeholder's Associations which are working in area of operations related to the assigned task to assess the strength, weaknesses, opportunities and threats prevailing in the area of operations related to the assigned task;

(b) engage with the individual player (in public or private sector) working in area of operations related to the assigned task to assess the strength, weaknesses, opportunities and threats prevailing in the area of operations related to the assigned task;

(c) review the past schemes of the Government launched in area of operations related to the assigned task and to assess their efficacy in the current circumstances.



(d) review the ongoing schemes of the Government in area of operations related to the assigned task and to assess their efficacy in the current circumstances.

(e) devise any new scheme in area of operations related to the assigned task to fulfill the assigned task.

7. The Sub-Committee may submit its findings and suggestions with a 5 years' time horizon keeping in mind the Government vision as envisaged in

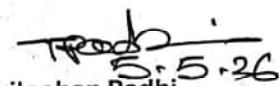
(a) MAKV-2047 (b) MIV-2030 (c) Ease of doing business/Ease of living (d) Atmanirbhar Bharat (e) PM Gati Shakti and (f) Budget announcement made in the budget for the year 2026-27.

8. The sub-committee may take up any other assigned task as per the directions given by the Board from time to time.

9. This order issued as per the deliberations made in the NSB meeting dated 10.03.2026 held at Janpath, New Delhi.

10. This is issued with the approval of the Chairperson, National Shipping Board.

Yours sincerely,


Trilochan Padhi

OSD II to the Chairman, NSB
National Shipping Board, New Delhi
Mobile +91-9873736702
Email: official04.nsb@gov.in

Copy to:

(i) All Members of National Shipping Board.

-sd-

OSD II to the Chairman, NSB

PART II

Subcommittee Report No.1

Sub-Committee No. 1

Title:

**To prepare a Roadmap for Augmentation of the Indian Shipping
Tonnage to achieve MAKV-2047 Goals**

Chairperson: Shri Anil Devli

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PREFACE BY THE CHAIRMAN OF THE SUB-COMMITTEE



Anil Devli, CEO INSA

India is the world's fifth-largest economy, the largest democracy, and one of the biggest generators of seaborne trade on the planet. Yet, as this report documents with uncomfortable precision, the ships that carry that trade the crude oil that powers our refineries, the coal that lights our cities, the fertiliser that feeds our farmers, the containers that carry our exports to the world are almost entirely foreign-owned and foreign-flagged. We pay them approximately USD 75 billion every year in freight, tax-free, a sum that has at times surpassed our entire current account deficit. And we pay it not because we lack the capital, the skill, or the will to build an Indian fleet, but because our own policies make it structurally more expensive to fly the Indian flag than to fly any other.

That is the central finding of this Sub-Committee, and it is a finding that is neither comfortable nor ambiguous. It is supported by seven years of consistent representation by the Indian shipping industry to successive arms of the Government of India to NITI Aayog, to the Ministry of Finance, to the Ministry of Ports, Shipping and Waterways, to multiple inter-ministerial committees and by the Government's own data. The Maritime Amrit Kaal Vision 2047 (MAKV-2047) itself acknowledges that India's share of world shipping tonnage has stagnated at roughly one per cent for decades, and places the augmentation of Indian tonnage among its eleven priority themes. The Chairman, National Shipping Board has constituted this Sub-Committee with a precise mandate: to

convert that high-level aspiration into a detailed, grounded, actionable roadmap. This report is our response to that mandate.

The Sub-Committee has drawn on an extensive body of material: the MAKV-2047 document itself; the data of the Directorate General of Shipping and UNCTAD; submissions made by the Indian National Shipowners’ Association (INSA) and other stakeholders between 2019 and 2026; comparative analyses of Indian-flag versus foreign-flag operating costs; studies of global best practice from Greece, China, Norway, Singapore and the UAE; and the expert inputs of domain specialists in strategic affairs, maritime economics and maritime law. The picture that emerges is consistent and clear.

Indian shipping is not uncompetitive because it is inefficient. An Indian-flag ship, on a like-for-like voyage, costs approximately 16 to 20 per cent more to operate than its foreign-flag competitor not because of any failing of management or seamanship, but because of the cumulative weight of IGST on ship import, IGST on overseas MRO services, TDS on seafarers’ wages, GST on freight and charter hire, and a structurally higher cost of capital. The foreign competitor carries none of these burdens and yet is given unrestricted access to Indian cargo. The Indian shipowner, labouring under this asymmetric fiscal load, is then asked, under the Right of First Refusal mechanism, to match that foreign competitor’s rate. That the Indian fleet has not shrunk further is, frankly, a testament to the resilience and patriotism of Indian shipowners. That it has not grown is entirely explicable by policy.

The roadmap that follows is built around a simple but powerful conviction: correct the asymmetry, and the fleet will grow. The Indian shipping industry has told the Government, repeatedly and with quantified evidence, that given the right policy environment it can add approximately 100 vessels in the next five years alone. This Sub-Committee endorses that estimate and sets it as the first milestone on the longer journey to MAKV-2047’s aspiration of India ranking among the world’s top five shipowning nations by 2047. The recommendations in this report structured under five heads of fiscal reform, cargo support, financing, regulatory improvement, and ease of doing business are not a wish-list. They are the minimum necessary conditions for that fleet growth to occur.

I wish to place on record the Sub-Committee’s appreciation for the detailed, evidence-based representations made by INSA and the shipping industry over many years. This report draws heavily on that work. I also wish to acknowledge the leadership provided by the Chairman, National Shipping Board in constituting

this Sub-Committee and in providing us with a clear and purposeful mandate. The observations, findings and recommendations in this report are those of the Sub-Committee and any errors of omission or commission are mine alone.

Francisco de Almeida, the first Viceroy of the Indies, wrote in the sixteenth century that “whosoever is lord of the sea will be lord of the commerce of the world, and therefore lord of the world itself.” Five centuries later, as India aspires to be a Viksit Bharat by 2047, the truth of that observation has not diminished. A nation that cannot secure its own trade routes is a nation that remains, at some level, dependent on the goodwill of others. This Sub-Committee submits this roadmap in the conviction that India can, and must, command its own waterline.

**Chairman, Sub-Committee on Augmentation of Indian Shipping Tonnage
National Shipping Board**

KEY TAKEAWAYS

The following are the principal findings and conclusions of the Sub-Committee. They are intended to be read as a distilled summary of the detailed analysis that follows in the body of the report.

1

India pays USD 75 billion a year in freight to foreign shipowners a sum that has at times exceeded India's entire current account deficit. Only about 6 per cent of India's origin and destination cargo is carried on Indian-flag ships. This is not a market failure; it is a policy outcome that can be reversed.

2

An Indian-flag ship is approximately 16–20 per cent more expensive to operate than a foreign-flag competitor on an identical voyage entirely because of asymmetric domestic taxation: IGST on ship import, IGST on overseas MRO services on a reverse-charge basis, TDS on seafarers' wages, and GST on freight and charter hire. None of these burdens fall on the competing foreign ship.

3

India's fleet of 1,553 vessels (13.5 million GT as on 31 March 2025) has an average age of 23.62 years well above decarbonisation and age-norm thresholds. A large portion of the existing fleet requires replacement, not merely augmentation, simply to maintain its current size. Fleet growth targets must account for this replacement need.

4

India ranks 17th globally by fleet ownership and approximately 22nd by tonnage, holding roughly 1 per cent of world tonnage against China's 12.4 per cent and Singapore's 6.5 per cent. India is one of the world's largest generators of seaborne trade and yet one of its smallest flag-state participants. This is structurally untenable for a nation aspiring to Viksit Bharat by 2047.

5

General Orders 1, 2 and 3 of 2018 have demonstrably failed each of their own stated objectives Indian transshipment at foreign ports increased; freight rates rose 200–320 per cent; zero agricultural cargo moved on foreign vessels under the GOs; and Indian container fleet investment ceased entirely after 2018. The Sub-Committee recommends their immediate withdrawal.

6

The Right of First Refusal (RoFR) mechanism, India's equivalent of cabotage, is critically undermined by the 20 per cent disqualification band given that Indian-flag operations are already 16–20 per cent costlier than foreign-flag purely on account of domestic policy, the 20 per cent cap effectively nullifies the RoFR in a large proportion of cases. The band must be removed.

7

The exemption granted to oil PSUs from the Public Procurement (Preference to Make in India) Order, 2017 is the single most damaging policy anomaly for Indian shipping it allows Oil PSUs, which control the largest volumes of Indian freight, to bypass Indian-flag preference entirely. Its reversal would immediately create the cargo visibility that unlocks investment in new Indian-flag tonnage.

8

India's 1957 Cargo Transportation Policy imports on FoB basis, exports on CIF basis remains sound in principle but has never been consistently enforced across Government and PSU procurement. Private-sector oil refineries follow FoB for over 90 per cent of crude imports as a matter of commercial prudence. Government PSUs should be mandated to do the same.

9

Given the right policy environment, INSA member companies could acquire approximately 100 vessels in the next five years this is the Sub-Committee's quantified interim target to 2030 and the first milestone on the

path to MAKV-2047. It is conditional on the resolution of ten specific, identified policy issues, which must be treated as an integrated package.

10

India's strategic and commercial security is materially at risk from its dependence on foreign carriers for critical imports crude oil, LNG, LPG, fertiliser, coal and food grain are overwhelmingly carried on ships over which India has no ownership, flag, or operational jurisdiction. A larger Indian-flag fleet is as much a national security imperative as it is an economic one.

11

The Maritime Investment Fund must be extended to second-hand vessel acquisition the overwhelming majority of Indian shipowners' actual acquisition activity involves second-hand ships. A fund confined to newbuilds will not drive the near-term fleet growth that MAKV-2047 demands.

12

Sovereign Green Bonds should be extended to eligible shipping expenditure including fleet decarbonization retrofits and green-compliant newbuilds. This would open a dedicated, low-cost, long-tenure capital channel for fleet renewal aligned with India's IMO and net-zero commitments.

EXECUTIVE SUMMARY

The Central Problem:

India's seaborne trade valued at approximately USD 1,200 billion per year is almost entirely carried by foreign ships. Approximately 94 per cent of India-origin and India-destination cargo moves on foreign-flag vessels. Indian ships carry roughly 30 per cent of India's crude oil imports, around 40 per cent of LPG imports, approximately 2 per cent of fertiliser imports, and effectively zero per cent of containerised EXIM cargo. The annual freight bill paid to foreign shipowners is approximately USD 75 billion a sum earned tax-free in India by companies registered in low-tax jurisdictions, and representing a permanent and avoidable drain on India's current account and foreign exchange reserves.

The root cause of this state of affairs is not a lack of Indian maritime capability. It is that an Indian-flag ship operating under Indian law is structurally more expensive than its foreign-flag competitor, purely on account of asymmetric domestic taxation and a structurally higher cost of capital. This asymmetry is the creation of Indian policy; it is therefore remediable by Indian policy. That is the conviction at the centre of this report.

The Scale of the Opportunity:

USD 75 billion in annual freight currently paid to foreign shipowners

Even retaining 20–25 per cent of this within the Indian economy through a larger Indian-flag fleet would be equivalent to a significant new source of services export income and import substitution. Over the 2026–2047 period, the cumulative value of freight retention could exceed USD 400–500 billion.

India's Fleet Today:

As on 31 March 2025, the Indian-flag merchant fleet comprised 1,553 vessels of 13.5 million Gross Tonnage (GT), with an average age of 23.62 years. India ranks 17th globally by fleet ownership and approximately 22nd by tonnage, holding roughly 1 per cent of world tonnage. China holds a 12.4 per cent share; Singapore 6.5 per cent; Greece approximately 17 per cent. This position is starkly disproportionate to the scale of India's seaborne trade.

The age profile of the existing fleet is a compounding problem. With the Indian government's own Age Norms policy increasingly restricting the import and operation of older tonnage, a substantial portion of the existing fleet must be replaced not just supplemented simply to maintain the current fleet size. Augmentation targets must therefore be set against a baseline that accounts for this attrition.

Why the Fleet Has Not Grown-The Cost Asymmetry:

A worked comparison of costs incurred by an Indian-flag ship and a foreign-flag ship on an identical voyage charter shows a total cost differential of approximately 16.7 per cent in favour of the foreign-flag vessel. The gap is driven entirely by domestic policy:

Cost Disadvantage Component	Nature of Burden	Borne by Foreign Ship?
5% IGST on ship import	Tax on vessel acquisition	No
5% IGST on overseas MRO (reverse charge)	Tax on maintenance and repair	No
~27% TDS on Indian seafarers' wages	Tax on crew employment	No
5% GST on freight / time-charter hire	Tax on core revenue	No
Higher cost of capital (9–13% vs 7–9% USD)	Financing disadvantage	No
Additional compliance obligations	Regulatory cost	No

None of these burdens is borne by the foreign-flag ship competing for the same Indian cargo. The Right of First Refusal (RoFR) mechanism then asks the Indian shipowner to match the foreign ship's rate while carrying this additional load. The

20 per cent disqualification band on Indian bids, far from protecting Indian shipping, has in practice become the mechanism through which the asymmetry is institutionalised.

Policy Failures That Have Deepened the Problem;

The Sub-Committee has examined the history of government policies directed at promoting Indian shipping. A consistent pattern emerges: sound policy intent undermined by inconsistent implementation, sector-specific exemptions, and the absence of monitoring mechanisms.

- The 1957 Cargo Transportation Policy (FoB/CIF) remains unenforced for PSUs, ceding the choice of carrier and therefore Indian freight revenue to foreign interests.
- The Public Procurement (Preference to Make in India) Order, 2017 was specifically exempted for oil PSU shipping contracts the very segment where it would have had the greatest positive impact.
- General Orders 1, 2 and 3 of 2018, introduced to benefit Indian trade, have by the Government's own underlying data failed each of their stated objectives: Indian transshipment at foreign ports increased; freight rates rose 200–320 per cent; zero agricultural cargo moved under the GOs; and Indian container-fleet investment ceased entirely after 2018, with the fleet declining from 37 to 32 vessels.
- The Scheme for Promotion of Flagging has utilised only 22 per cent of its budget (Rs. 358 crores of Rs. 1,624 crores), reflecting the narrowness of its current design.
- The Maritime Investment Fund, as currently structured, is largely confined to newbuilds, while the overwhelming majority of Indian shipowners' actual acquisition activity involves second-hand vessels.

The Sub-Committee's Recommendations:

The Sub-Committee's recommendations are grouped under five heads, to be treated as an integrated, time-bound package:

A. Fiscal and Taxation Reform (Immediate Priority):

- Exempt the import of Indian-flag vessels above 6,000 GT from 5% IGST.
- Exempt MRO services consumed overseas by Indian-flag vessels above 6,000 GT from IGST on a reverse-charge basis.
- Revise TDS applicability on the wages of Indian seafarers on Indian-flag vessels to achieve parity with seafarers on foreign-flag vessels.

- Extend GIFT City equivalent tax treatment to all DTA-domiciled Indian-flag vessels.
- Include shipping as an eligible category under India's Sovereign Green Bond framework.

B. Cargo Support and Demand-Side Measures:

- Strictly enforce the 1957 Cargo Transportation Policy: mandate at least 70% of PSU imports on FoB basis within five years, with 25% of exports on CIF basis, rising 5 percentage points annually.
- Bring oil PSU shipping procurement fully within the Public Procurement (Preference to Make in India) Order, 2017 (as revised 2020); reverse the December 2020 general relaxation.
- Withdraw General Orders 1, 2 and 3 of 2018 and restore the Right of First Refusal for container cargo (EXIM and coastal).
- Remove the 20 per cent disqualification band on Indian bids under the RoFR mechanism.
- Award long-term Contracts of Affreightment (CoA) to Indian shipping companies for coal, fertiliser and crude oil imports.
- Mandate that foreign-flag ships engaged by Indian charterers for periods exceeding six months must convert to Indian flag.
- Develop a national Indian-flagged floating storage policy for strategic crude, petroleum products, LPG and LNG reserves.

C. Financing:

- Mandate that the Maritime Investment Fund (MIF) provides long-term, internationally competitive finance for second-hand vessel acquisition (not only newbuilds) and for decarbonisation retrofits.
- Direct infrastructure lending institutions to extend long-term, low-cost finance for vessel acquisition, given infrastructure status to the shipping sector.
- Include shipping in the Sovereign Green Bond framework as a dedicated channel of long-tenure capital for fleet decarbonisation.

D. Regulatory Strengthening:

- Strengthen RoFR in coastal shipping, oil tankers, gas carriers and dry bulk the sectors where Indian-flag participation is structurally viable and strategically critical.

- Review and rationalise the cumulative additional compliance burden on Indian-flag vessels beyond IMO requirements (mandatory FSI over 15 years, mandatory CCTV, additional SAT-C, etc.).
- Align safe-manning norms with White List MOU-flag vessels of comparable type and size.

E. Ease of Doing Business:

- Standardise customs procedures for vessel import, conversion and reconversion across all Indian customs houses.
- Ensure policy consistency and longevity; avoid sector-specific exemptions and sudden policy reversals.
- Issue conditional Vessel Sharing Agreement (VSA) guidelines for container ships with mandatory capacity reservation for Indian operators and NVOCCs.

The Phased Roadmap:

Phase	Timeline	Key Actions	Headline Target
Phase 1	0–6 months	Remove IGST on ship import and overseas MRO; withdraw GOs 1/2/3 of 2018; remove 20% RoFR band; reverse oil PSU procurement exemption; include shipping in Sovereign Green Bond framework; issue standard Customs SOP for vessel import	Administrative and fiscal quick-wins; create conditions for investment decisions
Phase 2	6–12 months	Mandate FoB/CIF compliance trajectory for PSUs; operationalise Maritime Investment Fund for second-hand acquisition; declare 12-month notice for Indian-built/flagged vessel requirement on coastal cargo up to 8,000 DWT; notify national floating storage policy	Demand visibility established; financing pipeline operationalized

MAKV-2047 Milestone	By 2030 (interim)	100+ new Indian-flag vessels added; sustained growth trajectory established	~100 vessel additions; India's freight retention increases materially
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Expected Outcomes:

If implemented as an integrated package, the Sub-Committee assesses that the measures above will:

1. Retain a substantial and growing share of the USD 75 billion annual freight within the Indian economy, replacing outflows with domestic earnings for Indian shipowners, seafarers, and ancillary service providers.
2. Materially improve India's commercial and strategic security in the carriage of critical imports crude oil, LPG, LNG, fertiliser, coal and food grain in the prevailing geopolitical environment.
3. Enable strategic floating storage of crude oil, petroleum products and gas on the Indian coast, adding depth and diversity to India's strategic reserves.
4. Generate significant additional employment and training opportunities for Indian seafarers and shore-based maritime professionals.
5. Support India's decarbonisation commitments by enabling fleet renewal toward IMO-compliant, lower-emission tonnage.
6. Place India on a credible growth trajectory toward the MAKV-2047 aspiration of ranking among the world's top five shipowning nations by 2047.

The Closing Argument:

Indian shipping does not require protection from inefficiency. It requires freedom to operate on terms equivalent to its foreign competitors the removal of the asymmetric fiscal and regulatory burden that domestic policies impose upon the Indian flag, and the long-term policy certainty and demand visibility that allow Indian companies to plan and finance fleet growth with confidence. The Government has the evidence, the mandate in MAKV-2047, and the tools. What is required now is the decision and its consistent execution.

CHAPTER I: INTRODUCTION

The Chairman, National Shipping Board (NSB) has constituted this Sub-Committee with the mandate “To prepare a Roadmap for Augmentation of the Indian Shipping Tonnage to achieve MAKV-2047 Goals.” This report is submitted in fulfilment of that mandate and sets out the present status of Indian-flag tonnage, the structural and policy reasons for its stagnation, the views of stakeholders and domain experts placed before the Government over the past several years, national and global best practices, and a consolidated roadmap of policy recommendations for the consideration of the Government of India.

The Maritime Amrit Kaal Vision 2047 (MAKV-2047), launched by the Ministry of Ports, Shipping and Waterways (MoPSW), is the Government of India’s long-term blueprint for the maritime sector, built after 150 stakeholder consultations and an assessment of more than 50 international benchmarks. It sets out more than 300 actionable initiatives across eleven key themes, one of which is dedicated specifically to “Enhance India’s Tonnage.” MAKV-2047 records that the growth of Indian-flag shipping tonnage has not kept pace with the needs of Indian trade, that India’s share of world tonnage remains close to 1 per cent against China’s 5 per cent and Singapore’s 6.5 per cent, and that India today ranks 22nd in the world by tonnage with an aspiration to be ranked among the top five ship owning nations by 2047.

MAKV-2047 has identified nine initiatives toward this goal. This Sub-Committee’s task is to convert these high-level aspirations into a detailed, actionable roadmap, grounded in the lived operating experience of Indian shipowners and the extensive record of representations already made by the industry to the Government over the past several years.

1.1 Mandate and Scope:

The Sub-Committee was tasked with examining the policy, fiscal, regulatory, financial and operational factors that determine the size and competitiveness of the Indian-flag merchant fleet, and with recommending a roadmap by which Indian tonnage can be augmented to a level commensurate with India’s EXIM and coastal trade, in line with the aspirations of MAKV-2047. The scope covers EXIM shipping (tankers, bulk carriers, gas carriers, container vessels), coastal shipping, and related cross-cutting issues of taxation, customs, finance, regulation and ease of doing business.

1.2 Methodology:

In preparing this report, the Sub-Committee has drawn upon an extensive body of representations, notes, submissions and data compiled by the Indian National Shipowners’ Association (INSA) and placed before various arms of the Government of India over the period 2019 to 2026. The Sub-Committee has also taken into account the MAKV-2047 document published by MoPSW and the data published by the Directorate General of Shipping (DGS) and UNCTAD.

1.3 Structure of the Report:

This report follows the standard format prescribed by the Chairman, NSB for Sub-Committee reports. Chapter II sets out the statement of the problem. Chapter III describes the present status of Indian tonnage globally and nationally. Chapter IV examines the present status and challenges faced by stakeholders, including a comparative cost analysis of Indian versus foreign-flag operations. Chapter V reviews on-going government policies and their efficacy. Chapter VI presents the Sub-Committee’s suggested policies. Chapter VII presents the Sub-Committee’s final policy recommendations. Supporting material is placed at the Annexures, and sources used are listed in the Bibliography.

CHAPTER II: STATEMENT OF THE PROBLEM

India needs ships. The central and inescapable fact before this Sub-Committee is that the current Indian fleet does not have tonnage commensurate with the scale of India’s annual merchandise EXIM trade, valued at approximately USD 1,200 billion per year. The quantum of tonnage under the Indian flag should be sufficient to carry at least 50 per cent of India’s origin and destination cargoes, to replace old and redundant tonnage, and to induct state-of-the-art ships with green-compliant technology.

Today, around 94 per cent of India-origin and India-destination cargo is carried by foreign-flag ships, resulting in India paying a freight bill of approximately USD 75 billion every year to foreign shipowners. On average, Indian ships carry only about 40 per cent of India’s LPG imports, only about 30 per cent of India’s crude oil imports, and only about 2 per cent of India’s fertilizer imports; foreign-flag ships carry effectively 100 per cent of India’s containerized cargo. In global rankings, India stands 17th in the world in terms of fleet ownership by capacity and flag of registration as on 1 January 2025 (UNCTAD, Review of Maritime Transport, October 2025), and 22nd by tonnage as recorded in MAKV-2047 a position starkly at odds with the size of India’s economy and the volume of its seaborne trade.

The core reason for this shortfall is not a lack of capital, demand, or managerial capability within the Indian shipping industry. It is that an Indian-flag ship is structurally and systemically more expensive to own and operate from India than an equivalent foreign-flag ship competing for the same Indian cargo from overseas. The disadvantage arises principally from the cumulative effect of duties and taxes IGST on the import of ships, GST on MRO services procured overseas, TDS on seafarers’ wages, and GST on coastal and time-charter freight that are levied on Indian-flag ships but not on competing foreign-flag ships who are free to carry the same Indian cargo.

Beyond the economic cost, this dependence carries a strategic and commercial security dimension that the Sub-Committee considers central to its mandate. In the prevailing geopolitical environment, no Indian face-off or regional crisis can be assumed not to place India’s seaborne supply of crude oil, LPG, LNG, fertiliser, coal and food grain at risk. An overwhelming majority of this trade today moves on ships over which India has no control either in terms of ownership or flag jurisdiction and hence there is no assured continuity of service.

The problem before this Sub-Committee may be stated simply: Indian shipping is not non-competitive because it is inefficient. It is unable to compete because of Indian policies. Provision of a shipping service by an Indian company is heavily regulated and taxed, while the same service is freely allowed to be provided by foreign ships at net lower cost. Correcting this asymmetry is the precondition for achieving the tonnage-augmentation goals of MAKV-2047.

CHAPTER III: PRESENT STATUS NATIONAL AND GLOBAL PERSPECTIVE

3.1 The Indian Fleet Today:

As on 31 March 2025, the Indian-flag fleet comprised 1,553 vessels of 13.5 million Gross Tonnage (GT), with an average age of 23.62 years well above the threshold at which international decarbonisation and age-norm requirements begin to bind. The composition is set out below.

Ship Type	No. of Vessels	Million GT	Average Age (years)
Bulk Carriers	123	3.42	22.79
Tankers	199	7.59	23.55
Container Carriers	34	0.73	27.35
Offshore Vessels	233	0.57	26.41
Other Vessels	964	1.20	22.93
Total (31.03.2025)	1,553	13.50	23.62

Table 1: Composition of the Indian-flag merchant fleet
(Source: Directorate General of Shipping)

The implications of such an age profile are significant: the Indian government’s Age Norms policy increasingly restricts the import and operation of older tonnage. A substantial number of existing vessels will need replacement simply to maintain the current fleet size, in addition to the growth needed to meet MAKV-2047 goals.

3.2 India's Position in the Global Fleet:

India ranks 17th in the world in terms of fleet ownership by capacity and flag of registration as on 1 January 2025, according to UNCTAD’s Review of Maritime Transport (October 2025). MAKV-2047 records India’s position as 22nd by tonnage, with a share of approximately 1 per cent of world tonnage against a 12.4 per cent share for China and 6.5 per cent for Singapore. This is despite India being among the largest generators of seaborne trade volumes in the world.

3.3 Share of Indian Ships in the Carriage of Key Commodities:

Commodity	Approximate Share Carried by Indian-Flag Ships
LPG imports	~40%
Crude oil imports	~30%
Fertiliser imports	~2%
Container cargo (EXIM)	~0%
Overall India-origin/dest. Cargo	~6%

Table 2: Share of Indian-flag vessels in key commodity trades
(Source: INSA submissions)

3.4 The Scale of the Annual Freight Outflow:

Because Indian ships carry only a small fraction of India’s seaborne trade, India pays an estimated USD 75 billion every year in freight to foreign shipowners a sum that has at times surpassed India’s annual current account deficit. This freight is earned effectively tax-free in India since foreign shipping companies are typically incorporated in low-tax jurisdictions. This outflow represents value that, with an adequately sized Indian-flag fleet, would instead accrue to the Indian economy through freight earnings, seafarer employment, ship repair, insurance spend, and tax revenue.

3.5 Global Context - The Rise of State-Backed Maritime Nations:

Nations that have transitioned to advanced economies have, without exception, strategically expanded their national fleets. China, as on 1 January 2025, owns the most valuable fleet in the world with a 12.4 per cent share of world tonnage. Academic research cited by CSIS estimates that combined Chinese state support to shipping and shipbuilding totalled approximately USD 132 billion between 2010 and 2018, comprising state financing, direct subsidies, preferential lending, state-mandated equity infusions, and policy and legal preference for Chinese ships to carry Chinese cargo. Greece offers a different but equally instructive precedent: having suffered severely in the 2008 global financial crisis, Greek shipping rebuilt itself within roughly a decade into being the owner of the world’s largest fleet substantially by capturing trade on Asia and India-centric routes that Indian ships should have been well-positioned to serve.

CHAPTER IV: CURRENT CHALLENGES FACED BY STAKEHOLDERS

The single most consistent theme across every stakeholder representation examined by the Sub-Committee is that the higher cost of operating an Indian-flag ship does not arise from any inefficiency on the part of Indian shipping companies. Indian companies operate competitively and efficiently in the global market; it is the cumulative weight of duties, taxes and higher cost of capital that prevents them from competing freely for India-centric cargoes.

4.1 Cost Comparison - Indian-Flag vs Foreign-Flag on a Voyage Charter:

A detailed comparison of costs incurred by an Indian-flag ship and a foreign-flag ship undertaking an identical voyage charter (first leg, 18.8 days) was placed before the Sub-Committee. The results show a total cost differential of approximately 16.7 per cent against the Indian-flag ship.

Cost Component	Indian Flag (USD)	Foreign Flag (USD)	Difference (USD)	% of Total Gap
Bunker costs	329,433	315,428	14,005	13.5%
Employee cost (TDS ~30%)	53,915	41,473	12,442	12.0%
Tax on charter hire (5% GST upfront)	177,660	169,200	8,460	8.1%
MRO cost (incl. 5% IGST)	4,720	3,146	1,573	1.5%
IGST on customs re-import after MRO	225		225	0.2%
Cost of capital (incl. 5% IGST)	161,051	94,776	66,275	63.8%
Mandatory cadet training cost	968		968	0.9%
TOTAL	727,970	624,023	103,948	16.7%

Table 3: Voyage-charter cost comparison Indian-flag vs foreign-flag
(Source: INSA, 11 February 2026)

The largest single driver of the differential is the cost of capital, reflecting the materially higher cost of debt available to Indian shipping companies compared with foreign peers who access financing at SOFR plus a modest spread. The remaining gap is driven almost entirely by asymmetric taxation.

4.2 Structural Cost Factors - A Comparative Overview:

Cost Factor	Foreign Company / Foreign Flag	Indian Company / Indian Flag
Financing cost	SOFR + 2.5–4%; ~7–9% p.a. (USD)	9–13% p.a. depending on bank/company size
Tax on ship acquisition (IGST)	0% generally	5% IGST; BCD + surcharge 5.5–27.5% (except HSN 8901)
Tax on MRO in India	Typically 0%	5% GST
Tax on MRO abroad	Typically 0%	5% IGST on reverse-charge basis
Tax on seafarers’ wages	Typically no withholding by flag state	TDS as per slab; ~27% average for foreign-going vessels
GST on freight / time-charter	NIL	5% GST
Insurance (P&I, Hull) IGST	NIL	5% IGST on reverse-charge basis
Additional compliance costs	Registry/safety/tonnage fees only	Annual FSI > 15 yrs; mandatory CCTV; additional SAT-C; MMD survey; PHO certification; cadet training obligation

Table 4: Structural cost comparison Indian-flag vs foreign-flag
(Source: INSA / DGS / GST provisions)

4.3 Demand-Side Constraints:

Stakeholders have consistently identified the absence of long-term, visible cargo demand as a binding constraint on investment decisions. Specific concerns include: continuation of CIF basis imports by Indian PSUs (ceding carrier choice to foreign sellers); oil PSU tenders floated as global rather than reserved tenders; and qualifying criteria in PSU cargo tenders that explicitly favour foreign ships or road/rail expertise over ship-owning experience.

4.4 Ease of Doing Business - Operational Friction:

Indian-flag ships are subject to a cumulative additional compliance burden not applied to foreign-flag ships, including mandatory annual Full Survey/Inspection (FSI) for vessels over 15 years; mandatory CCTV installation (recommendatory only for foreign flags); a requirement for an additional SAT-C satellite communication terminal; compulsory class-society survey participation during dry-docking; Port Health Officer jurisdiction over purely coastal vessels; and continued requirement for physical Articles of Agreement notwithstanding MLC supersession. Each of these add cost to Indian-flag operations without equivalents for foreign competitors.

CHAPTER V: ON-GOING GOVERNMENT POLICIES AND THEIR EFFICACY

5.1 The 1957 Cargo Transportation Policy (FoB/CIF):

The Government of India’s Cargo Transportation Policy of 1957 envisaged imports on a Free on Board (FoB) basis and exports on a Cost, Insurance and Freight (CIF) basis, vesting the choice of carrier with an Indian entity supported by the Right of First Refusal. The policy remains sound in principle India’s private-sector oil refineries import over 90 per cent of crude oil on FoB basis as a matter of commercial prudence. However, it has not been consistently followed across Government and PSU procurement, ceding the choice of carrier and therefore the opportunity to employ Indian shipping to foreign interests.

5.2 The Right of First Refusal (RoFR) Mechanism:

Under RoFR, an Indian shipping company is given the opportunity to carry cargo only if it can match the rate offered by the lowest foreign bidder (L1), with disqualification if the Indian bid exceeds the foreign bid by more than 20 per cent. Given that Indian-flag operations are approximately 16 per cent costlier than foreign-flag purely on account of asymmetric domestic policy, this 20 per cent band effectively negates the policy intent of RoFR in many cases. The L1-only framework also takes no account of the relative environmental performance, age, or the capital already invested by an Indian company in acquiring Indian-flag tonnage.

5.3 Public Procurement (Preference to Make in India) Order, 2017:

The PPP-MII Order, 2017 requires that shipping freight contracts below Rs. 200 crores be floated among Indian companies only. However, an order issued by the Department of Expenditure on 21 December 2020 granted oil PSUs under MoPNG a general relaxation since extended permitting them to float global tenders even below Rs. 200 crores. This directly contravenes the Order’s intent and has had the most damaging practical effect on Indian shipping of any single policy action in recent years.

5.4 General Orders 1, 2 and 3 of 2018:

GOs 1, 2 and 3 of 2018 permitted foreign-flag vessels to transport EXIM containers and agricultural/fertiliser commodities between Indian ports without a licence. The evidence is unambiguous that these GOs have failed each of their own stated objectives:

- Indian transshipment at foreign ports increased from 21.84 lakh TEUs (FY17) to 28.81 lakh TEUs (FY24), while transshipment at Indian ports fell from 5.97 to 1.92 lakh TEUs.
- Freight rates rose by 200–320 per cent over the period.
- Zero agricultural cargo has moved on foreign vessels under the GOs.
- Indian container fleet investment ceased entirely post-2018: the fleet declined from 37 vessels (FY19) to 32 vessels (FY24), against 14 vessel additions in the preceding four years.

The Sub-Committee considers the case for withdrawal of GOs 1, 2 and 3 of 2018, and restoration of RoFR in the container trade, to be comprehensively established.

5.5 Scheme for Promotion of Flagging of Merchant Ships:

Against a budget of Rs. 1,624 crores, only Rs. 358 crores had been utilised as of 31 March 2026 a utilisation rate of approximately 22 per cent reflecting the narrowness of the scheme’s present design. The scheme is confined to import cargoes under RoFR and does not extend to exports, Contracts of Affreightment, or coastal shipping. This Sub-Committee recommends expansion of the scheme’s scope to all trades.

5.6 GST and Customs Treatment of Shipping Inputs:

5% IGST is levied on the import of Indian-flag vessels. This effectively taxes all Indian shipowners’ acquisition activity. Input credit remains substantially blocked in many structures. Indian shipyards have limited capacity to build ships above 6,000 GT, meaning the underlying rationale that this would benefit Indian shipbuilding has not been borne out. Additionally, 5% IGST is levied on a reverse-charge basis on MRO services consumed overseas by Indian ships, despite international shipping logistics making it impractical to divert vessels to India mid-charter. The DGS has agreed on a proposal to remove IGST on ships above 6,000 GT for a period of five years; the Sub-Committee recommends this be implemented without further delay.

5.7 TDS on Seafarers’ Wages:

Indian shipping companies must deduct approximately 27 per cent as TDS on seafarers’ wages, on average across ranks. No equivalent obligation applies to foreign ships employing Indian seafarers on Indian-origin or India-destination trades. The result is extreme reluctance on the part of Indian seafarers to serve on Indian ships, migration of seafarers to foreign-flag vessels, and a higher wage

cost for Indian companies. This Sub-Committee recommends revisiting TDS applicability to achieve parity with the treatment of seafarers on foreign-flag vessels.

5.8 Maritime Investment Fund (MIF):

The Government’s outlay for the Maritime Investment Fund, the Shipbuilding Financial Assistance Scheme, and the Shipbuilding Development Scheme is Rs. 25,000 crores. Stakeholders have welcomed these measures but note that the MIF’s current structure appears largely confined to financing newbuilds in India, whereas the overwhelming majority of Indian shipowners’ actual acquisition activity involves second-hand tonnage. The Sub-Committee recommends that the MIF be explicitly mandated to finance second-hand vessel acquisition and decarbonization retrofits on internationally competitive terms.

5.9 Overall Assessment:

The consistent pattern across on-going policy initiatives is not an absence of sound intent but a persistent gap between stated intent and implementation, and abrupt policy reversals. The FoB / CIF policy exists but is unenforced; the PPP-MII Order exists but was specifically exempted for the sector where it would have had the greatest effect; GOs 1, 2 and 3 of 2018 have, by the Government’s own data, failed each of their objectives while materially damaging Indian container-shipping capacity. This pattern of well-intentioned policy undone by inconsistent implementation and periodic sector-specific exemptions is a central lesson this Sub-Committee carries into its recommendations.

In summary, the current policy scenario remains skewed against Indian-flag ships in three critical respects:

- Core fiscal asymmetries IGST on ship import, IGST on overseas MRO, and TDS on seafarers’ wages remain unresolved despite representations since 2017.
- On-going support schemes are inadequate in scope: the flagging promotion scheme covers only 22% of its budget; the RoFR 20% band effectively neutralizes the mechanism; the MIF is confined to newbuilds.

- Policy orders that should protect Indian shipping the PPP-MII Order and the FoB/CIF Policy have not been implemented in the shipping sector and have been actively undermined by specific sector exemptions.

CHAPTER VI: SUGGESTED POLICIES

Drawing on the present status, stakeholder discussions, expert views and best practices set out in the preceding chapters, this Sub-Committee groups its suggested policy interventions under five heads.

6.A Fiscal and Taxation Measures:

- Exempt the import of Indian-flag vessels above 6,000 GT from the 5% IGST currently levied.
- Exempt MRO services consumed by Indian-flag vessels above 6,000 GT outside India from IGST on a reverse-charge basis.
- Revisit the applicability of TDS on the wages of Indian seafarers serving on Indian-flag vessels, achieving parity with the treatment of seafarers on foreign-flag vessels.
- Extend the tax benefits currently available to GIFT City domiciled vessels to all Indian-flag vessels operating from the Domestic Tariff Area.
- Include shipping as an eligible category under India’s Framework for Sovereign Green Bonds, alongside the existing “Clean Transportation” category.

6.B Cargo Support Measures (Demand Side):

- Strictly reaffirm and enforce the 1957 Cargo Transportation Policy (imports on FoB basis, exports on CIF basis) across all Government and PSU procurement.
- Mandate that Indian PSUs/CPSEs maintain at least 70% of imports on FoB basis over five years and at least 25% of exports on CIF basis on Indian ships, increasing by 5 percentage points annually.
- Bring procurement of shipping services by oil PSUs fully within the Public Procurement (Preference to Make in India) Order, 2017 as revised in 2020; reverse the December 2020 relaxation.
- Mandate that any foreign-flag ship engaged by an Indian charterer (including PSUs) for a period exceeding 3–6 months must convert to Indian flag before commencement of the contract.
- Award long-term Contracts of Affreightment to Indian shipping companies for the import of coal, fertiliser and crude oil.
- Withdraw General Orders 1, 2 and 3 of 2018 and restore the Right of First Refusal for container cargo (EXIM and coastal); permit Vessel Sharing Agreements only on condition that a minimum of 10% of capacity is reserved for Indian container companies and NVOCCs.

- Reform the RoFR mechanism so that the 20% disqualification band on Indian bids is removed.
- Develop a national Indian-flagged and owned floating storage policy enabling oil & gas PSUs to charter, own or co-invest in Indian-flag FSU/FSRU/FSO assets for strategic crude, POL and LPG/LNG reserves.

6.C Financing Measures:

- Mandate that the Maritime Investment Fund (MIF) will provide long-term, internationally competitive finance for acquisition of second-hand vessels (not newbuilds alone), and for decarbonisation retrofits.
- Direct infrastructure lending institutions to extend long-term, low-cost infrastructure finance specifically to vessel acquisition, following the grant of infrastructure status to the shipping industry.
- Include shipping as an eligible category under the Sovereign Green Bond framework as an additional, dedicated channel of low-cost, long-tenure capital for fleet decarbonisation.

6.D Regulatory Measures:

The Right of First Refusal (RoFR) is India’s equivalent of cabotage calibrated to India’s specific circumstances. The ITF’s comprehensive 2018 study of global maritime cabotage practices found that 91 countries within the United Nations employ some form of maritime cabotage; among WTO members, at least 30 maritime nations have a well-developed cabotage system. The most developed economies, including all G7 countries, practice cabotage. India’s RoFR system offers a sweet spot: it ensures Indian ships get the opportunity to carry Indian cargo while Indian trade retains time-bound access to ships either Indian or foreign. RoFR must therefore be strengthened, not diluted.

- Strengthen RoFR in coastal shipping, oil tankers, gas carriers and dry bulk carriers.
- Remove the 20% disqualification band on Indian bids under RoFR.
- Review and rationalise the cumulative additional compliance burden placed on Indian-flag vessels beyond IMO requirements.
- Align safe-manning norms for Indian-flag ships with White List MOU-flag vessels of comparable type and size.

6.E Ease-of-Doing-Business Measures:

- Standardise customs procedures for the import, conversion and reconversion of vessels across all Indian customs houses.

- Issue a single, standardized national SOP for customs treatment of vessel import, conversion and reconversion.
- Ensure policy longevity and consistency; avoid abrupt policy reversals and sector-specific exemptions that undermine investor confidence.
- Issue Vessel Sharing Agreement guidelines for container ships only after the interests of Indian shipowners and NVOCCs are protected through mandatory capacity reservation requirements.

CHAPTER VII: FINAL POLICY RECOMMENDATION TO THE GOVERNMENT TO ACHIEVE THE MAKV-2047 GOAL

7.1 The Quantified Opportunity:

According to industry estimates, given the right economic and policy environment demand visibility and consistent policies that make the Indian flag competitive with foreign ships INSA member companies could acquire approximately 100 vessels across shipping sectors in the next five years. This Sub-Committee adopts this estimate as the headline and quantified target against which the augmentation roadmap should be measured over the period to 2030 as an interim milestone on the longer path to MAKV-2047. This estimate is explicitly conditional on the resolution of ten specific policy issues, which this Sub-Committee considers must be treated as a single, integrated package.

7.2 The Ten Pre-Conditions for Tonnage Growth:

The following conditions are endorsed by this Sub-Committee as the precise and necessary pre-conditions for the estimated tonnage growth. They must be addressed as a package, not piecemeal:

- ✓ At least 70% of PSU cargo imports to be on FoB basis, tied with long-term charters with Indian shipping companies.
- ✓ Provide long-term demand visibility through inclusion of private-sector companies in proposed JVs with oil PSUs, creation of competitive-bidding-based JVs with CPSEs, and requirement that foreign companies granted contracts to transport Indian EXIM cargo for longer than 6 months must compulsorily flag in India.
- ✓ Withdraw General Orders 1, 2 and 3 of 2018 which have decimated Indian container capacity and made India 100% dependent on global container shipping companies for containerised trade.
- ✓ Place Indian-flag DTA vessels on par with foreign-flag ships in respect of all duties and taxes: remove IGST on ship import; remove IGST on overseas MRO; remove TDS on Indian seafarers' wages.
- ✓ Provide access to long-term, low-cost capital and debt funds, both for second-hand tonnage acquisition and for fleet renewal.
- ✓ Ensure policy consistency and longevity; avoid sudden reversals and sector-specific exemptions that deter long-horizon investment.

- ✓ Reverse the exemption granted to oil & gas PSUs from the PPP-MII Order, 2017 (as revised 16 September 2020) in respect of procurement below Rs. 200 crores.
- ✓ Remove the 20% disqualification band on Indian bids under RoFR; strengthen RoFR in coastal, oil tanker, gas carrier and dry bulk sectors.
- ✓ Establish uniform customs practice in respect of the import of ships and related formalities.
- ✓ Issue Vessel Sharing Agreement guidelines for container ships only after the interests of Indian shipowners and NVOCCs are protected.

7.3 Consolidated Roadmap and Sequencing:

Phase	Timeline	Key Actions
Phase 1 Quick Wins	0–6 months	Remove 5% IGST on ship import (>6,000 GT) and on overseas MRO; remove 20% RoFR disqualification band; strengthen RoFR in coastal, tanker, gas and bulk sectors; withdraw GOs 1, 2, 3 of 2018; restore RoFR for container cargoes with conditional VSA guidelines; reverse oil PSU procurement exemption; issue standardised national Customs SOP for vessel import; include shipping in Sovereign Green Bond framework; revisit TDS on seafarers’ wages; extend GIFT City tax equivalence to DTA Indian-flag vessels.
Phase 2 Demand & Finance	6–12 months	Mandate FoB/CIF compliance trajectory for PSUs (70% FoB imports within 5 years; CIF exports rising 5 pp annually from 25% base); operationalise Maritime Investment Fund for second-hand and newbuild acquisition; declare 12-month advance notice that coastal cargo up to 8,000 DWT to be carried on Indian-built or Indian-flagged vessels; notify national Indian-flagged floating storage policy for FSU/FSRU/FSO assets.
MAKV-2047 Milestone	By 2030 (interim) and	~100 vessel additions by 2030; India’s share of its own freight rising materially; fleet renewal toward IMO-compliant decarbonized tonnage; India on

	beyond to 2047	trajectory to Top-5 shipowning nation by 2047 per MAKV-2047 aspiration.
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7.4 Expected Outcomes:

If implemented as an integrated package, this Sub-Committee assesses that the roadmap above would:

- ✓ Retain a substantial share of the USD 75 billion in annual freight currently paid to foreign shipowners within the Indian economy.
- ✓ Materially improve India’s commercial and strategic security in the carriage of critical EXIM commodities crude oil, LPG, LNG, fertilizer, coal and food grain.
- ✓ Enable strategic floating storage of crude oil, petroleum products and gas on the Indian coast, adding depth and diversity to strategic reserves.
- ✓ Generate additional employment and training opportunities for Indian seafarers and shore-based maritime professionals.
- ✓ Support India’s decarbonization commitments by enabling fleet renewal toward IMO-compliant, lower-emission tonnage.
- ✓ Place India on a credible growth trajectory toward the MAKV-2047 aspiration of ranking among the world’s Top-5 ship owning nations by 2047.

7.5 Closing Recommendation:

The evidence placed before this Sub-Committee representations made consistently over the period 2019 to 2026 by the Indian shipping industry to successive arms of the Government of India demonstrates that Indian shipping does not require protection from inefficiency; it requires freedom to operate on terms equivalent to its foreign competitors, the removal of the asymmetric fiscal and regulatory burden that domestic policies impose on the Indian flag, and long-term policy certainty and demand visibility that allows Indian companies to plan and finance fleet growth with confidence.

This Sub-Committee accordingly recommends that the Government of India treat the measures set out in this report fiscal parity with the foreign flag, restoration of cargo support mechanisms, a dedicated and adequately capitalized fund for second-hand ship acquisition, and removal of the

disproportionate regulatory burden on Indian-flag vessels as a single, time-bound, monitored package, in order to achieve the Maritime Amrit Kaal Vision 2047 goal of a larger, competitive and more secure Indian-flag merchant fleet.

ANNEXURES

The following Annexures form part of this report and are to be compiled and appended by the Secretariat of the Sub-Committee:

- Annexure A: Written Representations by Stakeholders (INSA, DGS, and others, 2019–2026)
Ann A _ Additional policy issues for Niti Aayog
Ann A_ Augmentation of Indian tonnage_
Ann A_Issues with coastal shipping PPT by NSB_INSA
- Annexure B: Views of Domain Experts on the Strategic and Economic Case for an Indian Merchant Fleet
Ann B Towards a larger Indian fleet by Dr. Ghanekar
- Annexure C: Data Tables — Fleet Statistics, Freight Outflows, Commodity-wise Carriage Share, Cost Comparison Workings – Please refer to <https://shipmin.gov.in/en/transport-research/indian-shipping-statistics>
- <https://www.clarksons.com/>
- <https://www.drewry.co.uk/trackers-and-indices/latest-trackers-and-indices>
- Annexure D: Government Policies Discussed in this Report (text / extracts of relevant Government orders, circulars and notifications) <https://dgma.gov.in/>

<https://shipmin.gov.in/>
- Annexure E: Global Conventions and International Benchmarks Used (ITF Cabotage Study 2018; UNCTAD Maritime Transport Review 2024–25; CSIS China Shipping Report; etc.)
- Annexure F: Case Studies of National and Global Best Practice (China, Greece, Norway, Singapore, UAE/GIFT City)

<https://www.itfseafarers.org/en/news/national-flag-ships-vital-national-security>

<https://unctad.org/publication/review-maritime-transport-2025>

<https://www.csis.org/analysis/charting-new-course-countering-chinas-dominance-global-shipbuilding>

Annexure A: Additional policy issues for Niti Aayog

17.08.2021

1) Services provided by the Indian shipping industry need to be considered as deemed exports:

Shipping services i) earn money in foreign exchange when it provides shipping services and carries foreign origin/destination cargo. This would also include cross trades. ii) It also aids in import substitution when it provides shipping services to Indian cargo owners and valuable foreign exchange is saved in the process.

As a result, shipping services is one of the sectors that earns/saves maximum foreign exchange. This efficacy of the shipping sector needs to be duly recognized and it needs to be granted the status of deemed exports.

Given the structural imbalances in the sector where it is costlier to provide a shipping service from India and cheaper to import it, the grant of deemed exports status and the consequent benefits will help the Indian shipping claim a larger share in the carriage of India's EXIM trade and the approximate annual freight of USD 52 billion.

2) Indian maritime sector not able to make any headway at IMO, WTO, bilateral and regional trade:

India has failed to make an impact at several powerful platforms including the IMO which results in additional compliance cost to Indian shipping companies.

A report published in November 2017 by a UK-based non-governmental organization, InfluenceMap revealed that corporations carry disproportionate influence on the International Maritime Organization's (IMO) decision-making processes. In contrast, India, who is a member of the IMO Council since 1959 and has an EXIM trade of ~USD 800 billion plus, has never been able to influence the IMO on issues that would have directly aided the profit of or pruned the costs for Indian shipping companies, thereby benefiting the Indian economy as a whole.

India has also not been able to realize its full potential in maritime auxiliary services at the WTO through its skilled set of seafarers, because of the restrictive market access opportunities in most countries for foreign service professionals.

These are the crucial factors responsible for India not gaining at all in the maritime space.

Because of India's inability to work around the skewed framework of WTO policies and negotiating terms, the Indian shipping industry has not been able to achieve the requisite size and capacity by making use of the market access opportunities in external markets.

So, in real terms, market access is only ceded by India, and the domestic policy framework makes it possible for foreign shipping service providers to have free access to the Indian coast and cargoes – EXIM and coastal and at the same time be more competitive vis-à-vis Indian shipping companies.

3) Need for specialised funding to renew Indian flag shipping fleet in consonance with international decarbonisation targets:

The maritime transport industry is under increasing pressure to curb its greenhouse gas (GHG) emissions, which account for approximately 3% of global emissions annually. The International Maritime Organization (IMO), in line with United Nations Sustainable Development Goals has adopted an ambitious GHG reduction strategy with a vision to begin decarbonizing shipping with set targets and timelines.

With 2008 as a baseline year, this strategy aims to reduce by at least 50% the total GHG emissions from shipping by 2050 while at the same time reducing the average carbon intensity (CO₂ per tonne-mile) by at least 40% by 2030, and 70% before mid-century. The targets outlined above apply by default to Indian shipping as it is but a sub set of the global shipping industry.

As this decarbonisation protocol must be met, India must buy newer ships to renew the existing fleet worth Rs. 70,000 crore which cannot sail beyond the short term! Indian flag shipping assets have to comply with these international industry standards or shut down!

The existing Indian fleet is already small and aging, and adequate only to carry less than 10% of India's national EXIM cargoes. This would mean that almost immediately, all old ships would need to be replaced with a younger fleet and/or equipped with this engines or fuel systems in order to meet the new requirements of decarbonization that is low carbon emissions.

While the Indian Shipping industry is committed to walk the path of net-zero carbon emissions, it is facing challenges related to financing/procurement of

energy efficient ships, investments in new green technologies and phasing out carbon intensive assets.

Therefore, it is critical to understand the financial constraints of the shipping industry and the urgency of “decarbonisation in shipping”.

On this backdrop, there is a need to set up a Maritime Development Fund to

- i. provide competitive, long term financial assistance;
- ii. supplement the present sources of finance available from banks; for the acquisition and modernisation of various types of vessels under the Indian flag.

Annexure A: Augmentation of Indian Tonnage

14.04.2026

The need for augmentation of Indian tonnage:

While prima facie shipping is all about export-import of goods, this exchange or trade underscores defining issues such as **ownership of ships**, strategy, economic and commercial security, all of which finally upholds the sovereignty of a state.

The basic issue

The most basic issue today is that India needs ships. It is a fact that the current Indian fleet does not have ships commensurate to carry India's annual merchandise export-import trade valued around USD 1200 billion per year.

The quantum of ships needed in the Indian flag should be commensurate to carry at least 50% of Indian destination and origin cargoes, to replace old and redundant ships, and to buy new ships which use the state-of-the-art technologies and green compliant fuels.

The Indian fleet today

Ship Type	No of Vessel	Million GT	Average Age
Bulk Carriers	123	3.42	22.79
Tankers	199	7.59	23.55
Containers Carriers	34	0.73	27.35
Offshore Vessels	233	0.57	26.41
Other Vessels	964	1.20	22.93
Total as on 31.03.2025	1553	13.5	23.62

Source: Directorate General of Shipping

The table above highlights the need for replacing old tonnage especially given the Age Norms policy as mandated by the Directorate General of Shipping.

Today, around 94% of Indian origin/destination cargo is carried by foreign ships and this results in India paying a freight of about USD 75 billion per year to foreign ships.

On an average,

- a) Indian ships carry only 40% of Indian LPG imports

- b) Indian ships carry only 30% of Indian crude oil imports
- c) Indian ships carry only 2% of Indian fertilizer imports
- d) Foreign ships carry 100% of Indian container cargoes

In the global context, India ranks 17th in the world in terms of fleet ownership by capacity and in terms of flag of registration as on 1 January 2025.

This is seen in the table below sourced from United Nations Conference on Trade and Development (UNCTAD)'s Review of Maritime Transport dated October 2025

 **Table II.3**
World fleet ownership by capacity and flag of registration, 1 January 2025

Country or territory of ownership	Vessels (number)			Carrying capacity (dead weight tons)				
	National flag	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag share (percentage of world total)	Capacity share (percentage of world total)
1 Greece	562	4 555	5 124	47 554 402	350 065 296	397 649 662	88	16.4
2 China	7 103	3 282	10 440	134 110 270	210 763 710	347 215 014	61	14.4
3 Japan	958	3 123	4 083	39 524 134	201 146 629	240 678 389	84	9.9
4 Singapore	1 358	1 527	2 922	71 301 599	81 844 936	153 428 741	53	6.3
5 Hong Kong, China	919	1 122	2 081	82 621 846	56 608 620	139 502 591	41	5.8
6 Republic of Korea	824	855	1 700	20 359 786	77 885 773	98 532 659	79	4.1
7 Germany	177	1 838	2 016	8 146 887	63 368 913	71 529 560	89	3.0
8 Taiwan Province of China	141	910	1 063	5 746 261	58 052 148	63 875 855	91	2.6
9 United Arab Emirates	142	1 434	1 598	648 895	55 699 303	57 431 043	97	2.4
10 United Kingdom, including the Isle of Man	328	941	1 275	8 352 748	48 054 580	56 990 614	84	2.4
11 Bermuda	-	425	426	-	53 683 102	53 743 656	100	2.2
12 Norway	938	837	1 777	16 435 489	35 609 247	52 175 429	68	2.2
13 Türkiye	404	1 743	2 159	6 209 585	43 920 400	50 184 717	88	2.1
14 Switzerland	12	737	749	767 211	46 467 757	47 234 968	98	2.0
15 United States	777	912	1 702	10 057 558	35 034 228	45 796 064	77	1.9
16 Denmark	385	412	797	20 983 825	21 314 142	42 297 967	50	1.7
17 India	915	318	1 244	17 201 926	19 639 071	37 066 599	53	1.5
18 Indonesia	2 450	155	2 617	29 335 545	3 889 225	33 276 506	12	1.4

Indian flag has relatively fewer ships:

The number of ships in the Indian flag remain on the lower side as the sector is unable to attract any new investments despite

- a) 100% Foreign Direct Investment being permitted in the sector and
- b) the fact that India is the destination and origin of humungous cargo volumes.
- c) Availability of personnel – on sea and shore.

d) Government does periodically come up with some limited incentive schemes and sporadically comes up with positive legislations like the implementation of the tonnage tax scheme in India.

Reasons for shortfall in tonnage

The core reason for the shortfall in Indian ships is that Indian flag shipping is disincentivised in India due to the inherent disadvantages that accrue to it by just being in the Indian operating environment.

While operating in India, Indian ships are costlier to operate because of the taxes and duties levied on it as also the additional responsibilities thrust upon it; that is to hire only Indian seafarers and train new cadets on Indian flag ships.

Similar taxes and duties are not levied on foreign ships when they compete with Indian flag ships in India and they are not burdened with additional responsibilities like hiring only Indian seafarers and compulsorily training cadets on their ships.

These disadvantages amplify when Indian policies fail to recognise the basic unfair matrix and give the necessary fillip to Indian flag ships when they have to compete with foreign ships for Indian coastal and export-import cargoes.

Here in this context, some fundamental issues need to be understood and clarified by the government.

a) Why do Indian and foreign ships enjoy equal access to Indian cargoes when foreign ships do not pay taxes in India or contribute to the Indian economy?

b) While it is a well-accepted fact that Indian ships are costlier to operate by 20% compared with any other foreign ship operating in India, yet the Right of First Refusal (RoFR) policy mandates that the contract for cargo carriage would be awarded to an Indian company only if it matches the rate quoted by the foreign ship which is the lowest bidder. This pushed down the revenues of Indian ships when their cost of operations are 20% higher.

Operating Indian ships is costlier:

The fundamental issue that ails Indian shipping is the fact that the costs of inputs needed to provide a shipping service are much higher for an Indian company compared to if one was to import such a service.

The higher costs of operating an Indian shipping company do not arise from any 'lack of efficiencies' in a company, i.e. the usage/components needed for operating a ship in India. In fact, most Indian companies are able to operate their ships efficiently in the global market. However, what spikes the cost of operating an Indian ship is the taxes imposed on it while operating in India/overseas while similar taxes are not levied on a foreign ship that provides a similar service in India/overseas. This makes Indian ships non-competitive in the fiercely competitive international freight market.

This is the crux of the issue with wider and strategic ramifications that leave India exposed to economic and commercial vulnerabilities.

All consumers of goods/services in India are required to purchase and use goods or services that are provided locally. In case a good or a service is imported, sufficient countervailing and legal action kicks in to ensure that the import is made costlier than the local supply. In case of 'cheap imports in any other sector in India,' anti-dumping duties are imposed on goods.

Inexplicably, this does not apply to shipping services. What worsens the situation is that India's government and private companies are allowed to import shipping services into India from a foreign shipping company without any barrier/control. This actually diverts cargo away from Indian companies who are set up in India, pay taxes in India, employ only Indian seafarers, train Indian cadets and contribute in myriad ways to the Indian economy.

While import of consolidated shipping services into India attracts nil tariff, importation of all individual inputs by an Indian shipping company, to further provide a consolidated Indian flag shipping service are severely taxed. To explain, "goods" (the ship itself), "other goods" (stores, spares, fuel) and "services" (insurance, maintenance and repair) needed to provide an "Indian flag shipping service" are taxed. This points to a huge gap between India's trade policy in general and domestic regulatory regime and this results in more favourable treatment to foreign service suppliers or a difference of around 20 percent in operating costs.

All these policy logjams effectively incentivize import of shipping services rather than promoting, facilitating the setting up and expansion of the use of Indian shipping services.

Tax issues need to be addressed:

Indian shipping is not against payment of any taxes in India per se. However, taxes that are unevenly levied only on Indian ships and not on the competing foreign ships hurt the prospects of Indian shipping. The following levies are restricted to Indian ships and need to be removed.

Comparative cost factors for ships under Foreign & Indian Flag

S. N.	Cost factors	Foreign Co. Foreign Flagged (%)	Indian Co. Indian Flagged (%)
1	Financing cost	SOFR + 2.5 - 4%; ~7–11% p.a. (USD)	9 to 13% depending on Bank and size of the company
2	Taxation on Acquisition of ship (e.g. IGST, Import Duties etc)	0% (generally no import duty/GST); one-time registry & documentation fees	5% IGST on import of all vessels. BCD + Surcharge ranging between 5.5% to 27.5% on all vessels except those that fall within HSN 8901
3a	Taxation on Maintenance, Repairs & Overhaul (MRO) Services including Dry-Dock service availed in India	Typically, 0% as foreign vessels are treated under export of services	5% GST
3b	Taxation on Maintenance, Repairs & Overhaul (MRO) Services including Dry-Dock service availed abroad	Typically, 0% VAT/sales tax on ship repair for international shipping (many jurisdictions exempt/zero-rate); otherwise local VAT may apply	5% IGST

4	Taxation on Seafarers' wages.	No TDS/withholding by flag state in most open registries; crew taxed (if at all) in their home jurisdiction	As per Indian Income tax applicable rates slab wise in case of those who are not eligible to be treated as NRIs. On an Indian flag FG vessel average TDS deducted by the employer is about 27% of wages overall.
5	Withholding Tax on the receipt from non-resident	NIL	
	Minimum Alternate Tax	Subject to jurisdictional tax	As per Indian income tax laws, the basic rate of Minimum Alternate Tax (MAT) is 15% of the company's book profit. This rate is applied along with applicable surcharge and a 4% Health and Education Cess
6	GST on freight services:		
	Import	NIL	NIL
	Export	NIL	NIL
	Between two Indian port	NIL	5% GST
7	Time Charter services	NIL	5% GST
8	Insurance Cost (P&I, Hull etc)	NIL	5% IGST RCM BASIS

9	Any other Cost Component	Registry fees, annual safety/tonnage fees, local agent fees; generally lower statutory compliance burden than Indian flag. License permits required from DGS if vessels is calling India	1. Tonnage tax training 2. Cost of compliance in ship management costs. 3. Vessels more than 15 years the vessels must undergo FSI every year. 4. Compulsory CCTV system installation on ships 5. Additional SAT-C instead of 1 allowed by other flags. 6. Participation Survey of MMD during Drydocking 7. Mandatory PHO Certification costs 8. Loss of hire due to need to bring vessels alongside for inspection by Surveyors.
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The table above shows that foreign flag ships in India operate with NIL GST/Customs duty. In addition, foreign ships get cheaper/internationally competitive funding in their home countries.

One other important issue is that whenever the Indian government legitimately tries to get the India operations of foreign companies into the Indian tax net, their embassies in India get into the protest mode and approach the Indian PMO's office.

The solutions that would lead to ship augmentation

(a) To reaffirm the government of India's Cargo Transportation Policy of 1957 regarding Imports on "Free on Board" basis (FoB policy) and exports on the basis of "Cost Insurance and Freight Board" or CIF policy and strengthen the policy of Right of First Refusal (RoFR) thereby ensuring that transportation is decided by Indian entities and not foreign.

(b) There is a need to strictly implement the revised Department for Promotion of Industry and Internal Trade Public Procurement (Preference to Make in India) 2017. The revised order of 4th June 2020 states that orders below Rs. 200 crore have to be floated among Indian companies only with no international competitive bidding. However, Oil PSUs continue to float Global tenders in contravention of this Order. Incidentally, the Department of Expenditure, Ministry of Finance, has given a waiver to MoPNG/oil PSUs from this revised order for procurement of items on December 21st 2020.

(c) Any Indian charterer who hires a foreign ship for more than 3 months must have a clause in the hiring contract that the ship needs to be converted to Indian flag after the stipulated time period of 3 months.

(d) All the above-mentioned tax issues are to be alleviated.

(e) Need for funding has to be addressed by a dedicated fund that will provide long term money at internationally competitive rates.

All these actions together would make Indian and foreign ships equally competitive when competing for and carrying Indian cargoes. The foremost benefit of these positive actions would be that

The benefits of a large national fleet are that freight worth USD 75 billion or more than Rs. 7 lakh crore per year would be retained in India. In the current times of geopolitical conflicts it would be considered prudent that atleast 50% of national export-import cargoes are carried on Indian ships.

Given the tough geopolitical times that we currently live in, any face-off with our neighbours would put critical Indian imports in a jeopardy as no foreign flag would risk its ship and seafarers to bring crude oil or any other critical commodity to any Indian port in India. Even if a foreign flag was persuaded to carry Indian crude, it would be at stratospheric freight rates. This endangers India's commercial security.

Policy issues that need redressal other than tax:

1) Issues with the Right of First Refusal (RoFR)

Right of First Refusal (RoFR) in operation means that in a freight bidding process, if a foreign company is the lowest bidder, the participating Indian company is given the opportunity to transport the said cargo if it matches the rate offered by the foreign shipping company.

- a) The grant to RoFR by Indian charters should be a considered decision after taking into account the expenditure/investment that the Indian flag ship has incurred to buy a new ship.
- b) L1 cannot be the sole criteria in this complex ship operating environment. The RoFR mechanism should consider how “green” the Indian flag ships are before declaring a foreign ship to be L1.
- c) A bid by an Indian company gets automatically disqualified if it quotes more than 20% of the bid as submitted by a foreign shipping company. This completely disregards the fact that the cost of operating an Indian ship in India is 20% higher compared to a competing foreign ship. This clause should be withdrawn as this defeats the very purpose of RoFR.

2) All imports have to be made compulsorily on FoB basis and exports on CIF basis

3) DPIIT, Atmanirbhar Bharat and the Indian shipping sector

The government approved a "Policy to Provide Preference to Make in India in Public Procurement" on 24th May 2017. This was intended to give teeth to the 'Make in India' policy.

The purpose of the policy as described in its preamble said that it was meant to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment. Further, that government procurement was already substantial and could be further increased through partnerships, cooperation with local companies, establishing production units in India or joint ventures (JV) with Indian suppliers. This was also expected to increase the participation of local employees in services and ensure their training.

Accordingly, the Department for Promotion of Industry and Internal Trade (DPIIT) issued the "Public Procurement (Preference to Make in India) Order, 2017 (PPP-MII Order)" pursuant to Rule 153 (iii) of General Financial Rules, 2017. The order also made provision for the constitution of a Standing Committee to oversee its implementation. The policy was later revised on 16th September 2020 with provisions that were even more (domestic) industry friendly.

On this backdrop, the provisions of this order are very much applicable to the Indian flag shipping industry. Yet Indian shipping was not awarded a single additional opportunity for carriage of cargo owned by Indian PSUs, let alone the price preference as envisaged by this policy.

Incidentally and in an unrelated development, a meeting of the Standing Committee that was constituted to oversee the implementation of the policy was held on 6th December, 2017 to deliberate upon some specific issues and grievances related to public procurement. The Committee observed that some of the government institutions/ autonomous bodies/PSUs/JVs/companies etc. had included certain restrictive conditions in-the bid documents, which were highly discriminatory against domestic industry. This observation was not specific to any industry but a general one for all industry.

In this regard, Principal Secretary to Prime Minister had written to the Secretary, DPIIT to express his anguish that it was very disturbing that the broad message of this policy has not been appreciated by various Departments. The letter went on to say that it was the responsibility at the highest level in each Department to ensure that the tender conditions are strictly in sync with the public procurement order and each tender must be examined from the point of view of the interest of Indian industry.

In fact, all nodal ministries were asked once again to notify domestic content in respect of items assigned to them and to evolve an internal system of vetting the restrictive and discriminating terms & conditions against domestic manufacturers especially included in tenders or pre-qualification bids or expressions of interest floated by Indian PSUs or their attached/ subordinate offices, autonomous bodies, PSUs, JVs, with state governments and JVs formed among Central PSUs. In this manner, all nodal ministries were asked to implement this policy not only in letter but also in spirit.

It was also reported in the press in 2018 that due to this Order, Indian companies garnered over Rs. 50 billion in projects and business received from railways, GAIL, ONGC among others. The Ministry of Steel was at the forefront in implementing this policy. But for Indian shipping, this policy was a no show.

On its part, the Indian National Shipowners' Association (INSA) wrote extensively to its parent ministry, the Ministry of Ports, Shipping and Waterways (MoPSW) to liaise with other ministries so that additional business was procured by Indian flag shipping companies. INSA also wrote to several other people who could have used their good offices to implement the policy. **But this policy was not implemented in the shipping sector.**

What can be seen as an act of rubbing salt in the wound, not only the first but also the revised policy in September 2020 was not implemented for Indian shipping. Currently, the Indian shipping industry is unable to avail of the benefits prescribed because of an order issued by the Department of Expenditure, Ministry of Finance, on 21st December 2020 granting a 2-year general relaxation for procurement of shipping services by the Oil PSUs under the MOPNG. As a result of this relaxation/exemption, oil PSUs are permitted to float global tenders for the procurement of the services of chartering of ships; voyage charter, contract of affreightment (C0A), time charter of vessels for import of (a) crude oil, [b] LPG, [c] LNG and voyage charter for product vessels even for value of less than Rs. 200 crores. This is despite clear instructions by the DPIIT revised order said that all orders less than Rs. 200 crores were to be given to Indian shipping companies only.

This order was extended for another 2 years up to 2024. (Need to verify current status)

This anomaly needs to be corrected and the Oil PSUs under the MoPNG should be requested to comply with the provisions of the PP Order by granting preference to Indian ships.

4) The scheme for promotion of flagging of merchant ships is restrictive as it gives subsidy support to Indian ships only for import cargo and it kicks in only if there is a counter quote from a foreign ship and the Right of First Refusal (RoFR)

has been exercised. Therefore, against a budget of Rs. 1624 crores, only about Rs. 358 crores was estimated to be utilized until 31st March 2026.

This scheme needs to be extended to exports, CoAs and coastal shipping.

5) Need to permanently scrap General Orders 1, 2 and 3 of 2018 and to ban Vessel Sharing Agreements between container companies in India.

For the augmentation of Indian tonnage, the Indian shipping industry needs meaningful support from the Indian government and measures that will increase demand visibility for Indian ships.

The key measures would be:

- a) All Indian PSUs to maintain at least 70% of imports on FOB basis
- b) Award of long-term contracts by Indian PSU companies for the import of Coal, Fertilizers and Crude oil with a provision to convert to Indian flag before commencement of contract.
- c) Ensure open competitive bidding for JVs in ship owning with PSUs.

An example of successful state support to an industry

Countries who have transited into developed economies have strategically expanded their fleet to protect their economies in a fiercely competitive world. The most recent example is of China. According to UNCTAD, the most valuable fleet in the world belonged to China as on 1 January 2025 with 12.4% share of the world fleet by country of ownership.

It is clearly apparent that Chinese companies are increasingly dominant across the maritime supply chain as they are aided by formal and informal state support that is unrivalled in size and scope. While the nature of support is complicated and is opaque for an outsider looking for evidence, it has been quoted in several academic research papers that the combined state support to Chinese firms in the shipping and shipbuilding industry totalled roughly \$132 billion between 2010 and 2018. This is basis a report published by the Center for Strategic and International Studies (CSIS) and includes financing from state banks (\$127 billion) and direct subsidies (\$5 billion).

Owing to data limitations and the opacity of China's political system, this maybe a conservative estimate and may not include direct subsidies to unlisted firms, indirect subsidies, state-backed fundraising, preferential borrowing rates, and other non-market advantages from China's state capitalist system which includes support in law and policy that preference would be given to Chinese ships to carry Chinese cargo.

To summarise, China's shipping industry has risen from after the financial crises for ten years upto 2018 has been due to among several other things

- 1) Direct subsidies \$ 5 billion
- 2) State financing \$ 127 billion
- 3) Other types of state support namely

a) State fundraising

The Chinese government directs SOEs to support each other through various means including low interest loans with preferential terms, debt waiver, government-mandated equity infusions and low-interest bond issuances.

b) Barriers to foreign ships

China deters foreign firms from competing with or supplying Chinese shipping and ship building companies through domestic input requirement, import substitution and export restrictions.

However, the shipping and ship building industries are seen as just one chapter in China's evolving playbook for supporting the global rise of their strategically significant industries.

Issues impacting growth of Indian Coastal Shipping and proposed solutions.....



A presentation by
National Shipping Board



Ships covered in the proposal

1. Ships engaged in carriage of cargo and passengers on Indian coast, including Andaman & Nicobar Islands.
2. Ships engaged in service sectors such as ports and offshore installations.
3. Foreign flag ships operating under long-term Specified Period License (SPL) issued by DGMA.
4. INSA, ICCSA, CCTA, and SCI collectively represent over 90% of Indian tonnage +



Key objectives of the exercise

1. Make coastal shipping an efficient & preferred mode of transportation & reduce end users' costs.
2. Propose policy **and process interventions**, Infrastructure support, taxation reforms to promote investment in Indian tonnage and reduce logistics costs.
3. **Promote cargo visibility to spur investment in Indian tonnage**
3. Promote cargo agglomeration centers and logistics complexes at major/ non-major ports to facilitate the Hub-and-Spoke model of freight movement +



Earlier initiatives and their outcome

Earlier initiatives failed to deliver largely due to:

- Painting coastal shipping with a single stroke of brush instead of taking **a type wise** and regional approach. (not considering peninsular disadvantage)
- Taking “top down” approach with limited consultation with operational stakeholders to factor ground realities.
- Recommendations remained unimplemented.
- Lack of measuring and monitoring mechanisms +



Identified issues and proposed solutions



Lack of measures and resources to promote investment in Indian flag ships

Issue: WHY FLAG IN INDIA? ~~High Capital cost.~~ There is no incentive to own ships under Indian flag.

1. *Remove IGST on acquisition of vessels. (MoF, MoPSW)*
2. *Extend scope of Infra status to ships of 500 GT/24 Mtr length. (MoF, MoPSW)*
3. *Make Indian registry mandatory for foreign flag ships operating under long-term SPL within 6 months period of operation. (MoPSW)*
4. *Promote more liner service on Indian coast. (MoPSW)+*



Lack of cargo visibility/assurance leading to lack of investment in Indian flag ships

(chicken and egg situation)

Success stories:

Amba River (JSW), GTTP, AMNS (Hazira), etc.

Issue: Without cargo visibility/assurance, no long-term investment will be made in Indian tonnage.

1. *Market outreach (awareness) on a continuous basis with regional focus.*
2. *Organize regular interaction between cargo owners and shipowners to identify hurdled in modal shift.*



Lack of cargo visibility/assurance.....

3. *Gather data on movement of cargo (type, quantity, packaging, etc.) to and from key hub ports to neighboring coastal STATESregions currently using rail/road modes.
(Cargo mapping for short sea shipping including containers)*
4. *Cargo commitment from PSUs and involve major private players.*

(Coastal shipping promotion cell and stake holders)



To address viability gap

Issue: Cargo interests always compare the overall cost with other modes (rail/roadways)

1. *Implement a clear and transparent policy to incentivize “cargo interests” opting for modal shift.*
2. *Provide fuel (Diesel) used by ships carrying coastal cargo at 5% GST. (3 Lakh MT consumed by coastal vessels)*
3. *Extraordinary rise in fuel prices due to gulf war to be addressed.*

(MoF, MoPSW)



Port and Infra related issues

Issues:

1. Lack of clear transparent policy of berth allocation for coastal vessels/cargo. (Major and non major ports)

Establish and implement clear and transparent coastal berth allocation policy. Incentivize non major ports to dedicate berths for coastal trade. (MoPSW, State Govts.)

2. Lack of space/facility for cargo agglomeration/complexes.

Identification of key ports, commodities and facility creation for coastal movement of cargo (MoPSW)



Port and Infra related issues

3. Vessel and cargo related port charges linked with USD. Coastal vessels are charged as percentage of rates applicable to EXIM vessels linked to USD leading to continuous increase in rates.

VRC and CRC for coastal vessel shall be delinked with USD and rates to be fixed in INR. (MoPSW)

4. Poor entry and evacuation infrastructure to/from ports.

Improve connectivity between ports, roads and railways. (MoPSW, Gatishakti, and concerned ministries)



Port and Infra related issues

5. No uniform procedures for disposal of wastes (pyros, e-waste, sludge, medicines, etc.)

Procedures to be standardized across ports and facilities to be made available for regular disposal at reasonable cost.

Fresh water supplies across ports to be standardized for quality and cost. (MoPSW)



Issues related to Customs

Issues:

1. Customs control of berths allocated to coastal vessels.
De-notify coastal berths from customs control.
(MoPSW, MoF, CBIC)
2. Nonuniformity in customs procedure wrt to “coastal conversion” of Indian flag vessels.
Standardize customs procedures across all Indian ports for coastal conversion of vessels. **(MoPSW, MoF, CBIC)**



Issues related to Immigration

Issues

Seafarers engaged on Indian flag vessels engaged in coastal/domestic trade exclusively continue to be subjected to Immigration rules for sign on/off and shore leave.

*Coastal vessels operating within Indian ports/harbours should be kept out of immigration control **(in pipeline)***

Vessels operating between 2 Indian ports shall be brought out of immigration control in 2nd phase.



Regulatory (maritime) reforms

Issues:

1. Regulatory overreach leading to cost escalation and delays.
2. Changes in rules without consultation with stakeholder.
 - a. *Review and rationalize conventions applicability to coastal vessels.*
 - b. *Remove “age norm” restrictions” for coastal vessels below 6000 GT.*



Regulatory (maritime) reforms

- c. *Facilitate smooth transition from coastal to inland trade and vice versa.*

(DGMA/MoPSW)



Human resources issues

Issues:

1. Coastal ships are faced with acute shortage of officers.
 - a. *Permit Indian nationals holding foreign certificates to work on coastal vessels.*
 - b. *Develop guidelines for (address competency gap) Inland certificate holders to serve on coastal vessels.*

(DGMA/MoPSW)



Miscellaneous issues

Issues:

1. Different transport documents required for shipments using multiple modes (water, road, railways) leading to delays and costs
 - a. *Create “single multi modal transport document” for shipment through more than one mode where one of the mode is coastal/waterways.*

(MoPSW, Commerce ministry)



ESG recognition for cargo using waterways

Recommendation:

Introduce Carbon Credit mechanisms and Green Logistics certification for cargo owners using coastal shipping/waterways (NSB, MoPSW)



Way Forward (summary)



Need to institutionalize the “coastal shipping initiative”

1. *Recommend to create a coastal shipping promotion cell under MoPSW comprising key stakeholders (ship and cargo owners, government agencies, etc.) with fixed terms, deliverable and periodic reviews.*
2. *Under the above Cell launch “National Coastal Cargo Promotion Mission”.*

(MoPSW)



Way forward. (Key measures)

1. *Introduce and promote measures to augment growth of Indian flag vessels.*
2. *Improve cargo visibility through cargo mapping (region, commodity, parcel size, present modes, etc.)*
3. *Improve port and infrastructural support.*
4. *Ease of business (rationalize regulatory regimes, process efficiency, etc.)*
5. *Build adequate human capital.*
6. *Continuous review and improvement. +*

Thanks



Towards a larger Indian shipping industry

RUPALI GHANEKAR

While the underlying theme of Budget 2020 was wealth creation for all anchored in the motto – 'Sabka Saath, Sabka Vikas and Sabka Vishwas' as the way forward to build a vibrant economy, the central theme was definitely an appeal to Indian and foreign corporates to invest and grow their businesses in India. The intermittent sops weaved in through the budget speech for corporates were hard to miss.

On this backdrop, it would be important to draw attention to the case of Maritime Transport Sector, whose scope in terms of attracting investments, creating jobs, and most importantly being a tool to save huge foreign exchange outflows, seems to have missed the attention of the policymakers and the economists. This is a sector in which there is potential to grow with just a few bits of fundamental and structural changes.

The biggest opportunity or what investments in this sector can bring home, is the saving of an eye popping USD 50 billion, which is the approximate net freight outgo being currently paid by Indian trade/India every year to foreign shipping companies. In a particularly bad year, this has been the quantum of India's current account deficit.

The freight has been calculated basis a study conducted by UNCTAD on transport and insurance costs covering the time period from 2006-2016. It was published in the UNCTAD Maritime Review 2017. This study has not been updated thereafter. This study speaks of the world's average cost of transport and insurance being 15% as a share of the value of imports/total trade.

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At a conservative 7.5% of India's EXIM trade, the freight bill of India works out to USD 62.88 billion FY19. We have considered that other logistics costs and insurance costs would add up to another 7.5%,

This large forex outflow is because India's national fleet carries only 9.7 percent of India's EXIM trade and around 59 percent of domestic coastal cargo as in FY19. All of the balance is carried by foreign ships who simply walk away with the freight, tax free! Once simple way forward is to try and bring all these Indian import and export cargoes on to ships owned by Indian companies with foreign investments.

It would be pertinent in this context to mention the case of Greek shipping. In the global financial crises of 2008 and in the subsequent years, Greek shipping suffered like the others did. But in the 12 years hence, it has rebuilt its position with the largest fleet in the world¹ using *Asia and India centric trades*. Yet, Indian shipping sector hasn't been able to increase its market share using India's own EXIM cargoes.

The moot point here how does the Indian government and the Indian shipping industry pull this off.

If there was one big impediment working against the growth of the services sector in India today, it would be the lack of anti-dumping measures against foreign services imports even if they were being dumped in India at rates cheaper-than-its-input-costs in India. Indian law does not impose "tariffs" on

Commented [DD2]: Please hyperlink both references to 9.7% as well as 59% with web sources.

Commented [RG3R2]: These are provisional numbers for FY19 sourced from the Ministry of Shipping and will be officially published at the end of the month. Similar numbers for FY17-18 can be sourced from Table 5.7 from a report "Basic Port Statistics FY17-18" which is in the Transport Research section on the website of Ministry of Shipping.

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¹ https://unctad.org/en/PublicationsLibrary/rmt2019_en.pdf Page 37

services. At best, it asks the foreign service providers to set shop in India. Sadly, this caveat does not apply to maritime services.

Maritime transport or shipping is predominantly a services activity. The only “goods” component that arises in its context is the importation of ships by Indian shipping companies for purposes of providing maritime transport service.

Further, the import of shipping services from India is cheaper compared with providing these services as a legitimate Indian shipping company who pays all taxes in India.

The fact of the matter is that given the international nature of the shipping business, the foreign trade policy as well as the domestic shipping and taxation policy of India, needs to be in sync. In terms of robust policy making for the Indian shipping sector, it would entail straddling both the international operating environment and domestic realities, and ensuring that domestic Indian flag shipping companies are taxed only to the extent that it continues to remain competitive to compete internationally. But it seems that this is a task that Indian policymakers haven’t fully applied their mind to.

To give the Indian government its due, it has made intermittent and piecemeal efforts to bring about the growth of Indian shipping. They have also thrown in some one-off policy incentives for Indian shipping. But these efforts have been rendered ineffective because the basic input cost structure of the Indian shipping industry is not conducive for its growth. It falters on every competitive parameter when compared with 1) other foreign shipping companies operating on the coast as well as on EXIM trades 2) other modes of domestic transportation namely; rail and road.

On the other side are those foreign companies who would rather continue to enjoy tax-free revenue from Indian companies for services provided. Such companies would not want any progressive policies made which would require Shipping services to be provided through an Indian company. This could mislead the policy framers into missing the woods for trees, and we seek joy in the illusion of their assistance in winning a trade negotiation when in fact that issue was not even worth a mention.

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The lobby of foreign shipowners in India, in a sustained manner, continue to delude Indian policy makers into believing that freight rates would fall in India and Indian trade would benefit, if foreign owned shipping companies were continued to be given unfettered access to Indian cargo and the Indian coast.

This is a double whammy for the Indian government as it loses out on the tax revenues from the foreign shipping companies and the freight bill of Indian trade increases.

The current struggles of the Special Secretary (Logistics) and the Member (Customs) to try and ensure fair and transparent "Terminal Handling Charges" on imports (THC) and the steadfast stubbornness of the foreign container lines opposing it, is a standing example.

This fallacy has also been busted by global experience which has been that in the absence of national shipping industry, foreign shipping charge monopolistic pricing and follow restrictive trade practices. This has been the experience of several world economies as can be evidenced by the legal action initiated by them against the practices of global container companies.

Often, bogies with different names and nomenclatures are produced in order to cease the beneficial drive towards a greater Indian shipping industry. One favourite bogey is that of "insufficient Indian ships". Another recent favourite being "the need to ensure transshipment is weaned away". This is understandable given that the "pie" that they are protecting is worth USD 50 billion dollars a year or more, and that too tax free. What is not understood is how intelligent policymakers are unable to see through this smokescreen of bogeys.

There is a need for the policymakers to therefore see what India, the economy, its seafarers and the exchequer is losing. The key issue is to make investment in Indian shipping services attractive. "India costs" which are absent when not providing services from a non-Indian company need to be addressed. These uneven and illogical burdens placed on the domestic industry, which make it simply uncompetitive to provide services, need to be ironed out. A simple back of the envelope working will show that providing a shipping service from an Indian company is at least 26 percent costlier than providing that same service in India through a non-Indian company.

Imagine what would happen if you were able to procure the services of a lawyer from the UK or Singapore, in Indian arbitration, at costs lesser than those from an Indian lawyer or law firm. Similarly, in case of accountancy services, taxation services, etc. ... the list can go on. But every country ensures that goods and services should be, to the extent possible, provided through its local companies – regardless of the ownership of these companies.

Port services in India are provided through Indian companies which save except for one, are completely owned by foreign interests. Such foreign interests invest

in India, in Indian companies, employ Indians, earn money in India, employ those earnings in growth in India and take some away as dividend, and rightly so. However, the basic canon of economic policy is the need to ensure the ploughing of income into the economy and spurring greater growth back in the country where the opportunity arose. Yet, the same ministry does not seem to be able to follow this very logic when it comes to providing shipping services.

Suffice to say that lack of attention to this very basic issue of corralling the investment into shipping services using the USD 50 billion as the proverbial pot of gold or the nectar in the flower is the important issue. Having in place policies that would encourage foreign companies to invest in companies providing shipping services in India would be the first step. In order to do this, a first step would be to try and link market access to investment. Come and invest in India if you want access to this 700 MT volume of EXIM trade of my country.

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PART III

Subcommittee Report No.2

Sub-Committee No. 2

Title:

**To prepare a roadmap for Promotion of Shipbuilding/Ship Repair facilities
in India with focus on green & sustainable shipping to achieve MAKV-2047
Goals (incl. container manufacturing)**

Chairperson: Shri Anil Devli

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PREFACE BY THE CHAIRMAN OF THE SUB-COMMITTEE



Anil Devli, CEO INSA

It is a matter of considerable satisfaction to present this First Draft Report of the Sub-Committee constituted by the Chairman, National Shipping Board (NSB), to examine and recommend measures for the “Promotion of Shipbuilding / Ship Repair Facilities in India with Focus on Green and Sustainable Shipping”.

Indian shipbuilding and ship repair stand at an inflection point. The Government's flagship maritime initiatives – Maritime India Vision 2030, the Maritime Amrit Kaal Vision (MAKV) 2047, Sagar Mala, the Jal Marg Vikas Project, and the Shipbuilding Financial Assistance Scheme (SBFAS) have created an ambitious and welcome policy architecture aimed at positioning India among the world's leading shipbuilding nations. Yet, as this Report documents in considerable detail, the translation of policy intent into on-ground competitiveness continues to be constrained by a range of fiscal, regulatory, procedural and infrastructural gaps that deserve the urgent attention of Government.

This Report has been prepared on the basis of extensive representations, technical notes and proposals received from the Shipyards Association of India (SAI) and its member shipyards, supplemented by discussions with domain experts and an examination of national and global best practices. Fifteen distinct but interlinked policy areas have been examined – spanning infrastructure status and eligibility criteria, green vessel financing under SBFAS, tug propulsion specifications,

customs and GST anomalies, taxation reforms, indigenous ship design, inland waterway bridge clearances, sectoral deregulation, safeguarding of indigenous marine equipment manufacturing, regulation of second-hand vessel imports, and the availability of shipbuilding-grade steel.

A recurring theme across nearly every submission is that India's shipbuilding and ship repair industry is fundamentally sound in its technical and human capability, but is held back by an accumulation of avoidable frictions: eligibility thresholds that exclude the bulk of the coastal fleet; an inverted GST duty structure that blocks working capital; customs procedures that take days where competing hubs take hours; the absence of shipbuilding from the definition of ‘infrastructure facility’ under the Income Tax Act; and infrastructure planning that, on occasion, is undertaken without adequate regard to navigational requirements. None of these are insurmountable. Each is addressed in this Report with a specific, actionable recommendation.

Equally, this Committee has been conscious of the Government's commitment to green and sustainable shipping under the IMO's Net-Zero 2050 goals and India's own decarbonization commitments. The recommendations in this Report therefore give particular emphasis to financial incentives for electric, hybrid and green-fuel vessels, the Green Tug Transition Program, and the broader alignment of fiscal and regulatory policy with the sustainability agenda.

I place on record my sincere appreciation to the Shipyards Association of India and its member shipyards for their detailed and considered inputs, and to the members of this Sub-Committee for their guidance in the preparation of this Report. This is offered as a First Draft for the consideration of the National Shipping Board, and the Sub-Committee remains available to refine, supplement or reprioritize these recommendations as directed by the Board.

**Chairperson Sub-Committee on Promotion of Shipbuilding
& Ship Repair Facilities
National Shipping Board**

KEY TAKEAWAYS

The following are the principal, cross-cutting recommendations of the Sub-Committee. Complete, issue-wise recommendations are set out in Chapters X and XI of this Report.

Fiscal and Taxation:

- Amend Section 80-IA of the Income Tax Act, 1961 to recognise shipbuilding as an ‘infrastructure facility’, giving substantive effect to the infrastructure status already granted in principle.
- Rationalize GST across shipbuilding and ship repair (MRO) to remove the inverted duty structure, expand ITC refund eligibility to input services and capital goods, and reclassify dry docks and slipways as plant and machinery.
- Introduce an Essentiality Certificate mechanism for concessional GST on shipbuilding inputs, on the model used in the oil and gas sector.

Green and Sustainable Shipping:

- Introduce an additional 5–10% financial assistance slab under SBFAS for electric, hybrid and green-fuel vessels costing below ₹100 crore.
- Amend ASTDS specifications to permit Diesel Electric Propulsion (DEP) tugs alongside Diesel Mechanical Propulsion (DMP) tugs, and align tender delivery timelines with realistic global supply-chain lead times.
- Regulate the import of ageing, second-hand vessels, particularly below 6,000 GT, to reduce emissions and protect domestic order books.

Customs, Regulatory and Ease of Doing Business:

- Establish a fast-track, time-bound (24-hour) customs clearance channel for ship repair spares, and extend customs duty exemption to spares stocked by authorized OEMs and service providers.
- Undertake a comprehensive deregulation initiative – a National Maritime Single-Window Portal, Unified Shipyard Operating Licence, Shipyard Development Zones with pre-approved clearances, and a National Shipbuilding Authority as nodal regulator.
- Issue clear, consistent guidance to field customs formations on DGFT Chapter 89, SIMS, EPR, BIS and import-licensing provisions applicable to shipbuilding.

Infrastructure, Design and Manufacturing:

- Revise the eligibility criteria for Infrastructure Status to Ships to 24 metres length or 500 GT, extending benefits to the coastal fleet and MSME shipyards.
- Invest in indigenous ship design capability – a design software bank, tank-testing facilities, financial incentives for use of Indian design houses, and dedicated skill-development courses.
- Ensure that inland waterway bridges (including the Borim Bridge on the Zuari River and bridges over the Netravati River) are designed to adequate navigational clearance through mandatory consultation with maritime authorities.
- Safeguard indigenous marine gearbox manufacturing against underpriced imports through tariff measures, anti-dumping action where warranted, and a Production Linked Incentive scheme.
- Constitute a Joint Working Group of MoPSW, Ministry of Steel, ISA, IRS and SAI to strengthen the domestic supply of IACS-certified shipbuilding-grade steel.

Institutional:

- Consider a dedicated Secretary for Shipbuilding, a National Shipbuilding Plan, and dedicated institutions – an Indian Shipbuilding Institute and an Indian Marine Equipment Research Institute – to anchor long-term policy research, standardization and technology development

EXECUTIVE SUMMARY

The National Shipping Board constituted this Sub-Committee to examine the state of shipbuilding and ship repair facilities in India and to recommend a policy roadmap that supports the Government's objectives under Maritime India Vision (MIV) 2030 and Maritime Amrit Kaal Vision (MAKV) 2047, with particular emphasis on green and sustainable shipping. This Report consolidates and builds upon fifteen detailed proposals developed with the Shipyards Association of India (SAI), covering the full span of issues affecting the competitiveness of Indian shipyards – from eligibility for infrastructure status and green-vessel financing, to taxation, customs, ship design, inland waterway infrastructure, deregulation, indigenous equipment manufacturing, import policy and steel availability.

Four broad conclusions emerge from the Committee's work.

First, India's shipbuilding policy architecture is directionally sound but is not yet fully aligned across ministries. Infrastructure status has been granted to shipyards in principle, but is not reflected in the Income Tax Act; SBFAS provides financial assistance, but does not adequately differentiate in favour of green vessels; and GST, being an inverted duty structure across shipbuilding and ship repair, blocks significant working capital that could otherwise be redeployed into capacity expansion.

Second, procedural and administrative friction – in customs clearance, import licensing, environmental and land clearances, and vessel/tug specifications – imposes costs on the industry that are disproportionate to their policy rationale, and are readily addressed through digitisation, standard operating procedures, and inter-ministerial coordination, without requiring new expenditure.

Third, the sustainability agenda for shipping needs to be actively supported through differentiated fiscal incentives, revised technical specifications (for example, permitting Diesel Electric Propulsion tugs), and the removal of policy actions – such as the unregulated import of second-hand vessels and low-clearance bridges over navigable waterways – that work against the transition to a modern, green and resilient fleet.

Fourth, the long-term competitiveness of the sector will depend on deliberate capability building – in indigenous ship design and engineering, in a reliable

domestic supply of shipbuilding-grade steel and marine equipment, and in institutional strengthening through bodies such as a proposed Indian Shipbuilding Institute, an Indian Marine Equipment Research Institute, and a dedicated Secretary for Shipbuilding.

This Report sets out, chapter-wise, the statement of the problem, the present national and global status, the challenges faced by stakeholders, an assessment of past and current government policy, a summary of stakeholder consultations and domain expert views, applicable national and global best practices, and – in Chapter X – detailed suggested policies against each of the fifteen issue areas. Chapter XI consolidates the Committee's final policy recommendations to achieve the MAKV-2047 goal. A concise list of the Committee's Key Takeaways follows this Executive Summary.

CHAPTER I: INTRODUCTION

The Chairman, National Shipping Board (NSB), constituted this Sub-Committee to examine and report on the “Promotion of Shipbuilding / Ship Repair Facilities in India with Focus on Green and Sustainable Shipping.” This Report has been prepared on the basis of detailed proposals, notes and technical representations developed in consultation with the Shipyards Association of India (SAI), covering fifteen distinct policy areas central to the growth of India's shipbuilding and ship repair ecosystem.

India's maritime sector occupies a position of considerable strategic and economic significance. As a peninsular nation with an extensive coastline, approximately 1,200 islands, and a central location in the Indian Ocean Region, India depends heavily on maritime trade for its economic prosperity and energy security. The Government of India has, in recent years, articulated an ambitious vision for the sector through Maritime India Vision (MIV) 2030 and the Maritime Amrit Kaal Vision (MAKV) 2047, which together aim to position India among the world's top shipbuilding nations, expand ports, shipping and inland waterways, and substantially increase indigenous shipbuilding capacity and merchant fleet ownership.

Shipbuilding is recognised internationally as a ‘mother industry’ with extensive linkages to steel, aluminium, electrical equipment, marine engineering, logistics and ancillary manufacturing, generating a significant employment and industrial multiplier effect. Historically, nations that evolved into major manufacturing economies – the United Kingdom, the United States, Japan, the Republic of Korea, and more recently China – also emerged as global leaders in shipbuilding. India's own shipbuilding industry experienced substantial growth between 2003 and 2008, but was severely affected by the 2008 global financial crisis, the withdrawal of subsidies, and increasing international competition, resulting in a negligible share of the global shipbuilding market in the years that followed. Notwithstanding these setbacks, India's expanding domestic trade, growing coastal shipping and inland waterway transportation, rising defence procurement, and favourable geography create substantial long-term opportunity for the sector.

Recognising this potential, the Government has introduced a series of policy measures – infrastructure status for shipyards, the Shipbuilding Financial Assistance Scheme (SBFAS) and its predecessor SBFAP, the Green Tug Transition Programme (GTTP), Sagarmala, the Jal Marg Vikas Project, and demand aggregation of vessel orders – aimed at strengthening the domestic shipbuilding and ship repair ecosystem. The Committee has also had specific regard to India's commitments under the IMO Net-Zero 2050 goals and the Paris Agreement (CoP-26), which require the shipbuilding and shipping sectors to accelerate their transition towards green and sustainable technologies.

This Report examines, in respect of each of the fifteen policy areas placed before the Committee, the statement of the problem, the present status of the issue globally and nationally, the challenges faced by stakeholders, an assessment of past and current Government policy and their efficacy, a summary of discussions with stakeholders, the views of domain experts, applicable national and global best practices, detailed suggested policies, and a final policy recommendation aligned to the MAKV-2047 goal. The fifteen policy areas examined are:

- Revision of Eligibility Criteria for Infrastructure Status to Ships
- Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines
- Shipyards' Concerns on Recently Approved SBFAS Guidelines
- Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications
- Addressing Challenges Faced by Shipyards with Customs Authorities
- Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector
- Addressing Accumulation of Input Tax Credit in Shipbuilding
- Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector
- Input Tax Credit on Construction of Dry Docks and Slipways
- Promoting Indigenous Ship Design and Engineering Capabilities in India
- Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding
- Deregulation and Policy Interventions for the Shipbuilding Sector
- Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat

- Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding
- Domestic Procurement of Shipbuilding Grade Steel

The Committee has sought, in preparing this Report, to ensure that the entirety of the material placed before it by SAI and its member shipyards is reflected and available for the consideration of the National Shipping Board, so that the Board has before it the full range of issues, evidence and recommended interventions gathered in the course of this exercise.

CHAPTER II: STATEMENT OF THE PROBLEM

Taken together, the fifteen proposals examined by this Sub-Committee point to a common underlying difficulty: while the Government's policy intent to promote shipbuilding, ship repair and green shipping is clear and consistently articulated across MIV 2030 and MAKV 2047, the fiscal, regulatory, procedural and infrastructural framework within which the industry operates has not kept pace with that intent. The specific statement of the problem in each policy area is set out below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

The present notification restricts ‘Infrastructure Status’ to Indian-owned and flagged vessels of 10,000 GT and above, or Indian-built, owned and flagged vessels of 1,500 GT and above. This excludes a substantial portion of India’s coastal fleet and creates barriers for MSME shipyards, thereby limiting sectoral growth and contradicting national maritime objectives.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

The current SBFAS Guidelines do not provide additional financial incentives for electric, hybrid or green-fuel vessels costing below ₹100 crore. Instead, these vessels receive financial assistance at par with conventional diesel vessels (15%), effectively reducing earlier benefits and discouraging green adoption.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

Despite its intent, the current SBFAS framework does not adequately address several operational, financial and structural challenges faced by shipyards. Key issues include stringent domestic content requirements, reduced incentives for green vessels, limited infrastructure support, ambiguity in contract price adjustments, and transitional challenges between SBFAP and SBFAS.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

Despite progressive policy intent, the current ASTDS specifications recognise only Diesel Mechanical Propulsion (DMP) tugs and do not permit Diesel Electric

Propulsion (DEP) tugs. Recent tenders issued by ports continue to favour conventional propulsion systems, coupled with stringent delivery timelines of 18 months that are not aligned with current global supply chain realities for propulsion systems.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

Shipyards, marine equipment manufacturers, OEMs and ship repair service providers face recurring procedural and interpretative challenges with customs authorities during clearance of imported consignments meant exclusively for vessel construction, ship repair and marine equipment manufacturing. These issues result in delays, financial penalties, increased compliance costs, prolonged vessel turnaround time, and reduced competitiveness of Indian shipbuilding and ship repair facilities.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

Although shipyards have been categorised under the ‘transport’ segment through a Ministry of Finance (Department of Economic Affairs) notification dated 08 April 2016, they are not included in the definition of ‘infrastructure facility’ under Section 80-IA of the Income Tax Act, 1961. As a result, shipbuilding entities are not eligible for income tax benefits available to other infrastructure sectors, thereby limiting the practical utility of infrastructure status.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

Shipbuilding outputs are taxed at 5% GST, whereas input materials attract 12–18% GST and input services are taxed at 18% GST. This inverted duty structure leads to substantial accumulation of Input Tax Credit (ITC). Current GST provisions allow refund of ITC only on input materials, excluding input services and capital goods, resulting in blocked working capital and increased project costs.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

The current GST regime for ship repair creates an inverted duty structure wherein output MRO services are taxed at 5% GST, input materials are taxed at 12–18%

GST, and non-MRO input services (including OEM services for installation and commissioning) are taxed at 18% GST. This mismatch results in significant accumulation of Input Tax Credit (ITC), leading to increased costs and working capital blockage.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

Dry docks and slipways, despite being integral to shipbuilding, are currently classified as civil structures under GST provisions. As a result, they attract 18% GST and Input Tax Credit (ITC) is not permitted. This treatment significantly increases capital costs and limits infrastructure expansion by shipyards.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

The Indian shipbuilding industry currently lacks sufficient indigenous design capabilities, particularly for large and complex vessels. Dependence on foreign design houses – primarily European – continues to persist, limiting technological advancement, increasing project costs, and constraining the industry’s ability to compete globally.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

The construction of low vertical clearance bridges over navigable rivers is significantly restricting vessel movement, adversely affecting inland water transport (IWT) and shipbuilding operations. A specific instance is the proposed Borim Bridge over the Zuari River in Goa, with a planned clearance of approximately 14 metres above High Tide Level (HTL), inadequate for safe passage of many vessels. A second instance is the Netravati River in Mangalore, Karnataka, where ongoing and planned low-clearance bridge construction under urban development (Smart Cities Mission) initiatives is adversely impacting the viability of shipbuilding and inland waterway operations, including potential shipyard development in hinterland regions.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

The Indian shipbuilding ecosystem is characterised by multiple overlapping approvals and licensing requirements, complex environmental and land clearance

processes, high compliance burden and regulatory fragmentation, inefficient customs and import procedures, and limited access to finance and infrastructure incentives. These issues collectively increase project timelines, costs and uncertainty, reducing India’s attractiveness as a global shipbuilding hub.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

The indigenous marine gearbox manufacturing sector is currently facing severe challenges due to unregulated and underpriced imports, particularly from China. These imports, often priced below fair market value, are displacing domestic manufacturers, resulting in loss of competitiveness and threatening the survival of this strategic industry.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

The unrestricted import of old/second-hand vessels into India has emerged as a major impediment to the growth of domestic shipbuilding. India is increasingly becoming a destination for ageing and environmentally inefficient vessels. This trend raises environmental concerns, including increased carbon emissions, and significantly reduces demand for new vessels built in Indian shipyards, resulting in reduced order inflow, underutilisation of capacity, and limited incentives for technological advancement and green transition.

15. Domestic Procurement of Shipbuilding Grade Steel:

Indian shipyards continue to depend heavily on imported shipbuilding-grade steel, particularly from South Korea, for construction of technologically advanced vessels and export orders. Although domestic steel manufacturers possess significant production capacity, they are presently unable to consistently provide internationally accepted quality standards, required IACS-approved certifications, competitive pricing, appropriate plate sizes and grades, reliable delivery schedules, and flexible commercial terms suited to project-based shipbuilding.

CHAPTER III: PRESENT STATUS OF THE ISSUE UNDER CONSIDERATION – GLOBALLY AND NATIONALLY

This Chapter sets out the present national and global status of each of the fifteen issues examined, drawing comparisons with practices in leading shipbuilding and maritime nations.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

Globally, leading shipbuilding nations such as China, South Korea and Japan provide comprehensive policy support across vessel categories, including small and medium-tonnage ships. Nationally, India has approximately 1,550 registered vessels, of which nearly 1,000 are coastal vessels. A majority of these fall below the current eligibility threshold, effectively excluding over 50% of the domestic fleet from infrastructure benefits.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

Globally, countries are actively incentivising green shipping through subsidies, tax benefits and dedicated funding mechanisms. Nationally, India has an extensive 11,000 km inland waterways network, where nearly 90% of operations depend on small vessels. Electric and solar vessels, capable of reducing emissions by 80–100%, are critical for sustainable inland and coastal transport.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

Globally, leading shipbuilding nations adopt flexible and phased approaches to localisation, incentivise green technologies, and provide comprehensive infrastructure support. In India, the shipbuilding ecosystem – particularly for commercial vessels – is still evolving; significant policy support exists, but critical gaps remain in equipment manufacturing, financing mechanisms and infrastructure readiness.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

Globally, ports are increasingly adopting hybrid and electric propulsion systems for harbour tugs to reduce emissions and improve efficiency. In India, approximately 12–15 green tugs have already been ordered; however, a

significant number of ongoing tenders still specify conventional diesel tugs. Global supply chains for propulsion systems currently have lead times of around 24 months, creating practical challenges in meeting tender timelines.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

Globally, leading shipbuilding and ship repair nations provide streamlined customs frameworks with clear exemptions and facilitative procedures for shipbuilding-related imports, ensuring minimal delays. In India, despite policy provisions under DGFT regulations and Chapter 89 of the ITC (HS) Classification, procedural inconsistencies, digital portal issues and varied interpretations by customs authorities continue to create bottlenecks, affecting shipyards, marine equipment manufacturers and OEMs alike.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

Globally, leading shipbuilding nations provide comprehensive fiscal incentives, including tax benefits, subsidies and financing support, to enhance competitiveness. In India, while shipbuilding has been recognised as an infrastructure activity in principle, the absence of alignment with income tax provisions results in a gap between policy intent and actual benefits available to shipyards.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

Globally, shipbuilding nations adopt tax-neutral frameworks or provide full input credit refunds to ensure competitiveness. In India, the mismatch in GST rates and limited refund eligibility results in accumulation of ITC amounting to approximately 4–6% of vessel cost, adversely affecting cost competitiveness.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

Globally, leading maritime hubs maintain tax-neutral regimes for MRO activities – for instance, in major international hubs such as Dubai, all inputs and outputs related to ship repair are taxed uniformly. In India, input materials constitute approximately 25–40% of MRO contract value, making the current tax structure financially burdensome and reducing global competitiveness.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

Globally, shipbuilding nations treat such infrastructure as part of industrial plant and machinery, often extending tax benefits or exemptions to encourage investment. In India, the classification of dry docks and slipways as civil structures creates a disconnect between their functional role and tax treatment, adversely affecting infrastructure development.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

Globally, leading shipbuilding nations, particularly in Europe, have well-established design ecosystems supported by strong R&D funding, innovation incentives and decades of expertise. In India, existing design houses are primarily engaged in basic and detailed design of smaller vessels such as barges, ferries, tugs and dredgers; capability for designing large, complex vessels compliant with international efficiency standards remains limited.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

Globally, countries with advanced inland waterway systems – including the Netherlands, Germany and China – ensure adequate vertical and horizontal clearances in bridge design and have adopted advanced engineering solutions such as movable, vertical-lift and high-clearance fixed bridges to accommodate current and future vessel requirements. Nationally, India is actively developing inland waterways through the Inland Waterways Authority of India (IWAI), Sagarmala and National Waterways development; however, instances of low-height bridge construction across state rivers continue to emerge, reflecting gaps in coordination between infrastructure planning (including under PM Gati Shakti and the Smart Cities Mission) and maritime requirements.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

Globally, leading shipbuilding nations operate under streamlined regulatory frameworks with single-window clearance systems, simplified licensing regimes, strong institutional coordination, and export-oriented and investor-friendly policies. In contrast, India’s shipbuilding sector operates within a multi-agency regulatory environment, resulting in delays and inefficiencies.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

Globally, leading maritime nations actively protect and promote their domestic marine equipment industries through policy support, subsidies and tariff measures. In India, despite a large and growing maritime sector supported by initiatives such as Sagarmala and inland waterways development, the domestic marine gearbox manufacturing ecosystem remains limited to only a few capable players, and is increasingly vulnerable due to import pressures and structural cost disadvantages.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

Globally, leading shipbuilding nations such as China, South Korea and Japan have implemented protective and promotional measures to safeguard their domestic industries, including import restrictions, fiscal incentives, and strong regulatory frameworks to discourage the use of outdated vessels. Nationally, India currently has no stringent restrictions on the import of second-hand vessels, particularly in the segment below 6,000 GT; shipowners continue to prefer importing older vessels due to lower upfront cost, distorting market dynamics and adversely impacting Indian shipyards, especially MSME and mid-sized yards.

15. Domestic Procurement of Shipbuilding Grade Steel:

Globally, major shipbuilding nations such as South Korea, China and Japan have developed integrated ecosystems wherein domestic steel manufacturers work closely with shipyards to ensure availability of internationally certified shipbuilding-grade steel at globally competitive prices. In India, demand for shipbuilding steel is expected to increase substantially; MoPSW has already aggregated demand for nearly 437 vessels, with procurement processes already underway for several projects. Unless domestic steel manufacturers are able to meet technical and commercial requirements, import dependence is likely to increase even for Government-supported domestic projects.

CHAPTER IV: PRESENT STATUS AND CHALLENGES FACED BY STAKEHOLDERS

Shipyards, ship repair facilities, marine equipment manufacturers, OEMs, shipowners and ancillary industries have reported a wide range of operational, financial and structural challenges. These are summarized, issue-wise, below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

- Limited access to affordable financing for coastal shipping operators
- Reduced order inflow for MSME shipyards
- High capital and operational costs
- Inadequate infrastructure support for smaller shipbuilders

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

- High capital cost of electric and hybrid vessels
- Lack of differential financial incentives
- Limited commercial viability compared to diesel vessels
- Reduced willingness of shipowners to invest in green vessels
- MSME shipyards facing reduced demand for green vessel construction

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

- Limited domestic availability of high-value marine equipment
- Reduced financial incentives for electric and green vessels
- Inadequate infrastructure for capacity expansion
- Financial and contractual uncertainties
- Transition-related challenges between policy regimes
- Limited support for specialised assets like Floating Dry Docks

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

- Misalignment between tender timelines and equipment delivery schedules
- Limited flexibility in ASTDS specifications
- Continued reliance on conventional propulsion systems
- Supply chain constraints for imported propulsion packages
- Pressure on shipyards and tug operators to meet unrealistic timelines

5. Addressing Challenges Faced by Shipyards with Customs Authorities;

- SIMS (Steel Import Monitoring System): delays in registration due to DGFT portal issues, leading to penalties and shipment hold-ups
- EPR (Extended Producer Responsibility): requirement of EPR certification for minor packaging materials or components not intended for resale creates unnecessary compliance burden
- Import Licensing (WPC/LMPC): customs authorities often insist on licences despite DGFT Chapter 89 provisions permitting imports without licences for shipbuilding
- BIS Certification: unwarranted queries on components not covered under mandatory certification norms
- Aluminium and Copper Monitoring Systems: similar procedural issues causing delays and penalties
- Targeted delays for high-value, time-sensitive shipments arriving by air
- Delays in customs clearance of ship repair spare parts: 5–7 days in India versus 24 hours in Singapore and Colombo
- Customs duty anomaly: ship owners get duty exemption on spares supplied directly to vessels, while OEMs/authorised workshops/service providers importing identical spares for stocking pay duty, discouraging inventory stocking in India
- Procedural delays in movement of repair equipment (engines, machinery, tools) into and out of port premises
- Customs duty on components for indigenous marine equipment manufacturing, while imported finished equipment enjoys exemption – creating an uneven competitive environment

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

- Absence of income tax benefits under Section 80-IA
- Lack of parity with other infrastructure sectors such as telecom, highways and power
- Limited financial incentives compared to global competitors
- High capital intensity and long gestation periods without adequate fiscal support
- Competitive disadvantage vis-à-vis shipping companies benefiting from the tonnage tax scheme

- Working capital constitutes approximately 25–35% of total ship cost; Indian interest rates on working capital range 10–11% compared with 4–8% in major shipbuilding nations

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

- Significant working capital blockage due to unutilised ITC
- Increased project cost and reduced global competitiveness
- Ambiguity regarding classification of ‘parts of vessels’ (e.g. steel, pipes, cables, paints)
- Issuance of show-cause notices (SCNs) due to differing interpretations
- Exclusion of input services and capital goods from refund eligibility

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

- Accumulation of ITC due to inverted duty structure
- Higher cost of ship repair compared to global competitors
- Working capital blockage for shipyards
- Differential GST rates on input services and materials
- Lack of concessional GST treatment for OEM-related services
- Reduced attractiveness of Indian ship repair yards for global clients

9. Input Tax Credit on Construction of Dry Docks and Slipways:

- High capital investment requirements for dry docks and slipways
- Denial of ITC leading to increased project costs
- Extended payback periods due to higher upfront expenditure
- Difficulty in securing affordable financing
- Limited capacity expansion due to financial constraints

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

- Limited number of established Indian ship design firms
- Dependence on foreign design houses for advanced vessel design
- Lack of access to advanced design software and tools
- Absence of adequate model testing facilities (e.g. tank testing)
- Limited compliance capabilities for global standards such as EEDI
- Shortage of skilled manpower in ship design engineering

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

- Restricted vessel movement due to low bridge clearance
- Inability to design/build larger or more efficient vessels
- Increased operational risks and navigation constraints
- Reduced economic viability of inland waterways
- Long-term impact on shipyard order books and investments
- Restricted access for larger vessels at Netravati River, limiting shipyard expansion and investment viability
- Increased logistics costs due to modal shifts and inefficiencies
- Reduced investor confidence due to regulatory and infrastructure uncertainties

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

- Delays due to multiple approvals from central and state authorities
- Stringent environmental and CRZ compliance requirements
- Lack of uniform land leasing policies
- Limited access to affordable credit
- Customs delays and import licensing complexities
- High compliance burden and absence of unified governance

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

- Aggressive price undercutting by imported gearboxes
- High domestic production costs (GST burden, electricity tariffs, raw materials, labour compliance, financing costs)
- Lack of tariff safeguards and policy protection
- Declining order books and underutilisation of manufacturing capacity
- Increasing difficulty in sustaining skilled workforce and supply chains

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

- Shipyards: declining order books, particularly in the small vessel segment; underutilised infrastructure and workforce; limited investment in modernisation and green technologies
- Shipowners: preference for low-cost imports over long-term efficiency; lack of incentives to procure domestically built vessels

- Ancillary industries: reduced demand affecting component manufacturers and service providers; slower growth of the maritime supply chain ecosystem
- Government: difficulty in achieving capacity expansion and employment generation targets; environmental concerns due to older vessel operations

15. Domestic Procurement of Shipbuilding Grade Steel:

- Price disadvantage: domestic shipbuilding steel remains costlier than imported alternatives even after considering customs duties and freight; absence of long-term or index-linked pricing mechanisms affects competitiveness for fixed-price export contracts
- Inconsistent product quality: frequent variations in mechanical properties, dimensional accuracy, surface finish and flatness cause higher rejection rates, rework and delays; inconsistent availability of high-tensile grades such as AH36, DH36 and EH36
- Thickness tolerance: broader thickness tolerances lead plates to be rolled towards the upper limit to avoid negative-tolerance rejection, adding approximately 6–7% additional structural weight and increasing cost while reducing deadweight capacity
- Limited plate dimensions: domestic mills offer limited sizes and are generally unwilling to supply project-specific quantities or smaller lots, affecting nesting efficiency and increasing wastage
- Certification limitations: most domestic mills lack comprehensive approvals from all major IACS Classification Societies (DNV, ABS, LR, BV, NK, KR and others), making imported steel the only practical option for export shipowners
- Unreliable supply chain: unpredictable lead times, with domestic mills often prioritising larger industrial sectors over shipbuilding, exposing shipyards to contractual penalties
- Restrictive commercial practices: high Minimum Order Quantities (MOQ), advance payment requirements, and absence of standard return/replacement policies for defective material, particularly burdensome for MSME and medium-sized shipyards

CHAPTER V: PAST POLICIES OF THE GOVERNMENT AND THEIR EFFICACY

This Chapter reviews the past policy interventions of the Government in each of the fifteen areas examined, and assesses the extent to which they have achieved their intended objectives.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

Previous policies encouraged indigenous shipbuilding through financial assistance schemes, subsidy support and stakeholder consultations. These policies enabled gradual capacity building in MSME shipyards and increased domestic participation.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

Under earlier schemes such as SBFAP 2023, electric/hybrid vessels received up to 20% assistance and green fuel vessels received up to 30% assistance. These policies provided meaningful incentives and encouraged early adoption of sustainable technologies.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

Earlier policies such as SBFAP provided targeted incentives for shipbuilding, including higher assistance for specialised and green vessels, contributing to gradual growth in domestic shipbuilding capacity and stakeholder participation.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

Government initiatives such as the Green Tug Transition Programme (GTTP) and broader maritime decarbonisation efforts have created a strong policy foundation, successfully initiating the transition towards green tugs and encouraging domestic shipbuilding participation.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

Government initiatives aimed at simplifying trade, promoting ease of doing business, and encouraging indigenous shipbuilding, including DGFT provisions under Chapter 89 to facilitate imports of restricted items without licensing

requirements. While these measures improved the policy framework, benefits have not been fully realised due to implementation-level challenges, inconsistent interpretation by customs authorities, and absence of similar facilitative provisions for ship repair and indigenous marine equipment manufacturing.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

The Government has undertaken several initiatives to support shipbuilding, including granting infrastructure status and reducing corporate tax rates. While these measures provided some relief, they have not delivered sector-specific advantages comparable to those available to other infrastructure industries.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

GST reforms introduced a concessional 5% rate for shipbuilding outputs and parts of vessels, aimed at promoting the sector. However, the absence of a comprehensive refund mechanism has limited the effectiveness of this policy.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

The introduction of concessional GST rates (5%) for ship repair services was a positive step aimed at promoting the MRO sector. However, the absence of alignment with input tax rates has limited the effectiveness of this policy.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

Government initiatives have focused on promoting shipbuilding through financial assistance schemes and infrastructure recognition. However, limited attention has been given to tax treatment of core infrastructure assets, thereby restricting the impact of these initiatives.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

Government initiatives have primarily focused on shipbuilding capacity and financial support to shipyards. While these measures have strengthened construction capabilities, limited emphasis has been placed on developing indigenous design ecosystems and R&D infrastructure.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

The Government has undertaken significant initiatives such as development of National Waterways, promotion of inland water transport, and investments under Sagarmala and related programmes. However, lack of integrated planning between bridge construction and navigation requirements has limited the effectiveness of these policies in certain regions; infrastructure development has historically been sector-specific (focused on road connectivity and urban mobility) rather than integrated with navigational requirements and maritime growth potential.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

Government initiatives such as financial assistance schemes and infrastructure recognition have supported shipbuilding growth. However, regulatory reforms have not kept pace, limiting the effectiveness of these initiatives in improving ease of doing business.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

Government initiatives under Make in India and Aatmanirbhar Bharat have encouraged domestic manufacturing and investment. However, the absence of sector-specific protective measures for marine equipment manufacturing has limited the effectiveness of these policies in safeguarding critical component industries.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

The Government has introduced several initiatives to promote shipbuilding, including the Shipbuilding Financial Assistance Policy (SBFAP), infrastructure status for shipyards, and Ease of Doing Business reforms. While these measures have provided a positive impetus, their impact is being diluted due to parallel inflow of cheaper imported vessels, which offsets domestic demand creation.

15. Domestic Procurement of Shipbuilding Grade Steel:

The Government has consistently promoted indigenous shipbuilding through initiatives such as SBFAS, Make in India, Maritime India Vision 2030, Maritime Amrit Kaal Vision 2047, promotion of indigenous content, and demand aggregation of vessels by MoPSW. These initiatives have considerably improved order visibility for Indian shipyards and encouraged domestic manufacturing; however, corresponding development of a globally competitive domestic supply chain for shipbuilding-grade steel has not kept pace with policy objectives.

CHAPTER VI: CURRENT POLICIES OF THE GOVERNMENT AND THEIR EFFICACY

This Chapter assesses the current policy framework applicable to each of the fifteen issues, and identifies the specific gaps that limit its effectiveness.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

While the current policy aims to strengthen shipping through infrastructure status, its restrictive eligibility criteria limit its effectiveness. The intended benefits are skewed towards large vessels, leaving out the backbone of coastal shipping.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

Under SBFAS 2025, all vessels below ₹100 crore receive 15% financial assistance irrespective of fuel type. Though green vessels are categorised as ‘specialised’, the benefit is ineffective for vessels under ₹100 crore, resulting in a 5–15% effective reduction in incentives for green vessels compared to earlier schemes.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

The SBFAS Guidelines aim to provide structured financial assistance and promote indigenisation. However, uniform assistance rates dilute incentives for green vessels, domestic content requirements may not be practical at present, infrastructure support is limited in scope, and transitional provisions create uncertainty – constraining the policy’s effectiveness in driving rapid sectoral growth.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

While GTTP promotes green transition, the ASTDS specifications remain restrictive by permitting only DMP tugs, creating a disconnect between policy intent and implementation. Current tender conditions – particularly delivery timelines and fuel consumption criteria – further limit the adoption of alternative propulsion technologies.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

Current Government policies provide an enabling framework for shipbuilding and maritime manufacturing; however, effectiveness is diluted by inconsistent interpretation and enforcement by customs authorities. The absence of dedicated customs facilitation for ship repair, lack of uniform implementation across ports, and duty anomalies affecting domestic marine equipment manufacturers continue to reduce India’s competitiveness as a maritime manufacturing and repair hub.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

The current framework recognises shipyards under infrastructure through policy notification but does not extend corresponding tax benefits under the Income Tax Act. As a result, infrastructure status remains largely symbolic, shipyards do not receive targeted fiscal incentives, and the policy’s effectiveness in promoting investment and growth is limited.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

Current GST provisions permit refund under inverted duty structure only for input materials, exclude input services and capital goods from refund, and lack clarity on classification of ship components – resulting in continued ITC accumulation and financial strain on shipyards.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

Current GST provisions provide a concessional output tax rate (5%) but do not extend similar benefits to input materials and services, resulting in accumulation of ITC without adequate refund mechanisms – leading to increased operational costs and reduced competitiveness of Indian ship repair yards.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

Under current GST provisions, land, buildings and civil structures are excluded from the definition of ‘plant and machinery’. Consequently, ITC is not available on construction of dry docks and slipways, increasing the cost burden and discouraging new investments in shipbuilding infrastructure.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

Current policy frameworks support shipbuilding growth but do not adequately address development of design capabilities, access to shared R&D infrastructure, or incentivisation of indigenous design usage. As a result, the design segment remains underdeveloped relative to construction capacity.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

Current frameworks (Sagarmala, PM Gati Shakti National Master Plan, Smart Cities Mission) support inland waterways and integrated infrastructure development in principle, but there is no uniform national standard mandating minimum navigational clearance for bridges, limited inter-ministerial coordination, lack of enforceable design standards, and inadequate alignment between urban development and maritime priorities. Coordination between MoPSW, IWAI and State Governments remains limited, and project approvals do not consistently factor in future vessel size and traffic growth.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

Existing frameworks involve multiple ministries and regulatory bodies, resulting in fragmented governance, procedural delays and high compliance costs. While sectoral policies are progressive, their implementation is constrained by regulatory bottlenecks.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

Current policy frameworks support shipbuilding and maritime infrastructure but lack targeted interventions for component manufacturing such as marine gearboxes. As a result, domestic manufacturers remain exposed to unfair competition, no dedicated incentives or protection mechanisms exist, and import dependency continues to rise.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

Current policy frameworks under MIV 2030 and MAKV 2047 aim to increase shipbuilding capacity to 10 million CGT and position India among the top 5 shipbuilding nations globally. However, the absence of import regulation for second-hand vessels remains a significant policy gap, limiting the effectiveness of these initiatives.

15. Domestic Procurement of Shipbuilding Grade Steel:

The present policy framework encourages higher indigenous content in shipbuilding and aims to achieve approximately 40% domestic value addition under SBFAS. However, domestic steel manufacturers continue to face challenges in supplying internationally compliant shipbuilding steel, and shipyards remain dependent upon imports to satisfy contractual obligations relating to quality, classification approvals and delivery schedules.

CHAPTER VII: DISCUSSIONS WITH STAKEHOLDERS

The Committee's proposals draw substantially on consultations conducted by the Shipyards Association of India (SAI) with its member shipyards, and on discussions with the Indian National Shipowners' Association (INSA), the Directorate General of Shipping (DGS), the Ministry of Ports, Shipping and Waterways (MoPSW), and other stakeholders. A summary of these discussions, issue-wise, is set out below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

- Extensive consultations involving SAI, INSA, DGS and MoPSW resulted in a consensus recommending eligibility criteria of 24 metres vessel length, or 500 Gross Tonnage (GT).
- These recommendations have not yet been incorporated in the current notification.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

- MSME shipyards from Kerala, Goa and Gujarat have expressed concern that the absence of additional incentives reduces competitiveness of green vessels.
- Shipowners are reluctant to place orders due to higher costs.
- Stakeholders note that the policy does not reflect the national sustainability agenda.

3. Shipyards' Concerns on Recently Approved SBFAS Guidelines:

- Consultations with shipyards and industry bodies highlighted the need for relaxation and phased implementation of domestic content norms.
- Enhanced incentives for green and hybrid vessels were sought, along with expanded infrastructure support and clarity in contractual and transitional provisions.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

- Consultations with shipyards, tug operators and technical experts indicate strong support for inclusion of Diesel Electric Propulsion (DEP) tugs.

- Stakeholders seek greater flexibility in propulsion system selection and alignment of tender timelines with supply chain realities.
- A detailed feasibility study conducted by industry experts also supports the adoption of DEP tugs.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

- Lack of uniformity in customs procedures across ports.
- Excessive compliance requirements for non-applicable cases.
- Delays arising from DGFT portal inefficiencies and procedural rigidity.
- Increased operational and financial burden; prolonged clearance timelines for urgent ship repair spares.
- Customs duty on spare parts stocked by authorised OEMs and service providers for emergency repairs.
- Cumbersome port procedures governing movement of repair equipment.
- Competitive disadvantage faced by indigenous marine equipment manufacturers due to customs duty on imported components used for domestic manufacturing.
- Absence of dedicated fast-track customs mechanisms for ship repair activities.
- Stakeholders unanimously emphasised the need for coordinated intervention by MoPSW, Ministry of Finance, DGFT and Customs authorities.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

- Industry stakeholders, including shipyards and associations, have consistently highlighted the need for inclusion of shipbuilding under Section 80-IA, parity with other infrastructure sectors, and enhanced fiscal incentives to improve competitiveness.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

- Need for uniform GST treatment across all inputs.
- Requirement for clarity in classification of vessel components.
- Inclusion of input services and capital goods in refund mechanisms.
- Adoption of certification-based concessional frameworks.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

- Need for uniform GST rates across inputs and outputs.
- Inclusion of all services (including OEM services) under concessional GST.
- Removal of anomalies causing ITC accumulation.
- Policy alignment with global best practices.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

- The need to reclassify dry docks and slipways as plant and machinery.
- The importance of enabling ITC to reduce capital costs.
- The necessity of tax incentives to support infrastructure expansion.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

- Urgent need for government-backed design infrastructure.
- Requirement for financial incentives to promote indigenous design.
- Need for capacity building in advanced design and compliance capabilities.
- Importance of skill development initiatives.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

- The Shipyards Association of India (SAI) has highlighted the need to avoid low-height bridges on navigable waterways and the importance of aligning infrastructure with maritime growth projections, including a requirement for mandatory consultation with maritime authorities before approvals.
- SAI has engaged member shipyards, industry experts and logistics stakeholders, finding strong willingness among shipyards to invest in hinterland expansion, consensus on the need for navigationally compliant bridge infrastructure, and demand for policy clarity and financial support mechanisms.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

- Need for a unified regulatory framework.
- Simplification of approvals and licensing.
- Reduction in compliance burden.
- Streamlining of customs and import processes.
- Policy alignment to support investment and exports.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

- Urgent need for tariff and non-tariff safeguards.
- Requirement for financial and fiscal support mechanisms.
- Need for policy alignment to support ancillary industries.
- Importance of creating a robust domestic ecosystem for marine components.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

- SAI has held extensive consultations with member shipyards, industry stakeholders and regulatory bodies, finding unanimous concern regarding the adverse impact of second-hand vessel imports, particularly in the sub-6000 GT segment, which constitutes a major portion of domestic shipbuilding capability.

15. Domestic Procurement of Shipbuilding Grade Steel:

- The Shipyards Association of India (SAI) has held detailed consultations with its member shipyards, including Chowgule Shipbuilding Division, L&T Shipbuilding, and SWAN Defence & Heavy Industries (SDHI).
- SAI has also participated in stakeholder discussions convened by MoPSW and interacted with the Indian Steel Association (ISA).
- Consultations highlighted a broad consensus that improving domestic availability of internationally compliant shipbuilding-grade steel requires coordinated action involving MoPSW, Ministry of Steel, Indian steel manufacturers, Indian Register of Shipping (IRS), Indian Steel Association (ISA), and the shipbuilding industry.

CHAPTER VIII: VIEWS OF DOMAIN EXPERTS

Domain experts – including naval architects, maritime economists, taxation specialists and industry practitioners – were consulted in the preparation of the underlying proposals. Their views, issue-wise, are summarized below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

- Coastal vessels are critical for port operations and offshore logistics.
- MSME shipyards are essential for decentralised industrial growth.
- Inclusive policies are required to ensure sectoral sustainability.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

- Electric vessels are essential for decarbonising inland and coastal shipping.
- Policy incentives are critical to offset higher upfront costs.
- Without targeted support, India may lag in the green maritime transition.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

- Localisation in commercial shipbuilding requires time and ecosystem development.
- Green vessel adoption depends heavily on financial viability.
- Infrastructure augmentation is critical for scaling shipbuilding capacity.
- Policy clarity is essential to build investor and shipowner confidence.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

- DG sets for DEP tugs are available within 10–12 months.
- DEP tugs offer higher indigenous content through locally manufactured components.
- Reduced foreign exchange outflow (approximately 20%).
- Lower fuel consumption and improved operational efficiency.
- Reduced maintenance and lifecycle costs.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

- Procedural inefficiencies significantly impact project timelines and cost competitiveness.
- MSME shipyards are disproportionately affected.

- Simplified and standardised customs processes are critical for ease of doing business.
- Ship repair competitiveness depends largely on vessel turnaround time rather than labour cost alone.
- Customs clearance delays significantly diminish India’s ability to attract international repair business.
- Customs policies should distinguish between commercial imports and imports intended exclusively for shipbuilding and ship repair.
- Parity between imported finished marine equipment and domestically manufactured equipment is essential for the Make in India initiative.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

- Shipbuilding is a capital-intensive industry requiring long-term financial support.
- Tax incentives are critical to attract investment and scale operations.
- Alignment between policy recognition and fiscal provisions is essential for meaningful impact.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

- GST neutrality is essential for export-oriented and capital-intensive industries.
- Blocked ITC reduces liquidity and discourages investment.
- Policy alignment with customs provisions is necessary to eliminate anomalies.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

- Tax neutrality is essential for service-based industries like MRO.
- Uniform taxation enhances competitiveness and attracts global business.
- Eliminating ITC accumulation improves liquidity and operational efficiency.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

- Shipbuilding infrastructure requires long-term capital investment.
- Tax inefficiencies directly impact project viability.
- Enabling ITC or reducing GST rates can significantly improve investment attractiveness.

- Infrastructure development is critical for scaling shipbuilding capacity.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

- Design capability is a strategic differentiator in shipbuilding.
- Indigenous design reduces dependency and enhances value addition.
- Investment in R&D and testing infrastructure is critical.
- Skill development is essential for long-term sustainability.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

- Bridge clearance must be planned based on future navigation needs, not current minimal requirements.
- Retrofitting or modifying bridges later is costly and impractical.
- Integrated planning between transport modes is essential for sustainable infrastructure development.
- Navigation impact assessments should be integrated into project approvals.
- Innovative bridge technologies (e.g. bascule, swing, lift bridges) should be used where required; early-stage planning interventions are significantly more cost-effective than retrofitting.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

- Regulatory efficiency is critical for global competitiveness.
- Institutional coordination must be strengthened.
- Digitalisation and self-certification can reduce compliance burden.
- Policy certainty and transparency are essential for investment.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

- Marine propulsion systems are strategic assets for maritime nations.
- Loss of indigenous manufacturing capability can create long-term supply chain vulnerabilities.
- Balanced trade policies are essential to ensure fair competition.
- Supporting MSMEs in critical sectors is vital for economic resilience.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

- Protectionist measures are essential during the growth phase of domestic industries.
- Encouraging new builds over imports leads to long-term economic and environmental benefits.
- Green and energy-efficient vessels should be prioritised to meet global sustainability commitments.

15. Domestic Procurement of Shipbuilding Grade Steel:

- Shipbuilding-grade steel requires significantly tighter manufacturing tolerances than conventional structural steel.
- International classification approvals are essential for export shipbuilding.
- Competitive steel pricing is a decisive factor in winning international shipbuilding contracts.
- Stable domestic steel availability is critical for achieving India’s long-term shipbuilding targets under MAKV-2047.
- Without strengthening domestic steel capabilities, India’s dependence on imported steel is likely to continue despite policy support.

CHAPTER IX: NATIONAL AND GLOBAL BEST PRACTICES TO RESOLVE THE ISSUE

Leading shipbuilding and maritime nations have adopted a range of practices that offer a useful frame of reference for Indian policy. These are summarised, issue-wise, below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

- Provide financial incentives across vessel categories.
- Promote domestic shipbuilding through inclusive policies.
- Support MSMEs through targeted funding and infrastructure access.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

- Provide higher subsidies for green vessels.
- Offer tax incentives and carbon credits.
- Support R&D and infrastructure for green fuels.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

- Adopt phased localisation strategies.
- Provide higher incentives for green technologies.
- Invest heavily in shipyard infrastructure and workforce development.
- Recognise specialised assets like floating docks under dedicated categories.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

- Adopt hybrid and electric propulsion systems.
- Encourage flexible technical specifications.
- Align procurement frameworks with sustainability goals.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

- Singapore, South Korea and Sri Lanka (Colombo) provide clear exemptions for shipbuilding imports.
- Minimise compliance requirements for non-commercial imports; ensure robust and efficient digital systems.
- Maintain coordination between regulatory authorities.

- Provide expedited customs clearance of marine spare parts and permit duty-free import of repair spares supplied to vessels.
- Establish dedicated customs procedures for ship repair operations and facilitate seamless movement of repair equipment within ports.
- Provide fiscal incentives supporting indigenous marine equipment manufacturing.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

- China has extended credit lines to foreign shipping companies to support its domestic shipbuilding industry and generate orders for local shipyards.
- The Philippines introduced the Domestic Shipping Development Act (2004), propelling it to become the world’s fourth-largest shipbuilding nation, offering 100% FDI and exemption from import duties and taxes on shipyard equipment, capital goods, spare parts and machinery.
- Vietnam has accorded priority status to shipbuilding, including retention of corporate income tax and capital-use tax for reinvestment, preferential corporate tax rates, special incentives for industrial zones, protection of the domestic industry, exemption from import duties, and promotion of joint ventures for technology transfer.
- Brazil’s Merchant Marine Fund (FMM) provides loans with repayment periods of up to 20 years at fixed interest rates of 4–6% per annum, financing up to 90% of total project cost.
- Malaysia’s Bank Pembangunan Malaysia Berhad offers financing at 4–6% interest, with repayment periods up to 10 years and a two-year grace period.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

- Ensure full refund of input taxes.
- Maintain uniform tax structures across inputs and outputs.
- Use certification-based mechanisms for concessional taxation, as followed in India’s oil and natural gas sector through Essentiality Certificates.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

- Maintain uniform tax rates for inputs and outputs.
- Ensure seamless credit flow without accumulation.

- Provide tax incentives to promote MRO activities – Dubai applies a uniform 5% tax rate across all MRO-related inputs and services.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

- Treat shipbuilding infrastructure as industrial assets.
- Provide tax exemptions or concessional rates.
- Facilitate access to credit and reduce capital costs.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

- Provide strong R&D funding and innovation grants.
- Support shared infrastructure such as model testing facilities.
- Offer incentives for use of domestic design firms.
- Promote skill development through specialised training programmes.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

- Mandatory navigation clearance standards for bridges.
- Integrated infrastructure planning involving maritime authorities.
- Use of movable/span bridges where required.
- Long-term forecasting of vessel sizes and traffic.
- Regulatory frameworks ensuring no obstruction to navigable waterways.
- Centralised regulatory oversight and use of smart/movable bridge technologies.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

- Integrated single-window clearance systems.
- Pre-approved industrial zones with environmental clearances.
- Liberalised import and export regimes.
- Dedicated maritime authorities.
- Simplified tax and compliance frameworks.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

- Impose anti-dumping duties and safeguard measures.
- Provide production-linked incentives and subsidies.

- Support domestic manufacturers through tax benefits and concessional utilities.
- Develop integrated policies covering both shipbuilding and component manufacturing.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

- Age restrictions on vessel imports.
- Higher import duties on second-hand vessels.
- Mandatory compliance with stringent environmental norms.
- Incentives for domestic procurement.

15. Domestic Procurement of Shipbuilding Grade Steel:

- Dedicated production facilities for shipbuilding-grade steel.
- Close collaboration between steel manufacturers and shipyards.
- Comprehensive IACS certification across product ranges.
- Competitive long-term pricing mechanisms.
- Flexible supply contracts with project-based quantities.
- Reliable just-in-time delivery systems.

CHAPTER X: SUGGESTED POLICIES

This Chapter sets out the Committee's detailed suggested policy measures against each of the fifteen issue areas examined. These form the operative recommendations of this Report and are intended to be read together with the consolidated Final Policy Recommendations in Chapter XI.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

- Revise eligibility criteria to include vessels of 24 metres length or 500 GT.
- Extend infrastructure benefits to coastal shipping.
- Provide targeted financial support to MSME shipyards.
- Align policies with Maritime India Vision and MAKV 2047.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

- Introduce an additional 5–10% financial assistance for electric, hybrid and green vessels below ₹100 crore.
- Create a separate incentive slab for green vessels under SBFAS.
- Encourage adoption through viability gap funding and tax incentives.
- Align SBFAS provisions with IMO Net-Zero goals and MAKV 2047.

3. Shipyards' Concerns on Recently Approved SBFAS Guidelines:

Domestic Content Requirement

- Allow ‘Nil’ domestic content for 3 years (domestic orders) and 5 years (export orders).
- Introduce phased localization thereafter.
- Mandate gradual involvement of Indian design houses.
- Reassess parity with defence shipbuilding requirements.

Financial Assistance for Green Vessels

- Provide additional 5–10% financial assistance for electric, hybrid and green vessels below ₹100 crore.
- Ensure meaningful differentiation from conventional vessels.

Infrastructure Augmentation under SbDS

- Extend capital assistance to include paint, machine and pipe shops.
- Include warehousing and logistics.

- Include training and accommodation facilities.
- Include breakwater structures and capital dredging.

Inclusion of Floating Dry Docks (FDDs)

- Classify FDDs ($\geq 135\text{m}$ length and $\geq 35\text{m}$ width) as Specialised Vessels.
- Recognise their technical complexity and capital intensity.

Amendment to Shipbuilding Contract Provisions

- Consider revised contract prices (post scope change) for SBFA applicability.
- Base eligibility on final contract value paid by the buyer.

Applicability of SBFAP and SBFAS

- Provide an extension up to 15 May 2026 for obtaining Approval-in-Principle.
- Align timelines for contract registration, fair price evaluation and approvals.
- Reduce uncertainty for ongoing contract negotiations.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

- Amend ASTDS specifications to include Diesel Electric Propulsion (DEP) as an approved alternative.
- Replace restrictive terminology with ‘mechanical/electrical propulsion’.
- Align tender timelines with realistic equipment delivery schedules.
- Promote indigenous manufacturing of propulsion components.
- Encourage adoption of green technologies through policy flexibility.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

Streamlining SIMS and Monitoring Systems

- Introduce flexibility in timelines for SIMS and similar registrations.
- Exempt small-quantity imports meant exclusively for shipbuilding purposes.

Rationalisation of EPR Requirements

- Exempt shipyards from EPR compliance for imports meant for direct installation and not for resale.

Clarification on Import Licensing

- Issue clear directions to customs authorities regarding DGFT Chapter 89 provisions.

- Allow imports without WPC/LMPC licences based on shipbuilding undertakings.

Simplification of BIS Compliance

- Restrict BIS queries only to notified items.
- Avoid unnecessary delays due to misinterpretation.

Digital System Improvements

- Strengthen DGFT portal functionality.
- Introduce an effective grievance redressal mechanism for time-bound resolution.

Standard Operating Procedures (SOPs)

- Develop uniform SOPs for customs clearance of shipbuilding imports.
- Ensure consistency across ports and customs jurisdictions.

Fast-Track Customs Clearance for Ship Repair Spares

- Establish dedicated customs clearance channels for spare parts imported exclusively for ship repair.
- Introduce time-bound customs processing, preferably within 24 hours.
- Implement electronic pre-arrival customs clearance mechanisms for urgent consignments.

Customs Duty Exemption on Ship Repair Spare Parts

- Extend customs duty exemption to spare parts imported by authorised OEMs, workshops and service providers exclusively for ship repair.
- Permit stocking of duty-free marine spare parts under suitable end-use monitoring mechanisms.

Simplification of Port Goods Movement Procedures

- Develop a uniform national SOP governing movement of repair equipment into and out of Indian ports.
- Digitise gate pass approvals and documentation.
- Benchmark Indian port procedures against international best practices.

Level Playing Field for Indigenous Marine Equipment Manufacturing

- Extend customs duty exemption to imported components used for manufacturing marine engines and equipment where domestic alternatives are unavailable.
- Ensure parity between imported finished marine equipment and equipment manufactured in India for supply to Indian shipyards.
- Encourage localisation by rationalising customs duties on critical imported inputs until domestic manufacturing capabilities mature.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

Recognition of Shipbuilding as Infrastructure

- Amend Section 80-IA of the Income Tax Act, 1961 to explicitly recognise shipbuilding as an ‘Infrastructure Facility’.
- Extend tax incentives and deductions available to other infrastructure sectors to the shipbuilding industry.
- Ensure fiscal parity between the shipping and shipbuilding sectors.
- Align taxation and investment policies with Make in India, Maritime India Vision 2030 and Viksit Bharat.

Grant Strategic Status to Shipbuilding

- Accord shipbuilding strategic industry status in view of its significance for national security, industrial development, employment generation and export growth, drawing on international experience (China, the Philippines, Vietnam).

Improve Access to Affordable Finance

- Establish dedicated financing mechanisms for shipbuilding.
- Provide working capital at internationally competitive interest rates.
- Offer long-term credit support through specialised financial institutions.
- Introduce sovereign-backed credit guarantee schemes for shipbuilding projects.
- Draw on international models such as Brazil’s Merchant Marine Fund and Malaysia’s Bank Pembangunan Malaysia Berhad.

Reform Payment Mechanisms

- Replace bank guarantee requirements for stage payments in government shipbuilding contracts with escrow-based payment mechanisms to improve liquidity while ensuring financial accountability.

Export Promotion

- Develop environmentally sustainable and technologically advanced vessel designs.
- Expand exports to emerging maritime economies.
- Create export credit facilities for overseas buyers of Indian-built vessels.
- Support concessional export financing similar to practices of leading shipbuilding nations.

Development of the Marine Ancillary Industry

- Encourage OEMs through incentives linked to complete transfer of technology.
- Promote domestic production of marine equipment.
- Mandate minimum domestic sourcing requirements in foreign ship procurement contracts.
- Develop dedicated shipbuilding clusters with strong MSME participation.

Taxation and Fiscal Rationalisation

- Rationalise taxes applicable to shipbuilding and shipping.
- Eliminate fiscal disadvantages faced by Indian shipyards.
- Ensure uniform taxation between Indian and foreign-flag vessels operating in India.
- Provide tax exemptions for imported shipbuilding machinery, specialised equipment and raw materials unavailable domestically.
- Provide income tax incentives for new shipbuilding investments and reinvestment of profits.

Key Legislative Initiatives

- Commercial Shipbuilding Law: enact legislation providing preference to Indian-built vessels for domestic coastal trade, or grant Indian shipyards right of first refusal.

- Prompt Payment Legislation: introduce statutory timelines for payments under government shipbuilding contracts to improve cash flow and reduce financial stress.
- Shipbuilding Cluster Development: facilitate cluster-based industrial development with integrated support for MSMEs, vendors and OEMs.
- Shipbuilding Research and Innovation Act: establish dedicated funding mechanisms for research, innovation, dual-use technologies, digital manufacturing and advanced marine systems.

National Shipbuilding Plan

- Formulate a comprehensive National Shipbuilding Plan based on consolidated requirements from all maritime stakeholders – Defence, Commercial Shipowners, Shipping, Fisheries, Home Affairs, Commerce, Earth Sciences and Inland Waterways.
- Short term: focus on simpler vessel categories, develop design capability, enhance workforce skills, improve productivity.
- Medium term: expand shipyard infrastructure, build more sophisticated vessels, meet domestic commercial demand.
- Long term: achieve international competitiveness, develop a globally integrated marine manufacturing ecosystem, increase exports of ships and marine equipment.

Institutional Reforms

- Create a dedicated Secretary for Shipbuilding (given the differing policy objectives of shipping and shipbuilding) to oversee industrial policy, legislative reforms, skill development, technology acquisition and competitiveness enhancement.

Strengthening the Shipping Sector

- Promote greater use of coastal shipping and inland waterways.
- Encourage modal shift from road and rail to water transport.
- Accelerate implementation of Sagarmala and Jal Marg Vikas initiatives.
- Introduce incentives for coastal cargo movement; expansion of the domestic merchant fleet will generate sustained demand for Indian shipyards.

Measures to Improve Competitiveness

- Standardise vessel designs for coastal and inland waterways.
- Promote large-scale production of standardised vessels to reduce costs.

- Develop government-owned standard vessel designs through competitive design agencies.
- Expand indigenous manufacturing of standardised marine equipment.

State-Level Maritime Initiatives

- Maritime States should establish proactive Maritime Boards and formulate dedicated shipbuilding policies, adopting best practices from Gujarat – developing maritime industrial clusters, providing infrastructure support, facilitating investment, and creating an enabling business environment.

Institutional Capacity Building

- Establish an Indian Shipbuilding Institute for policy research, benchmarking, demand forecasting, standard designs and productivity studies.
- Establish an Indian Marine Equipment Research Institute to promote indigenisation, technology transfer, equipment development and global collaboration.
- Support institutions such as a Government Export Credit Agency, Indian Offshore and Shipbuilding Association, Indian Marine Equipment Association, and National Marine Equipment Testing and Certification Centre.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding:

GST Rate Rationalisation

- Align GST Notification No. 1/2017 (Sr. No. 252) with Customs Notification 50/2017 (Sr. No. 559).
- Apply a uniform GST rate of 5% on all inputs (materials and services) used in shipbuilding.

Essentiality Certificate Mechanism

- Introduce a system whereby shipyards can procure inputs at concessional GST rates based on an Essentiality Certificate.
- Require certification (e.g. CA certificate) confirming usage for shipbuilding purposes.

Expansion of ITC Refund Scope

- Allow refund of ITC on input materials, input services and capital goods.
- Remove restrictions under inverted duty structure provisions.

Alternative Support Mechanism

- Compensate blocked ITC (approximately 4–6% of vessel cost) through enhancement of Shipbuilding Financial Assistance (SBFA).

Clarification on Classification of Parts

- Issue clear guidelines defining ‘parts of vessels’ to eliminate ambiguity and disputes.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

Uniform GST Rate Implementation

- Apply a uniform GST rate of 5% on all input materials and services used in ship repair/MRO.

Inclusion of OEM Services

- Extend concessional GST rate (5%) to installation, commissioning and other OEM-related services.

Elimination of ITC Accumulation

- Align input and output tax rates to remove inverted duty structure.

Simplification of GST Framework

- Provide clear guidelines for classification and applicability of GST rates in MRO activities.

Enhancing Competitiveness

- Align India’s GST framework with global maritime hubs to attract international ship repair business.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

GST Exemption Option

- Exempt construction of dry docks and slipways from GST.

Reclassification as Plant & Machinery

- Treat dry docks and slipways as ‘plant and machinery’ for shipyards.

Concessional GST Rate

- Apply a reduced GST rate of 5% on such infrastructure.

Input Tax Credit Availability

- Allow full ITC on GST paid for construction of dry docks and slipways.

Facilitating Investment

- Align tax policy to reduce capital costs and improve project viability.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

Creation of Design Infrastructure (Software Bank)

- Establish a government-supported design software bank accessible to Indian designers at nominal cost.

Development of Model Testing Facilities

- Set up tank model testing facilities to support design validation and compliance with international standards.

Incentivising Use of Indigenous Design

- Provide additional financial assistance (3–5%) to shipyards using Indian design firms.
- Introduce a sunset clause (10–15 years) for such incentives.

Subsidy for Design Tools

- Offer 50% subsidy on procurement of advanced design software by Indian design houses.

Export Incentives for Design Services

- Introduce a scheme similar to the Service Exports from India Scheme (SEIS) to promote export of design services.

Skill Development Initiatives

- Introduce ship design-specific courses in ITIs and diploma institutions.
- Develop a pipeline of skilled designers and technical professionals.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

Minimum Navigational Clearance Standards

- Establish national guidelines for vertical and horizontal clearance for all bridges over navigable waterways.

Mandatory Stakeholder Consultation / Clearance Assessment

- Require consultation with IWAI, MoPSW and industry bodies before project approval.
- Introduce navigation impact assessment as part of project approvals.

Integrated Planning Framework

- Align bridge construction with inland waterway development plans.

Review of Ongoing Projects

- Reassess projects such as the Borim Bridge and Netravati River bridges to ensure adequate navigational clearance.
- Issue directives to Smart City authorities to align infrastructure with maritime priorities.

Future-Proof and Advanced Bridge Design

- Design bridges considering long-term vessel growth and traffic expansion.
- Encourage openable, lift or high-clearance bridge designs.

Regulatory Oversight and Coordination

- Introduce a central approval system for infrastructure impacting navigable waterways.
- Establish an inter-ministerial coordination framework between MoPSW, MoHUA and State Governments.
- Provide funding support under Sagarmala and Gati Shakti for compliant bridge construction.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

Statutory and Licensing Framework

- Establish a National Maritime Single-Window Portal integrating all approvals.
- Introduce a Unified Shipyard Operating Licence.

- Enable fully digital vessel registration and certification.
- Delegate minor vessel registration to State Maritime Boards/classification societies.
- Implement a unified safety and labour compliance code with self-certification.

Land, Infrastructure, and Environmental Clearances

- Notify Shipyard Development Zones (SDZs) with pre-approved clearances.
- Simplify CRZ norms for shipbuilding and repair activities.
- Provide deemed approvals for dredging and berth expansion within designated zones.
- Standardise land lease policies across ports.
- Introduce fast-track approvals for brownfield expansion.

Financial and Taxation Measures

- Implement an automatic digital Shipbuilding Financial Assistance Scheme.
- Classify shipbuilding under priority sector lending.
- Exempt critical shipbuilding inputs from customs duty.
- Recognise shipbuilding as a manufacturing activity with full ITC eligibility.
- Provide tax incentives for domestic shipbuyers.

Capacity Expansion, Technology, and Exports

- De-license non-defence marine equipment manufacturing.
- Allow automatic approval for foreign joint ventures in non-strategic areas.
- Grant infrastructure status to shipyards.
- Treat export shipbuilding contracts as deemed exports.
- Allow repair yard conversion through self-declaration.

Institutional and Governance Reforms

- Establish a National Shipbuilding Authority (NSA) as a nodal body.
- Enable digital self-certification with risk-based audits.
- Set up a Maritime Arbitration Centre.
- Develop a single maritime data integration platform.

Import Licensing and Customs Procedures

- Adopt a negative list approach for import licensing.
- Introduce project-based master import authorisations.
- Allow duty deferment for shipbuilding imports.

- Grant Authorized Economic Operator (AEO) status to shipyards.
- Provide zero-duty and fast-track clearance for green technologies.

Reforms in Gas Cylinder Rules, 2016

- Permit type-approval-based clearance of gas cylinders, similar to other equipment.
- Exempt non-toxic, non-flammable cylinders (up to 200 units) from licensing if class-approved.
- Recognise firefighting systems as integrated components of shipbuilding.
- Eliminate redundant PESO licensing where international class approvals exist.
- Ensure faster customs clearance to avoid delays in vessel delivery and exports.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

Tariff and Trade Measures

- Impose appropriate customs/safeguard duties on imported marine gearboxes.
- Initiate anti-dumping investigations where pricing distortions are evident.

Financial Incentives

- Introduce a Production Linked Incentive (PLI) scheme or targeted capital subsidies.
- Provide GST rationalisation or refund mechanisms for domestic manufacturers.

Cost Competitiveness Support

- Extend concessional power tariffs to marine equipment manufacturing units.
- Reduce cost disadvantages through policy support.

Institutional Mechanisms

- Constitute a High-Level National Committee to address issues of the marine equipment ecosystem.
- Ensure coordinated inter-ministerial action.

Ecosystem Development

- Formulate a National Small Craft & Coastal Vessel Policy integrating indigenous component manufacturing.
- Strengthen ancillary industries and MSME clusters.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

- Formulate and immediately implement comprehensive policy guidelines for vessel imports in consultation with the Directorate General of Shipping (DGS) and industry stakeholders.
- Prohibit import of second-hand/older vessels below 6,000 GT for commercial operations in Indian territorial waters and the Exclusive Economic Zone (EEZ).
- Restrict import of new vessels below 6,000 GT, permitting them only for critical national or strategic projects.
- Introduce deterrent measures such as higher import duties on vessels to protect domestic shipbuilding.
- Align these measures with national visions under MIV 2030 and MAKV 2047.

15. Domestic Procurement of Shipbuilding Grade Steel:

- Improve product quality in accordance with IACS Unified Requirements and international shipbuilding standards.
- Expand production of approved high-tensile grades and thicker plates.
- Establish transparent and internationally competitive index-linked pricing mechanisms.
- Rationalise duties and taxes/GST issues to ensure parity between domestic and imported steel for export projects.
- Create a dedicated certification facilitation mechanism with IRS for obtaining approvals from all major IACS Classification Societies.
- Develop a comprehensive catalogue of pre-approved shipbuilding steel grades.
- Reserve dedicated mill capacity for shipbuilding-grade steel.
- Promote long-term framework agreements between steel producers and shipyards.

- Introduce a MoPSW-led demand aggregation mechanism for shipbuilding steel, so that annual steel demand is aggregated and promulgated for steel mills to plan production accordingly.
- Standardise commercial terms covering reasonable MOQs, payment schedules and mandatory return/replacement provisions for defective material.

CHAPTER XI: FINAL POLICY RECOMMENDATION TO THE GOVERNMENT TO ACHIEVE THE MAKV-2047 GOAL

The Sub-Committee's overarching recommendation is that the Government adopt a coordinated, time-bound implementation plan across the Ministry of Ports, Shipping and Waterways, the Ministry of Finance (including the Department of Revenue and CBIC), the Ministry of Steel, DGFT, Customs authorities, the Inland Waterways Authority of India, and concerned State Governments, to give full effect to the recommendations set out in Chapter X. The issue-wise final policy recommendations, expected benefits, and consequences of continued inaction are set out below.

1. Revision of Eligibility Criteria for Infrastructure Status to Ships:

It is recommended that the Government issue suitable directives to the Ministry of Finance to revise the notification and adopt the proposed eligibility criteria of 24 metres length or 500 GT, initially for a period of five years, with periodic review thereafter.

Expected benefits:

- Enable access to affordable financing for coastal shipping
- Boost MSME shipyard growth
- Reduce dependence on foreign-built vessels
- Strengthen indigenous shipbuilding capabilities
- Support national objectives under Make in India

Failure to revise the criteria may lead to increased reliance on imported vessels, missed MAKV 2047 targets, and stagnation of the domestic shipbuilding ecosystem.

2. Financial Assistance for Electric / Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines:

It is recommended that the Government review and amend the SBFAS Guidelines to provide meaningful and differentiated financial incentives for electric, solar and green-fuel vessels, particularly those costing below ₹100 crore.

Expected benefits:

- Promote adoption of sustainable maritime technologies

- Enhance commercial viability of green vessels
- Support MSME shipyards specialising in smaller vessels
- Reduce dependence on fossil fuels
- Accelerate India’s progress towards IMO Net-Zero 2050 targets

Without such revisions, the current framework risks discouraging green investments and slowing India’s transition to a sustainable maritime ecosystem, impacting the long-term goals of MAKV 2047.

3. Shipyards’ Concerns on Recently Approved SBFAS Guidelines:

It is recommended that the SBFAS Guidelines be suitably amended to address the above concerns in a comprehensive manner.

Expected benefits:

- Enable realistic and phased indigenisation
- Promote adoption of green technologies
- Strengthen MSME shipyards and infrastructure
- Enhance investor and shipowner confidence
- Reduce dependence on imports
- Accelerate achievement of MAKV 2047 targets

Without these amendments, the current framework may limit the growth potential of the shipbuilding industry and hinder India’s ambition to emerge as a global shipbuilding hub.

4. Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications:

It is recommended that the Government approve amendments to ASTDS specifications to allow both Diesel Mechanical and Diesel Electric propulsion systems for 60T and 70T BP tugs.

Expected benefits:

- Enable timely delivery of tugs
- Accelerate adoption of green and efficient propulsion technologies
- Promote indigenous manufacturing and reduce import dependency
- Support the objectives of GTTP and India’s decarbonisation commitments
- Strengthen India’s shipbuilding ecosystem and contribute to MAKV 2047 goals

Without such an amendment, there will be a continuing disconnect between policy intent and implementation, denying shipowners and ports the flexibility needed to transition towards sustainable maritime operations without disrupting ongoing procurement.

5. Addressing Challenges Faced by Shipyards with Customs Authorities:

It is recommended that the Government prioritise coordinated action between MoPSW, Ministry of Finance, DGFT and Customs authorities to address the above challenges through policy clarification, procedural simplification, digital system improvements and uniform implementation across all ports. The Government may also consider a comprehensive customs facilitation framework covering shipbuilding, ship repair and indigenous marine equipment manufacturing – including fast-track clearance, rationalisation of duties, simplified port logistics, dedicated ship repair procedures, and standardised nationwide implementation.

Expected benefits:

- Reduce delays, demurrage, detention charges and vessel turnaround time
- Improve operational efficiency of shipyards and ship repair facilities
- Enhance ease of doing business across the maritime sector
- Promote domestic manufacturing of marine equipment under Make in India
- Encourage OEMs to establish manufacturing, service and repair facilities in India
- Strengthen MSME participation in the maritime supply chain
- Increase India’s competitiveness as a regional and global shipbuilding and ship repair hub
- Accelerate achievement of MIV 2030 and MAKV 2047 objectives

Addressing these customs-related issues through a coordinated and facilitative policy framework is critical for creating a globally competitive, self-reliant and resilient maritime manufacturing ecosystem in India.

6. Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector:

It is recommended that the Government take necessary steps to include shipbuilding within the definition of ‘infrastructure facility’ under Section 80-IA

of the Income Tax Act, 1961, and to implement the wider fiscal, financial, institutional and regulatory reforms recommended above.

Expected benefits:

- Enable shipyards to avail income tax benefits
- Improve financial viability and investment attractiveness
- Enhance global competitiveness of Indian shipyards
- Support indigenous manufacturing under Make in India
- Accelerate achievement of MAKV 2047 targets

Without this alignment, the existing infrastructure status will remain limited in its impact, constraining the growth potential of the Indian shipbuilding industry. A coordinated policy framework encompassing fiscal incentives, affordable finance, regulatory reforms, institutional strengthening, technology development and human resource capacity building is essential to create a globally competitive shipbuilding ecosystem.

7. Addressing Accumulation of Input Tax Credit in Shipbuilding

It is recommended that the Government undertake comprehensive GST reforms for the shipbuilding sector by addressing the inverted duty structure, expanding ITC refund eligibility, and introducing a certification-based concessional framework.

Expected benefits:

- Eliminate working capital blockage
- Improve cost competitiveness of Indian shipyards
- Reduce litigation and compliance burden
- Encourage domestic manufacturing and exports
- Strengthen India’s position as a global shipbuilding hub

Addressing the issue of ITC accumulation is critical to ensuring the financial viability of shipyards and achieving the targets set under MAKV 2047.

8. Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector:

It is recommended that the Government undertake necessary amendments in the GST framework to ensure uniform taxation of all inputs and outputs in the ship repair and MRO sector at a rate of 5%.

Expected benefits:

- Eliminate accumulation of input tax credit
- Reduce operational costs for shipyards
- Improve liquidity and working capital efficiency
- Enhance India’s competitiveness as a global MRO hub
- Support the broader objectives of MAKV 2047

Addressing these structural tax inefficiencies is essential for unlocking the full potential of India’s ship repair industry and positioning the country as a preferred destination for global maritime services.

9. Input Tax Credit on Construction of Dry Docks and Slipways:

It is recommended that the Government undertake necessary amendments in the GST framework to either fully exempt dry docks and slipways from GST, or reclassify them as plant and machinery, enabling a concessional GST rate of 5% along with full Input Tax Credit.

Expected benefits:

- Reduce capital investment costs
- Improve financial viability of infrastructure projects
- Encourage expansion of shipbuilding capacity
- Strengthen India’s maritime infrastructure
- Support the goals of MAKV 2047

Addressing this issue is essential for enabling large-scale infrastructure development and positioning India as a globally competitive shipbuilding hub.

10. Promoting Indigenous Ship Design and Engineering Capabilities in India:

It is recommended that the Government implement a comprehensive policy framework to promote indigenous ship design and engineering capabilities through infrastructure development, financial incentives and skill development initiatives.

Expected benefits:

- Reduce dependence on foreign design houses
- Enhance value addition within India
- Strengthen innovation and R&D capabilities

- Improve global competitiveness of Indian shipbuilding
- Support the objectives of Atmanirbhar Bharat, MIV 2030 and MAKV 2047

Promoting indigenous design capabilities is essential for transforming India into a globally competitive shipbuilding hub and achieving long-term strategic and economic objectives.

11. Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding:

It is recommended that the Government adopt a holistic and forward-looking policy framework to ensure that infrastructure development over inland waterways does not hinder maritime growth, including immediate review and redesign of low-height bridges (particularly over the Netravati River in Mangalore and the proposed Borim Bridge), and institutionalisation of maritime considerations in all infrastructure planning frameworks.

Expected benefits:

- Enable efficient inland water transport
- Support shipbuilding growth and facilitate shipyard expansion in hinterland regions
- Attract private investment
- Reduce logistics costs
- Strengthen India’s position as a maritime nation

Such measures are essential to achieve the objectives of Maritime Amrit Kaal Vision 2047 and to ensure that infrastructure development complements, rather than constrains, India’s maritime ambitions. SAI has reiterated its commitment to supporting the Government with technical expertise, feasibility assessments and design recommendations.

12. Deregulation and Policy Interventions for the Shipbuilding Sector:

It is recommended that the Government undertake a comprehensive deregulation initiative for the shipbuilding sector, focusing on simplification, digitalisation and institutional integration, with a coordinated and time-bound implementation plan.

Expected benefits:

- Reduce project timelines and compliance burden
- Enhance ease of doing business

- Improve cost competitiveness of Indian shipyards
- Attract domestic and foreign investment
- Strengthen export capabilities
- Accelerate achievement of MAKV 2047 targets

A coordinated and time-bound implementation of these deregulation measures will be instrumental in transforming India into a globally competitive shipbuilding hub.

13. Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat:

It is recommended that the Government adopt a comprehensive policy framework to safeguard and promote indigenous marine gearbox manufacturing through targeted tariff measures, financial incentives and ecosystem development initiatives.

Expected benefits:

- Protect domestic manufacturing capacity
- Preserve skilled employment and MSME ecosystems
- Reduce import dependency and enhance supply chain resilience
- Strengthen India’s maritime industrial base
- Align with national initiatives such as Aatmanirbhar Bharat and MAKV 2047

Timely and decisive policy action is critical to prevent irreversible erosion of this strategic sector and to ensure that India’s maritime growth is supported by a strong and self-reliant industrial ecosystem.

14. Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding:

To realise the vision of MAKV 2047 and establish India as a leading global shipbuilding nation, it is imperative to ensure a level playing field for domestic shipyards. Immediate policy intervention to regulate and restrict the import of second-hand vessels – particularly in the sub-6000 GT segment – is essential.

Expected benefits:

- Stimulate domestic demand
- Enable capacity utilisation and expansion

- Promote job creation and ancillary industry growth
- Accelerate adoption of green and sustainable technologies

A decisive and timely policy action will not only safeguard the interests of the domestic shipbuilding industry but also reinforce India’s commitment to becoming a self-reliant and globally competitive maritime nation.

15. Domestic Procurement of Shipbuilding Grade Steel:

It is recommended that the Government constitute a Joint Working Group (JWG) comprising representatives from MoPSW, Ministry of Steel, the Indian Steel Association (ISA), domestic steel manufacturers, the Indian Register of Shipping (IRS), and the Shipyards Association of India (SAI), mandated to prepare and implement a time-bound roadmap for strengthening India’s domestic shipbuilding steel ecosystem.

Expected benefits:

- Enhance confidence of Indian shipyards in procuring domestically manufactured shipbuilding-grade steel
- Improve cost competitiveness of Indian shipyards in domestic and export markets
- Facilitate compliance with indigenous content requirements under SBFAS
- Strengthen India’s shipbuilding supply chain
- Reduce dependence on imported shipbuilding steel
- Support successful execution of the aggregated demand for approximately 437 vessels

Promoting the objectives of Make in India, Atmanirbhar Bharat, Maritime India Vision 2030 and Maritime Amrit Kaal Vision 2047 requires urgent strengthening of the domestic shipbuilding steel ecosystem, positioning India as a globally competitive shipbuilding nation.

Overarching Recommendation

A coordinated policy framework encompassing fiscal incentives, affordable finance, regulatory reforms, institutional strengthening, technology development and human resource capacity building is essential to create a globally competitive and self-reliant shipbuilding ecosystem. Simultaneously, expansion of India's merchant fleet, coastal shipping, inland waterways and ancillary manufacturing

industries will generate the demand required for sustained industrial growth. Long-term competitiveness will depend upon continuous investment in research and development, advanced ship design, green technologies, autonomous vessels, digital twin technologies, hybrid propulsion systems, and indigenous manufacturing capabilities. Collectively, implementation of the recommendations in this Report will strengthen India's commercial shipbuilding industry, enhance national maritime security, support defence preparedness, promote exports, and contribute to India's aspiration of becoming a leading global maritime power – in line with the objectives of the Maritime Amrit Kaal Vision 2047.

ANNEXURES

The following documents, forming part of the record of this Sub-Committee, are available as Annexures and may be appended to the final Report as directed by the National Shipping Board:

- Annexure I – NSB Proposal & Recommendation – 1: Revision of Eligibility Criteria for Infrastructure Status to Ships
- Annexure II – NSB Proposal & Recommendation – 2: Financial Assistance for Electric/Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines
- Annexure III – NSB Proposal & Recommendation – 3: Shipyards' Concerns on Recently Approved SBFAS Guidelines
- Annexure IV – NSB Proposal & Recommendation – 4: Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications
- Annexure V – NSB Proposal & Recommendation – 5A: Addressing Challenges Faced by Shipyards with Customs Authorities
- Annexure VI – NSB Proposal & Recommendation – 6A: Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector
- Annexure VII – NSB Proposal & Recommendation – 7: Addressing Accumulation of Input Tax Credit in Shipbuilding
- Annexure VIII – NSB Proposal & Recommendation – 8: Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector
- Annexure IX – NSB Proposal & Recommendation – 9: Input Tax Credit on Construction of Dry Docks and Slipways
- Annexure X – NSB Proposal & Recommendation – 10: Promoting Indigenous Ship Design and Engineering Capabilities in India
- Annexure XI – NSB Proposal & Recommendation – 11: Policy Paper on Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding (including the Netravati River representation)
- Annexure XII – NSB Proposal & Recommendation – 12: Deregulation and Policy Interventions for the Shipbuilding Sector
- Annexure XIII – NSB Proposal & Recommendation – 13: Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat
- Annexure XIV – NSB Proposal & Recommendation – 14: Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding

- Annexure XV – NSB Proposal & Recommendation – 15: Domestic Procurement of Shipbuilding Grade Steel

Note: The Annexures listed above comprise the source proposals and representations placed before the Sub-Committee by the Shipyards Association of India, and contain the detailed data, figures and stakeholder representations summarised in the body of this Report. These may be physically appended in full to the version of this Report to be circulated to the National Shipping Board.

NSB Proposal & Recommendation – 1

Revision of Eligibility Criteria for Infrastructure Status to Ships

Chapter I: Introduction

The Government of India has been actively promoting the maritime sector through various policy interventions under initiatives such as *Make in India*, *Maritime India Vision 2030*, and *Maritime Amrit Kaal Vision (MAKV) 2047*. Granting “Infrastructure Status” to shipping is a significant step aimed at enabling access to long-term, low-cost financing for vessel acquisition. However, the current eligibility criteria for infrastructure status have raised serious concerns among industry stakeholders, particularly the Shipyards Association of India (SAI), due to their limited inclusivity.

Chapter II: Statement of the Problem

The present notification restricts infrastructure status to:

- Indian-owned and flagged vessels of **10,000 GT and above**, or
- Indian-built, owned, and flagged vessels of **1,500 GT and above**

This excludes a substantial portion of India’s coastal fleet and creates barriers for MSME shipyards, thereby limiting sectoral growth and contradicting national maritime objectives.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations such as China, South Korea, and Japan provide comprehensive policy support across vessel categories, including small and medium-tonnage ships.

Nationally, India has approximately **1,550 registered vessels**, of which nearly **1,000 are coastal vessels**. A majority of these fall below the current eligibility threshold, effectively excluding over 50% of the domestic fleet from infrastructure benefits.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited access to affordable financing for coastal shipping operators
 - Reduced order inflow for MSME shipyards
 - High capital and operational costs
 - Inadequate infrastructure support for smaller shipbuilders
-

Chapter V: Past Policies of the Government and Their Efficacy

Previous policies encouraged indigenous shipbuilding through financial assistance schemes, subsidy support, and stakeholder consultations. These policies enabled gradual capacity building in MSME shipyards and increased domestic participation.

Chapter VI: Current Policies of the Government & Their Efficacy

While the current policy aims to strengthen shipping through infrastructure status, its restrictive eligibility criteria limit its effectiveness. The intended benefits are skewed towards large vessels, leaving out the backbone of coastal shipping.

Chapter VII: Discussions with Stakeholders

Extensive consultations involving SAI, INSA, DGS, and MoPSW had resulted in a consensus recommending eligibility criteria of:

- **24 meters vessel length, or**
- **500 Gross Tonnage (GT)**

These recommendations have not been incorporated in the current notification.

Chapter VIII: Views of Domain Experts

Industry experts highlight that:

- Coastal vessels are critical for port operations and offshore logistics
 - MSME shipyards are essential for decentralized industrial growth
 - Inclusive policies are required to ensure sectoral sustainability
-

Chapter IX: National & Global Best Practices

Globally, maritime nations:

- Provide financial incentives across vessel categories
- Promote domestic shipbuilding through inclusive policies
- Support MSMEs through targeted funding and infrastructure access

India can adopt similar practices to ensure balanced growth.

Chapter X: Suggested Policies

- Revise eligibility criteria to include vessels of **24 meters length or 500 GT**
 - Extend infrastructure benefits to coastal shipping
 - Provide targeted financial support to MSME shipyards
 - Align policies with Maritime India Vision and MAKV 2047
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government issue suitable directives to the Ministry of Finance to revise the notification and adopt the proposed eligibility criteria of **24 meters length or 500 GT**, initially for a period of five years, with periodic review thereafter.

Such a revision will:

- Enable access to affordable financing for coastal shipping
- Boost MSME shipyard growth
- Reduce dependence on foreign-built vessels
- Strengthen indigenous shipbuilding capabilities
- Support national objectives under *Make in India*

Failure to revise the criteria may lead to increased reliance on imported vessels, missed MAKV 2047 targets, and stagnation of the domestic shipbuilding ecosystem.

Annexure II

NSB Proposal & Recommendation – 2

Financial Assistance for Electric/Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines

Chapter I: Introduction

India's maritime sector is undergoing a transformative phase under *Maritime Amrit Kaal Vision (MAKV) 2047*, which targets a shipbuilding output of 4.5 million GT and ship ownership of 100 million GT. The introduction of the Shipbuilding Financial Assistance Scheme (SBFAS) is a progressive step toward strengthening domestic shipbuilding. However, in light of India's commitment to the International Maritime Organization (IMO) Net-Zero 2050 goals, there is a pressing need to align financial incentives with sustainable and green maritime technologies.

Chapter II: Statement of the Problem

The current SBFAS Guidelines do not provide additional financial incentives for electric, hybrid, or green-fuel vessels costing below ₹100 crore. Instead, these vessels receive financial assistance at par with conventional diesel vessels (15%), effectively reducing earlier benefits and discouraging green adoption.

Chapter III: Present Status of the Issue (Global & National)

Globally, countries are actively incentivizing green shipping through subsidies, tax benefits, and dedicated funding mechanisms.

Nationally, India has an extensive **11,000 km inland waterways network**, where nearly **90% of operations depend on small vessels**. Electric and solar vessels, capable of reducing emissions by **80–100%**, are critical for sustainable inland and coastal transport.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- High capital cost of electric and hybrid vessels
 - Lack of differential financial incentives
 - Limited commercial viability compared to diesel vessels
 - Reduced willingness of shipowners to invest in green vessels
 - MSME shipyards facing reduced demand for green vessel construction
-

Chapter V: Past Policies of the Government and Their Efficacy

Under earlier schemes such as SBFAP 2023:

- Electric/Hybrid vessels received up to **20% assistance**
- Green fuel vessels received up to **30% assistance**

These policies provided meaningful incentives and encouraged early adoption of sustainable technologies.

Chapter VI: Current Policies of the Government & Their Efficacy

Under SBFAS 2025:

- All vessels below ₹100 crore receive **15% financial assistance**, irrespective of fuel type
- Though green vessels are categorized as “specialised,” the benefit is ineffective for vessels under ₹100 crore

This results in a **5–15% effective reduction** in incentives for green vessels compared to earlier schemes.

Chapter VII: Discussions with Stakeholders

Stakeholders including MSME shipyards from Kerala, Goa, and Gujarat have expressed concerns that:

- The absence of additional incentives reduces competitiveness of green vessels
 - Shipowners are reluctant to place orders due to higher costs
 - The policy does not reflect the national sustainability agenda
-

Chapter VIII: Views of Domain Experts

Experts emphasize that:

- Electric vessels are essential for decarbonizing inland and coastal shipping
 - Policy incentives are critical to offset higher upfront costs
 - Without targeted support, India may lag in green maritime transition
-

Chapter IX: National & Global Best Practices

Globally, maritime nations:

- Provide higher subsidies for green vessels
- Offer tax incentives and carbon credits
- Support R&D and infrastructure for green fuels

Adopting such measures will accelerate India's transition to sustainable shipping.

Chapter X: Suggested Policies

- Introduce an **additional 5–10% financial assistance** for electric, hybrid, and green vessels below ₹100 crore
- Create a **separate incentive slab** for green vessels under SBFAS
- Encourage adoption through **viability gap funding and tax incentives**
- Align SBFAS provisions with IMO Net-Zero goals and MAKV 2047

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government review and amend the SBFAS Guidelines to provide meaningful and differentiated financial incentives for electric, solar, and green-fuel vessels, particularly those costing below ₹100 crore.

Such amendments will:

- Promote adoption of sustainable maritime technologies
- Enhance commercial viability of green vessels
- Support MSME shipyards specializing in smaller vessels
- Reduce dependence on fossil fuels
- Accelerate India's progress towards IMO Net-Zero 2050 targets

Without such revisions, the current framework risks discouraging green investments and slowing India's transition to a sustainable maritime ecosystem, thereby impacting the long-term goals of MAKV 2047.

NSB Proposal & Recommendation – 3

Shipyards’ Concerns on Recently Approved SBFAS Guidelines

Chapter I: Introduction

The Shipbuilding Financial Assistance Scheme (SBFAS) is a key policy initiative aimed at strengthening India’s shipbuilding ecosystem in line with *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. While the notification of SBFAS Guidelines is a progressive step, a detailed review by industry stakeholders, particularly shipyards, indicates certain critical gaps that may limit its effectiveness in achieving the intended objectives.

Chapter II: Statement of the Problem

Despite its intent, the current SBFAS framework does not adequately address several operational, financial, and structural challenges faced by shipyards. Key issues include stringent domestic content requirements, reduced incentives for green vessels, limited infrastructure support, ambiguity in contract price adjustments, and transitional challenges between SBFAP and SBFAS.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations adopt flexible and phased approaches to localisation, incentivise green technologies, and provide comprehensive infrastructure support.

In India, the shipbuilding ecosystem—particularly for commercial vessels—is still evolving. While significant policy support exists, critical gaps remain in equipment manufacturing, financing mechanisms, and infrastructure readiness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited domestic availability of high-value marine equipment
 - Reduced financial incentives for electric and green vessels
 - Inadequate infrastructure for capacity expansion
 - Financial and contractual uncertainties
 - Transition-related challenges between policy regimes
 - Limited support for specialised assets like Floating Dry Docks
-

Chapter V: Past Policies of the Government and Their Efficacy

Earlier policies such as SBFAP provided targeted incentives for shipbuilding, including higher assistance for specialised and green vessels. These policies contributed to gradual growth in domestic shipbuilding capacity and encouraged stakeholder participation.

Chapter VI: Current Policies of the Government & Their Efficacy

The SBFAS Guidelines aim to provide structured financial assistance and promote indigenisation. However:

- Uniform assistance rates dilute incentives for green vessels
- Domestic content requirements may not be practical at present
- Infrastructure support is limited in scope
- Transitional provisions create uncertainty

As a result, the policy's effectiveness in driving rapid sectoral growth may be constrained.

Chapter VII: Discussions with Stakeholders

Consultations with shipyards and industry bodies have highlighted the need for:

- Relaxation and phased implementation of domestic content norms

- Enhanced incentives for green and hybrid vessels
 - Expanded infrastructure support
 - Clarity in contractual and transitional provisions
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Localisation in commercial shipbuilding requires time and ecosystem development
 - Green vessel adoption depends heavily on financial viability
 - Infrastructure augmentation is critical for scaling shipbuilding capacity
 - Policy clarity is essential to build investor and shipowner confidence
-

Chapter IX: National & Global Best Practices

Global shipbuilding leaders:

- Adopt phased localisation strategies
- Provide higher incentives for green technologies
- Invest heavily in shipyard infrastructure and workforce development
- Recognise specialised assets like floating docks under dedicated categories

These practices provide a roadmap for strengthening India's policy framework.

Chapter X: Suggested Policies

1. Domestic Content Requirement

- Allow 'Nil' domestic content for **3 years (domestic orders)** and **5 years (export orders)**
- Introduce phased localisation thereafter
- Mandate gradual involvement of Indian design houses
- Reassess parity with defence shipbuilding requirements

2. Financial Assistance for Green Vessels

- Provide **additional 5–10% financial assistance** for electric, hybrid, and green vessels below ₹100 crore
- Ensure meaningful differentiation from conventional vessels
- 3. Infrastructure Augmentation under SbDS**
Extend capital assistance to include:
 - Paint, machine, and pipe shops
 - Warehousing and logistics
 - Training and accommodation facilities
 - Breakwater structures and capital dredging
- 4. Inclusion of Floating Dry Docks (FDDs)**
 - Classify FDDs (≥135m length and ≥35m width) as **Specialised Vessels**
 - Recognise their technical complexity and capital intensity
- 5. Amendment to Shipbuilding Contract Provisions**
 - Consider revised contract prices (post scope change) for SBFA applicability
 - Base eligibility on final contract value paid by the buyer
- 6. Applicability of SBFAP and SBFAS**
 - Provide an extension up to **15 May 2026** for obtaining Approval-in-Principle
 - Align timelines for contract registration, fair price evaluation, and approvals
 - Reduce uncertainty for ongoing contract negotiations

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the SBFAS Guidelines be suitably amended to address the above concerns in a comprehensive manner.

Such revisions will:

- Enable realistic and phased indigenisation
- Promote adoption of green technologies
- Strengthen MSME shipyards and infrastructure
- Enhance investor and shipowner confidence
- Reduce dependence on imports
- Accelerate achievement of MAKV 2047 targets

Without these amendments, the current framework may limit the growth potential of the shipbuilding industry and hinder India's ambition to emerge as a global shipbuilding hub.

NSB Proposal & Recommendation – 4

Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications

Chapter I: Introduction

India's maritime sector is undergoing a strategic transition towards sustainability under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. The **Green Tug Transition Programme (GTTP)** introduced by the Ministry of Ports, Shipping and Waterways (MoPSW) and Indian Ports Association (IPA) aims to transition port tug fleets to greener alternatives by 2030, in alignment with India's commitments under the Paris Agreement (CoP-26). Harbour tugs present a significant opportunity for reducing emissions at ports, and early adoption efforts have already begun across Indian shipyards.

Chapter II: Statement of the Problem

Despite progressive policy intent, the current ASTDS specifications recognise only **Diesel Mechanical Propulsion (DMP)** tugs and do not permit **Diesel Electric Propulsion (DEP)** tugs. Additionally, recent tenders issued by ports continue to favour conventional propulsion systems, coupled with stringent delivery timelines of 18 months, which are not aligned with current global supply chain realities for propulsion systems.

Chapter III: Present Status of the Issue (Global & National)

Globally, ports are increasingly adopting hybrid and electric propulsion systems for harbour tugs to reduce emissions and improve efficiency.

In India, approximately **12–15 green tugs** have already been ordered. However, a significant number of ongoing tenders still specify conventional diesel tugs, limiting the adoption of cleaner technologies. Furthermore, global supply chains for

propulsion systems currently have lead times of **around 24 months**, creating practical challenges in meeting tender timelines.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Misalignment between tender timelines and equipment delivery schedules
 - Limited flexibility in ASTDS specifications
 - Continued reliance on conventional propulsion systems
 - Supply chain constraints for imported propulsion packages
 - Pressure on shipyards and tug operators to meet unrealistic timelines
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives such as GTTP and broader maritime decarbonisation efforts have created a strong policy foundation. These initiatives have successfully initiated the transition towards green tugs and encouraged domestic shipbuilding participation.

Chapter VI: Current Policies of the Government & Their Efficacy

While GTTP promotes green transition, the ASTDS specifications remain restrictive by permitting only DMP tugs. This creates a disconnect between policy intent and implementation. Additionally, current tender conditions—particularly delivery timelines and fuel consumption criteria—further limit the adoption of alternative propulsion technologies.

Chapter VII: Discussions with Stakeholders

Consultations with shipyards, tug operators, and technical experts indicate strong support for:

- Inclusion of Diesel Electric Propulsion (DEP) tugs

- Greater flexibility in propulsion system selection
- Alignment of tender timelines with supply chain realities

A detailed feasibility study conducted by industry experts also supports the adoption of DEP tugs.

Chapter VIII: Views of Domain Experts

Domain experts and naval architects have highlighted that DEP tugs offer several advantages:

- Availability of DG sets within **10–12 months**
- Higher indigenous content through locally manufactured components
- Reduced foreign exchange outflow (approximately 20%)
- Lower fuel consumption and improved operational efficiency
- Reduced maintenance and lifecycle costs

These attributes make DEP tugs a practical and sustainable alternative to DMP systems.

Chapter IX: National & Global Best Practices

Globally, leading ports:

- Adopt hybrid and electric propulsion systems
- Encourage flexible technical specifications
- Align procurement frameworks with sustainability goals

India can benefit from adopting similar flexible and technology-neutral approaches.

Chapter X: Suggested Policies

- Amend ASTDS specifications to include **Diesel Electric Propulsion (DEP)** as an approved alternative

- Replace restrictive terminology with “**mechanical/electrical propulsion**”
 - Align tender timelines with realistic equipment delivery schedules
 - Promote indigenous manufacturing of propulsion components
 - Encourage adoption of green technologies through policy flexibility
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government approve amendments to ASTDS specifications to allow both Diesel Mechanical and Diesel Electric propulsion systems for 60T and 70T BP tugs.

This policy intervention will:

- Enable timely delivery of tugs
- Accelerate adoption of green and efficient propulsion technologies
- Promote indigenous manufacturing and reduce import dependency
- Support the objectives of GTTP and India’s decarbonisation commitments
- Strengthen India’s shipbuilding ecosystem and contribute to MAKV 2047 goals

Such an amendment will ensure alignment between policy intent and implementation, while providing shipowners and ports the necessary flexibility to transition towards sustainable maritime operations without disrupting ongoing procurement processes.

NSB Proposal & Recommendation – 5

Addressing Challenges Faced by Shipyards with Customs Authorities

Chapter I: Introduction

The Government of India has taken significant steps to promote indigenous shipbuilding under Maritime India Vision 2030 and Maritime Amrit Kaal Vision (MAKV) 2047. The Ministry of Ports, Shipping and Waterways (MoPSW) has played a proactive role in engaging with shipyards and fostering a conducive ecosystem for growth. However, certain operational challenges arising from interactions with customs authorities continue to impede the efficiency and competitiveness of Indian shipyards, ship repair facilities, indigenous marine equipment manufacturers, OEMs, and service providers, particularly MSMEs. Addressing these customs-related issues is essential for strengthening India's maritime manufacturing ecosystem and positioning the country as a global hub for shipbuilding and ship repair.

Chapter II: Statement of the Problem

Shipyards, marine equipment manufacturers, OEMs, and ship repair service providers are facing recurring procedural and interpretative challenges with customs authorities during the clearance of imported consignments meant exclusively for vessel construction, ship repair, and marine equipment manufacturing. These issues result in delays, financial penalties, increased compliance costs, prolonged vessel turnaround time, and reduced competitiveness of Indian shipbuilding and ship repair facilities, thereby affecting the overall viability of the domestic maritime industry.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding and ship repair nations provide streamlined customs frameworks with clear exemptions and facilitate procedures for imports related to shipbuilding, ship repair, and marine equipment manufacturing, ensuring minimal delays in project execution and vessel turnaround.

In India, despite policy provisions supporting shipbuilding under DGFT regulations and Chapter 89 of the ITC (HS) Classification, procedural inconsistencies, digital portal issues, and varied interpretations by customs authorities continue to create bottlenecks in import clearance processes. Similar challenges are also experienced by marine equipment manufacturers importing critical components and by OEMs undertaking urgent ship repair operations.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards, especially MSMEs, face the following key challenges:

- **SIMS (Steel Import Monitoring System):** Delays in registration due to DGFT portal issues often lead to penalties and shipment hold-ups.
- **EPR (Extended Producer Responsibility):** Requirement of EPR certification for minor packaging materials or components not intended for resale creates unnecessary compliance burden and delays.
- **Import Licensing (WPC/LMPC):** Despite DGFT provisions under Chapter 89 permitting imports without licenses for shipbuilding, customs authorities often insist on such licenses, causing avoidable delays.
- **BIS Certification:** Unwarranted queries on BIS certification for components not covered under mandatory certification norms.
- **Aluminium and Copper Monitoring Systems:** Similar procedural issues create delays and penalties due to portal-related issues and compliance complexities.
- **Targeted Delays:** High-value and time-sensitive shipments, particularly those arriving by air, are often subjected to repeated customs queries resulting in unnecessary delays.

In addition, indigenous marine equipment manufacturers, OEMs, authorised workshops, and service providers engaged in shipbuilding and ship repair face the following customs-related challenges:

- **Delays in Customs Clearance of Ship Repair Spare Parts:** Critical imported spare parts required for vessel repairs frequently take 5–7 days for customs clearance after arrival at Indian airports before delivery to shipyards or vessels. In contrast, competing maritime hubs such as Singapore and Colombo generally complete such clearances within 24 hours, enabling faster vessel turnaround.
- **Customs Duty on Ship Repair Spare Parts:** While ship owners receive customs duty exemption on spares supplied directly to vessels, OEMs, authorised workshops, and marine service providers importing identical spare parts for stocking and emergency repairs are required to pay customs duty. This discourages inventory stocking in India, limits immediate availability of critical spares, increases repair turnaround time, and reduces India's attractiveness as a regional ship repair destination.
- **Procedural Delays in Movement of Repair Equipment:** Ship repair operations require frequent movement of engines, machinery, components, and specialised tools into and out of port premises. Multiple approvals, documentation requirements, and prolonged gate clearance procedures often delay such movements by several days.
- **Customs Duty on Components for Indigenous Marine Equipment Manufacturing:** Manufacturers producing marine propulsion systems, engines, and specialised marine equipment under the Make in India initiative continue to pay customs duty on imported high-value components that are not presently manufactured in India, while imported finished equipment supplied to Indian shipyards enjoys customs duty exemptions. This creates an uneven competitive environment and discourages investments in indigenous manufacturing.

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives have aimed at simplifying trade, promoting ease of doing business, and encouraging indigenous shipbuilding. Policies under DGFT, including provisions under Chapter 89, were designed to facilitate imports of restricted items required for shipbuilding without licensing requirements.

While these measures have significantly improved the policy framework, their intended benefits have not been fully realized due to implementation-level challenges, inconsistent interpretation by customs authorities, and absence of similar facilitative provisions for ship repair operations and indigenous marine equipment manufacturing.

Chapter VI: Current Policies of the Government & Their Efficacy

Current Government policies provide an enabling framework for shipbuilding and maritime manufacturing. However, their effectiveness is diluted by inconsistent interpretation and enforcement by customs authorities, resulting in delays, increased compliance burden, and additional financial implications.

The absence of dedicated customs facilitation measures for ship repair operations, lack of uniform implementation across ports, and duty anomalies affecting domestic marine equipment manufacturers continue to reduce India's competitiveness as a maritime manufacturing and repair hub.

Chapter VII: Discussions with Stakeholders

Interactions with shipyards, industry associations, OEMs, marine equipment manufacturers, and service providers indicate widespread concern regarding:

- Lack of uniformity in customs procedures.
- Excessive compliance requirements for non-applicable cases.
- Delays arising from DGFT portal inefficiencies and procedural rigidity.
- Increased operational and financial burden.
- Prolonged customs clearance timelines for urgent ship repair spare parts.

- Customs duty on spare parts stocked by authorised OEMs and service providers for emergency repairs.
- Cumbersome port procedures governing inward and outward movement of repair equipment.
- Competitive disadvantage faced by indigenous marine equipment manufacturers due to customs duty on imported components used for domestic manufacturing.
- Absence of dedicated fast-track customs mechanisms for ship repair activities.

Stakeholders unanimously emphasised that improving customs procedures for shipbuilding, ship repair, and indigenous marine equipment manufacturing is essential for positioning India as a globally competitive maritime manufacturing and repair hub. They also highlighted the need for coordinated intervention by the Ministry of Ports, Shipping and Waterways, Ministry of Finance, DGFT, and Customs authorities.

Chapter VIII: Views of Domain Experts

Domain experts have observed that:

- Procedural inefficiencies significantly impact project timelines and cost competitiveness.
- MSME shipyards are disproportionately affected.
- Simplified and standardised customs processes are critical for enhancing ease of doing business.
- Policy clarity and stronger inter-ministerial coordination are essential.
- Ship repair competitiveness depends largely on vessel turnaround time rather than labour cost alone.
- Customs clearance delays significantly diminish India's ability to attract international repair business.
- Customs policies should distinguish between commercial imports and imports intended exclusively for shipbuilding and ship repair.

- Creating parity between imported finished marine equipment and domestically manufactured equipment is essential for achieving the objectives of the Make in India initiative.
-

Chapter IX: National & Global Best Practices

Leading shipbuilding and maritime nations such as Singapore, South Korea, and Sri Lanka (Colombo) have adopted facilitative customs frameworks that:

- Provide clear exemptions for shipbuilding imports.
- Minimise compliance requirements for non-commercial imports.
- Ensure robust and efficient digital systems.
- Maintain coordination between regulatory authorities.
- Provide expedited customs clearance of marine spare parts.
- Permit duty-free import of repair spares supplied to vessels.
- Establish dedicated customs procedures for ship repair operations.
- Facilitate seamless movement of repair equipment within ports.
- Provide fiscal incentives supporting indigenous marine equipment manufacturing.

These measures have substantially strengthened their competitiveness in both shipbuilding and ship repair. Adoption of similar practices would significantly improve India's maritime ecosystem.

Chapter X: Suggested Policies

1. Streamlining SIMS and Monitoring Systems

- Introduce flexibility in timelines for SIMS and similar registrations.
- Exempt small-quantity imports meant exclusively for shipbuilding purposes.

2. Rationalisation of EPR Requirements

- Exempt shipyards from EPR compliance for imports meant for direct installation and not for resale.

3. Clarification on Import Licensing

- Issue clear directions to customs authorities regarding DGFT Chapter 89 provisions.
- Allow imports without WPC/LMPC licenses based on shipbuilding undertakings.

4. Simplification of BIS Compliance

- Restrict BIS queries only to notified items.
- Avoid unnecessary delays due to misinterpretation.

5. Digital System Improvements

- Strengthen DGFT portal functionality.
- Introduce an effective grievance redressal mechanism for time-bound resolution.

6. Standard Operating Procedures (SOPs)

- Develop uniform SOPs for customs clearance of shipbuilding imports.
- Ensure consistency across ports and customs jurisdictions.

7. Fast-Track Customs Clearance for Ship Repair Spares

- Establish dedicated customs clearance channels for spare parts imported exclusively for ship repair.
- Introduce time-bound customs processing, preferably within 24 hours.
- Implement electronic pre-arrival customs clearance mechanisms for urgent consignments.

8. Customs Duty Exemption on Ship Repair Spare Parts

- Extend customs duty exemption to spare parts imported by authorised OEMs, workshops, and service providers exclusively for ship repair.

- Permit stocking of duty-free marine spare parts under suitable end-use monitoring mechanisms.

9. Simplification of Port Goods Movement Procedures

- Develop a uniform national SOP governing movement of repair equipment into and out of Indian ports.
- Digitise gate pass approvals and documentation.
- Benchmark Indian port procedures against international best practices.

10. Level Playing Field for Indigenous Marine Equipment Manufacturing

- Extend customs duty exemption to imported components used for manufacturing marine engines and marine equipment where domestic alternatives are unavailable.
- Ensure parity between imported finished marine equipment and equipment manufactured in India for supply to Indian shipyards.
- Encourage localisation by rationalising customs duties on critical imported inputs until domestic manufacturing capabilities mature.

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government prioritise coordinated action between the Ministry of Ports, Shipping and Waterways, Ministry of Finance, DGFT, and Customs authorities to address the above challenges through policy clarification, procedural simplification, digital system improvements, and uniform implementation across all ports.

The Government may also consider introducing a comprehensive customs facilitation framework covering shipbuilding, ship repair, and indigenous marine equipment manufacturing. Such a framework should include fast-track customs clearance, rationalisation of customs duties, simplified port logistics, dedicated customs procedures for ship repair, and standardised implementation of customs regulations nationwide.

These reforms would:

- Reduce delays, demurrage, detention charges, and vessel turnaround time.
- Improve operational efficiency of shipyards and ship repair facilities.
- Enhance ease of doing business across the maritime sector.
- Promote domestic manufacturing of marine equipment under the Make in India initiative.
- Encourage OEMs to establish manufacturing, service, and repair facilities in India.
- Strengthen MSME participation in the maritime supply chain.
- Increase India's competitiveness as a regional and global shipbuilding and ship repair hub.
- Accelerate achievement of the objectives of Maritime India Vision 2030 and Maritime Amrit Kaal Vision (MAKV) 2047.

Addressing these customs-related issues through a coordinated and facilitative policy framework is critical for creating a globally competitive, self-reliant, and resilient maritime manufacturing ecosystem in India.

NSB Proposal & Recommendation – 6

Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector

Chapter I: Introduction

The maritime sector has emerged as a strategic priority for India's economic development, industrial growth, and national security. Recognising its transformative potential, the Government of India has introduced several policy initiatives, including *Maritime India Vision 2030* and the *Maritime Amrit Kaal Vision 2047*, aimed at strengthening the country's maritime ecosystem through the expansion of ports, shipping, inland waterways, shipbuilding, and maritime services. As part of these initiatives, shipyards have been accorded infrastructure status with the objective of improving access to finance, encouraging private investment, and enhancing the competitiveness of the domestic shipbuilding industry. However, despite these policy interventions, the anticipated financial and fiscal benefits have not been fully realised due to structural constraints within the existing regulatory and taxation framework.

The shipbuilding industry occupies a unique position in the manufacturing sector because of its significant contribution to economic development, technological advancement, employment generation, and strategic self-reliance. Historically, nations that evolved into major manufacturing economies—such as the United Kingdom, the United States, Japan, the Republic of Korea, and more recently China—also emerged as global leaders in shipbuilding. Their experience demonstrates a close relationship between industrial development and a strong domestic shipbuilding base. Beyond its direct economic contribution, shipbuilding stimulates the growth of numerous allied industries, including steel, aluminium, electrical equipment, marine engineering, logistics, and ancillary manufacturing, thereby generating substantial multiplier effects across the economy.

For India, the strategic importance of shipbuilding extends beyond its economic value. As a peninsular nation with an extensive coastline, approximately 1,200 islands, and a central location in the Indian Ocean Region, India depends significantly on maritime trade for its economic prosperity and energy security. A robust indigenous shipbuilding industry is therefore essential not only for supporting commercial shipping and reducing dependence on foreign-built vessels but also for strengthening national defence capabilities through the construction of naval and coast guard vessels. Domestic

shipbuilding enhances strategic autonomy by ensuring continuity of maritime logistics during geopolitical disruptions, reducing foreign exchange outflows, and supporting the country's broader vision of self-reliance under initiatives such as *Make in India* and *Atmanirbhar Bharat*.

Despite its considerable potential, India's shipbuilding industry has not developed in proportion to the country's expanding economy, growing trade volumes, and skilled human resource base. The industry experienced substantial growth during the period between 2003 and 2008, supported by rising global demand and government incentives, including shipbuilding subsidies that encouraged significant investments in modern shipyard infrastructure. During this phase, India's share in the global shipbuilding order book increased considerably, creating expectations of sustained expansion. However, the global financial crisis of 2008, coupled with the withdrawal of government subsidies, declining freight markets, falling oil prices, and increasing international competition, severely affected the industry. Export orders were cancelled, several shipyards became financially distressed, and some of the country's largest private shipbuilding companies entered insolvency proceedings. While major shipbuilding nations adopted comprehensive policy measures to revive their industries, India's commercial shipbuilding sector struggled to regain its competitive position, resulting in a negligible share of the global shipbuilding market.

The challenges faced by the industry are further compounded by the distinctive characteristics of shipbuilding as an industrial activity. Unlike conventional manufacturing industries, shipbuilding follows a build-to-order model where contracts are secured before production begins. Shipyards must therefore establish credibility through timely delivery despite operating in a highly competitive global market. Ship construction involves long project cycles, substantial capital investment, extensive working capital requirements, and prolonged financing periods, making access to affordable long-term finance critical for the industry's sustainability. These unique operational characteristics distinguish shipbuilding from most other manufacturing sectors and justify specialised policy support.

Notwithstanding recent setbacks, the long-term prospects of the Indian shipbuilding industry remain substantial. India's expanding domestic trade, increasing coastal shipping, growing inland waterway transportation, rising defence procurement, and favourable geographic location create significant opportunities for indigenous shipbuilding. Government initiatives such as the *Jal Marg Vikas Project* and the development of inland waterways are expected to increase demand for specialised inland vessels, while growth in maritime trade and logistics will require greater domestic shipbuilding capacity. Furthermore, the industry has the potential to generate large-scale direct and indirect employment across engineering, fabrication, design, marine

equipment manufacturing, and associated service sectors. Studies consistently demonstrate that shipbuilding generates significantly higher employment per unit of investment than many other heavy manufacturing industries, making it particularly relevant for a labour-abundant economy like India.

The shipbuilding industry is also recognised as a "mother industry" because of its extensive linkages with ancillary manufacturing sectors. A significant proportion of the value created during ship construction originates from domestic suppliers of machinery, marine equipment, electrical systems, steel products, and specialised engineering services. Consequently, the growth of shipbuilding has the capacity to stimulate industrial diversification, technological innovation, skill development, and regional economic development while strengthening India's overall manufacturing ecosystem.

Recognising these economic and strategic benefits, the Government has sought to position shipbuilding as an infrastructure sector eligible for various policy incentives. However, many of these intended benefits remain constrained by the existing taxation regime. Although infrastructure status was expected to improve investment attractiveness and reduce financing costs, inconsistencies in tax treatment, indirect tax implications, depreciation provisions, and the limited availability of sector-specific fiscal incentives continue to affect the competitiveness of Indian shipyards. These issues assume greater significance given the capital-intensive nature of shipbuilding and the long gestation period associated with ship construction projects.

Against this backdrop, the present study examines the taxation framework applicable to the Indian shipbuilding industry in light of its infrastructure status. It seeks to evaluate whether the existing tax regime adequately supports the policy objectives of promoting domestic shipbuilding, enhancing international competitiveness, attracting investment, and facilitating long-term industrial growth. By analysing the interaction between infrastructure policy and taxation, the study aims to identify the legal and fiscal challenges confronting the sector and to propose reforms that can better align India's tax framework with its broader maritime development objectives.

Chapter II: Statement of the Problem

Although shipyards have been categorised under the "transport" segment through a notification issued by the Ministry of Finance (Department of Economic Affairs) dated 08 April 2016, they are not included in the definition of "infrastructure facility" under **Section 80-IA of the Income Tax Act, 1961**. As a result, shipbuilding entities are not eligible for

income tax benefits available to other infrastructure sectors, thereby limiting the practical utility of infrastructure status.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations provide comprehensive fiscal incentives, including tax benefits, subsidies, and financing support, to enhance competitiveness.

In India, while shipbuilding has been recognised as an infrastructure activity in principle, the absence of alignment with income tax provisions results in a gap between policy intent and actual benefits available to shipyards.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards face the following challenges:

- Absence of income tax benefits under Section 80-IA
 - Lack of parity with other infrastructure sectors such as telecom, highways, and power
 - Limited financial incentives compared to global competitors
 - High capital intensity and long gestation periods without adequate fiscal support
 - Competitive disadvantage vis-à-vis shipping companies benefiting from the tonnage tax scheme
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has undertaken several initiatives to support shipbuilding, including granting infrastructure status and reducing corporate tax rates. While these measures have provided some relief, they have not delivered sector-specific advantages comparable to those available to other infrastructure industries.

Chapter VI: Current Policies of the Government & Their Efficacy

The current framework recognises shipyards under infrastructure through policy notification but does not extend corresponding tax benefits under the Income Tax Act. As a result:

- Infrastructure status remains largely symbolic
 - Shipyards do not receive targeted fiscal incentives
 - Policy effectiveness in promoting investment and growth is limited
-

Chapter VII: Discussions with Stakeholders

Industry stakeholders, including shipyards and associations, have consistently highlighted the need for:

- Inclusion of shipbuilding under Section 80-IA
 - Parity with other infrastructure sectors
 - Enhanced fiscal incentives to improve competitiveness
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Shipbuilding is a capital-intensive industry requiring long-term financial support
 - Tax incentives are critical to attract investment and scale operations
 - Alignment between policy recognition and fiscal provisions is essential for meaningful impact
-

Chapter IX: National & Global Best Practices

Globally, leading shipbuilding nations have adopted a range of policy measures to promote and sustain the growth of their domestic shipbuilding industries. These measures typically include:

- Providing tax holidays and fiscal incentives for shipyards.
- Offering sector-specific tax benefits aligned with infrastructure status.
- Ensuring policy coherence and coordination across ministries and regulatory authorities.

The following countries have successfully fostered the development of their domestic shipping and shipbuilding industries:

i. **China** has extended credit lines to foreign shipping companies to support its domestic shipbuilding industry and generate orders for local shipyards.

ii. **The Philippines** introduced the *Domestic Shipping Development Act* in 2004, which propelled the country to become the world's fourth-largest shipbuilding nation. The Act provides several incentives to the shipbuilding industry, including allowing 100 per cent foreign direct investment (FDI), exemption from import duties and taxes on shipyard equipment, capital goods, spare parts, and other machinery required for the construction, expansion, upgrading, and modernisation of shipyards and related facilities.

iii. **Vietnam** has accorded priority status to the shipbuilding industry and has extended numerous incentives, including the retention of corporate income tax and capital-use tax for reinvestment, preferential corporate income tax rates, special incentives for industrial zones, protection of the domestic shipbuilding industry, exemption from import duties, and promotion of joint ventures to facilitate technology transfer. Vietnam's Master Plan further emphasises the importance of developing the country's shipbuilding industry and adopting modern technologies to enhance the efficiency and competitiveness of shipyards and supporting industries.

Addressing Financial Constraints

The shipbuilding industry is highly capital-intensive and characterised by long project gestation periods. Shipyards engaged in the construction of merchant vessels generally receive a substantial portion of the contract value only upon scheduled delivery of the vessel. Consequently, one of the major challenges faced by shipyards is the shortage of working capital and the burden of servicing long-term debt. Typically, working capital constitutes approximately 25 to 35 per cent of the total cost of a ship throughout the construction period. In India, interest rates on working capital generally range between 10 and 11 per cent, compared with 4 to 8 per cent in most major shipbuilding nations. As a result, Indian shipyards face a significant competitive disadvantage in the global market. Immediate financial support in the form of affordable working capital at concessional interest rates is therefore essential to strengthen the competitiveness of the Indian shipbuilding industry.

An analysis of countries that have successfully emerged as major shipbuilding hubs indicates that this challenge has been effectively addressed through targeted financial assistance, as illustrated below:

i. **Brazil** has established a dedicated *Merchant Marine Fund (FMM)*, which provides loans with repayment periods of up to 20 years at fixed interest rates ranging from 4 to 6 per cent per annum. The Fund also finances up to 90 per cent of the total project cost for shipping companies undertaking the construction or repair of vessels in Brazilian shipyards.

ii. **Malaysia** extends financial assistance to the shipping and shipbuilding industry through *Bank Pembangunan Malaysia Berhad (BPMB)*. The Bank offers financing at interest rates ranging from 4 to 6 per cent, with repayment periods of up to 10 years, in addition to a grace period of two years.

The adoption of similar policy measures and financial support mechanisms would significantly enhance the competitiveness of the Indian shipbuilding industry, strengthen its financial viability, and enable it to compete more effectively in the global shipbuilding market.

Chapter X: Suggested Policy Measures for the Growth of the Indian Shipbuilding Industry

Policy Recommendations

To establish a globally competitive and self-reliant shipbuilding industry, India requires a comprehensive policy framework supported by fiscal, financial, institutional, and regulatory reforms. The following measures are recommended:

Recognition of Shipbuilding as Infrastructure

- Amend **Section 80-IA of the Income Tax Act, 1961** to explicitly recognize shipbuilding as an "Infrastructure Facility".
- Extend tax incentives and deductions available to other infrastructure sectors to the shipbuilding industry.
- Ensure fiscal parity between the shipping and shipbuilding sectors.
- Align taxation and investment policies with India's broader maritime development objectives, including *Make in India*, *Maritime India Vision 2030*, and *Viksit Bharat*.

Grant Strategic Status to Shipbuilding

Shipbuilding should be accorded strategic industry status in view of its significance for national security, industrial development, employment generation, and export growth.

International experience demonstrates that government support has been instrumental in developing globally competitive shipbuilding industries:

- **China** has extended preferential credit to foreign shipping companies that place orders with domestic shipyards.
- **The Philippines** introduced the Domestic Shipping Development Act, 2004, offering tax exemptions on imported shipyard equipment, capital goods, and allowing 100 percent foreign direct investment.
- **Vietnam** has prioritized shipbuilding through concessional taxation, import duty exemptions, incentives for industrial zones, and policies promoting technology transfer and joint ventures.

India should adopt a similar long-term strategic approach.

Improve Access to Affordable Finance

Shipbuilding is a capital-intensive industry characterized by long construction cycles and delayed revenue realization. Indian shipyards continue to face high working capital costs compared to international competitors.

Government should therefore:

- Establish dedicated financing mechanisms for shipbuilding.
- Provide working capital at internationally competitive interest rates.
- Offer long-term credit support through specialized financial institutions.
- Introduce sovereign-backed credit guarantee schemes for shipbuilding projects.

Successful international models include:

- **Brazil's Merchant Marine Fund (FMM)**, which finances up to 90 percent of project costs with concessional interest rates.
- **Malaysia's Bank Pembangunan Malaysia Berhad**, which provides long-term financing at preferential rates.

Reform Payment Mechanisms

Government shipbuilding contracts should replace bank guarantee requirements for stage payments with escrow-based payment mechanisms, thereby improving liquidity while ensuring financial accountability.

Export Promotion

To enhance India's share in global ship exports:

- Develop environmentally sustainable and technologically advanced vessel designs.
- Expand exports to emerging maritime economies.
- Create export credit facilities for overseas buyers of Indian-built vessels.
- Support Indian shipyards through concessional export financing similar to practices adopted by leading shipbuilding nations.

Development of the Marine Ancillary Industry

A competitive ancillary manufacturing ecosystem is indispensable for reducing costs and increasing indigenous value addition.

The Government should:

- Encourage Original Equipment Manufacturers (OEMs) through incentives linked to complete transfer of technology.
- Promote domestic production of marine equipment.
- Mandate minimum domestic sourcing requirements in foreign ship procurement contracts.
- Develop dedicated shipbuilding clusters with strong MSME participation.

These measures will strengthen supply chains, improve economies of scale, and reduce dependence on imported equipment.

Taxation and Fiscal Rationalisation

India's taxation framework should be restructured to ensure global competitiveness.

Recommended measures include:

- Rationalization of taxes applicable to shipbuilding and shipping.
- Elimination of fiscal disadvantages faced by Indian shipyards.

- Uniform taxation between Indian and foreign-flag vessels operating in India.
- Tax exemptions for imported shipbuilding machinery, specialized equipment, and raw materials unavailable domestically.
- Income tax incentives for new shipbuilding investments and reinvestment of profits.

Such reforms are consistent with successful policy frameworks implemented in countries such as the Philippines and Vietnam.

Key legislative initiatives include:

Commercial Shipbuilding Law

Enact legislation providing preference to Indian-built vessels for domestic coastal trade, or grant Indian shipyards the right of first refusal.

Prompt Payment Legislation

Introduce statutory timelines for payments under government shipbuilding contracts to improve cash flow and reduce financial stress.

Shipbuilding Cluster Development

Facilitate cluster-based industrial development with integrated support for MSMEs, vendors, and OEMs.

Shipbuilding Research and Innovation Act

Establish dedicated funding mechanisms for research, innovation, dual-use technologies, digital manufacturing, and advanced marine systems.

National Shipbuilding Plan

India should formulate a comprehensive National Shipbuilding Plan based on consolidated requirements from all maritime stakeholders, including Defence, Commercial Shipowners, Shipping, Fisheries, Home Affairs, Commerce, Earth Sciences, and Inland Waterways.

The implementation strategy should comprise:

Short Term

- Focus on simpler vessel categories.
- Develop design capability.
- Enhance workforce skills.
- Improve productivity.

Medium Term

- Expand shipyard infrastructure.
- Build more sophisticated vessels.
- Meet domestic commercial demand.

Long Term

- Achieve international competitiveness.
- Develop a globally integrated marine manufacturing ecosystem.
- Increase exports of ships and marine equipment.

Institutional Reforms

Dedicated Secretary for Shipbuilding

Given the differing policy objectives of shipping and shipbuilding, a dedicated Secretary for Shipbuilding should be created to oversee:

- Industrial policy
- Legislative reforms
- Skill development
- Technology acquisition
- Competitiveness enhancement

Strengthening the Shipping Sector

Growth of shipbuilding is intrinsically linked to growth of the shipping industry.

Accordingly, Government should:

- Promote greater use of coastal shipping and inland waterways.

- Encourage modal shift from road and rail to water transport.
- Accelerate implementation of Sagarmala and Jal Marg Vikas initiatives.
- Introduce incentives for coastal cargo movement.

Expansion of the domestic merchant fleet will generate sustained demand for Indian shipyards.

Measures to Improve Competitiveness

The following initiatives are recommended:

- Standardize vessel designs for coastal and inland waterways.
- Promote large-scale production of standardized vessels to reduce costs.
- Develop government-owned standard vessel designs through competitive design agencies.
- Expand indigenous manufacturing of standardized marine equipment.

These measures will generate economies of scale and improve industrial efficiency.

State-Level Maritime Initiatives

Maritime States should establish proactive Maritime Boards and formulate dedicated shipbuilding policies.

States may adopt best practices from Gujarat by:

- Developing maritime industrial clusters.
- Providing infrastructure support.
- Facilitating investment.
- Creating an enabling business environment.

Institutional Capacity Building

Dedicated institutions should be established to support policy development, research, technology, and industrial growth.

These include:

- **Indian Shipbuilding Institute** for policy research, benchmarking, demand forecasting, standard designs, and productivity studies.

- **Indian Marine Equipment Research Institute** to promote indigenization, technology transfer, equipment development, and global collaboration.
- Supporting institutions such as:
 - Government Export Credit Agency
 - Indian Offshore and Shipbuilding Association
 - Indian Marine Equipment Association
 - National Marine Equipment Testing and Certification Centre

Conclusion

The Indian shipbuilding industry possesses significant strategic, economic, and employment potential but requires comprehensive policy intervention to achieve sustainable growth. Recognition of shipbuilding as a strategic infrastructure industry should form the cornerstone of future reforms.

A coordinated policy framework encompassing fiscal incentives, affordable finance, regulatory reforms, institutional strengthening, technology development, and human resource capacity building is essential to create a globally competitive shipbuilding ecosystem. Simultaneously, expansion of India's merchant fleet, coastal shipping, inland waterways, and ancillary manufacturing industries will generate the critical demand required for sustained industrial growth.

Long-term competitiveness will depend upon continuous investment in research and development, advanced ship design, green technologies, autonomous vessels, digital twin technologies, hybrid propulsion systems, and indigenous manufacturing capabilities. Collectively, these reforms will not only strengthen India's commercial shipbuilding industry but also enhance national maritime security, support defence preparedness, promote exports, and contribute significantly to India's aspiration of becoming a leading global maritime power.

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government take necessary steps to include shipbuilding within the definition of “infrastructure facility” under Section 80-IA of the Income Tax Act, 1961.

Such an amendment will:

- Enable shipyards to avail income tax benefits
- Improve financial viability and investment attractiveness
- Enhance global competitiveness of Indian shipyards
- Support indigenous manufacturing under *Make in India*
- Accelerate achievement of MAKV 2047 targets

Without this alignment, the existing infrastructure status will remain limited in its impact, thereby constraining the growth potential of the Indian shipbuilding industry.

NSB Proposal & Recommendation – 7

Addressing Accumulation of Input Tax Credit in Shipbuilding

Chapter I: Introduction

The shipbuilding sector is a capital-intensive industry central to India's ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. While policy measures such as the Shipbuilding Financial Assistance Scheme (SBFAS) aim to enhance competitiveness, structural challenges within the GST framework continue to adversely impact shipyards, particularly due to the accumulation of input tax credit (ITC).

Chapter II: Statement of the Problem

Shipbuilding outputs are taxed at **5% GST**, whereas input materials attract **12%–18% GST** and input services are taxed at **18% GST**. This inverted duty structure leads to substantial accumulation of ITC. Current GST provisions allow refund of ITC only on input materials, excluding input services and capital goods, resulting in blocked working capital and increased project costs.

Chapter III: Present Status of the Issue (Global & National)

Globally, shipbuilding nations adopt tax-neutral frameworks or provide full input credit refunds to ensure competitiveness.

In India, the mismatch in GST rates and limited refund eligibility results in accumulation of ITC amounting to approximately **4%–6% of vessel cost**, adversely affecting cost competitiveness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Significant working capital blockage due to unutilised ITC
 - Increased project cost and reduced global competitiveness
 - Ambiguity regarding classification of “parts of vessels” (e.g., steel, pipes, cables, paints)
 - Issuance of show-cause notices (SCNs) due to differing interpretations
 - Exclusion of input services and capital goods from refund eligibility
-

Chapter V: Past Policies of the Government and Their Efficacy

GST reforms introduced a concessional **5% rate for shipbuilding outputs and parts of vessels**, aimed at promoting the sector. However, the absence of a comprehensive refund mechanism has limited the effectiveness of this policy.

Chapter VI: Current Policies of the Government & Their Efficacy

Current GST provisions:

- Permit refund under inverted duty structure only for input materials
- Exclude input services and capital goods from refund
- Lack clarity on classification of ship components

These limitations result in continued ITC accumulation and financial strain on shipyards.

Chapter VII: Discussions with Stakeholders

Stakeholders, including shipyards and industry bodies, have highlighted:

- Need for uniform GST treatment across all inputs
- Requirement for clarity in classification of vessel components
- Inclusion of input services and capital goods in refund mechanisms
- Adoption of certification-based concessional frameworks

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- GST neutrality is essential for export-oriented and capital-intensive industries
 - Blocked ITC reduces liquidity and discourages investment
 - Policy alignment with customs provisions is necessary to eliminate anomalies
-

Chapter IX: National & Global Best Practices

Globally, shipbuilding hubs:

- Ensure full refund of input taxes
- Maintain uniform tax structures across inputs and outputs
- Use certification-based mechanisms for concessional taxation

In India, similar practices are followed in sectors such as oil and natural gas through the use of **Essentiality Certificates**.

Chapter X: Suggested Policies

1. GST Rate Rationalisation

- Align GST Notification No. 1/2017 (Sr. No. 252) with Customs Notification 50/2017 (Sr. No. 559)
- Apply a **uniform GST rate of 5%** on all inputs (materials and services) used in shipbuilding

2. Essentiality Certificate Mechanism

- Introduce a system whereby shipyards can procure inputs at concessional GST rates based on an **Essentiality Certificate**
- Require certification (e.g., CA certificate) confirming usage for shipbuilding purposes

3. Expansion of ITC Refund Scope

- Allow refund of ITC on **input materials, input services, and capital goods**
 - Remove restrictions under inverted duty structure provisions
 - 4. **Alternative Support Mechanism**
 - Compensate blocked ITC (approximately **4%–6% of vessel cost**) through enhancement of Shipbuilding Financial Assistance (SBFA)
 - 5. **Clarification on Classification of Parts**
 - Issue clear guidelines defining “parts of vessels” to eliminate ambiguity and disputes
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake comprehensive GST reforms for the shipbuilding sector by addressing the inverted duty structure, expanding ITC refund eligibility, and introducing a certification-based concessional framework.

Such measures will:

- Eliminate working capital blockage
- Improve cost competitiveness of Indian shipyards
- Reduce litigation and compliance burden
- Encourage domestic manufacturing and exports
- Strengthen India’s position as a global shipbuilding hub

Addressing the issue of ITC accumulation is critical to ensuring the financial viability of shipyards and achieving the targets set under *MAKV 2047*.

NSB Proposal & Recommendation – 8

Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector

Chapter I: Introduction

The Maintenance, Repair, and Overhaul (MRO) segment of the maritime industry plays a critical role in sustaining vessel operations and enhancing the lifecycle of assets. Under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, India aims to emerge as a global hub for ship repair and MRO services. However, structural inefficiencies in the GST framework are adversely affecting the competitiveness of this sector.

Chapter II: Statement of the Problem

The current GST regime for ship repair creates an inverted duty structure wherein:

- Output MRO services are taxed at **5% GST**
- Input materials are taxed at **12%–18% GST**
- Non-MRO input services (including OEM services for installation and commissioning) are taxed at **18% GST**

This mismatch results in significant accumulation of Input Tax Credit (ITC), leading to increased costs and working capital blockage.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading maritime hubs maintain tax-neutral regimes for MRO activities. For instance, in major international hubs such as Dubai, all inputs and outputs related to ship repair are taxed uniformly, ensuring no accumulation of tax credits.

In India, input materials constitute approximately **25%–40%** of MRO contract value, making the current tax structure financially burdensome and reducing global competitiveness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Accumulation of ITC due to inverted duty structure
 - Higher cost of ship repair compared to global competitors
 - Working capital blockage for shipyards
 - Differential GST rates on input services and materials
 - Lack of concessional GST treatment for OEM-related services
 - Reduced attractiveness of Indian ship repair yards for global clients
-

Chapter V: Past Policies of the Government and Their Efficacy

The introduction of concessional GST rates (5%) for ship repair services was a positive step aimed at promoting the MRO sector. However, the absence of alignment with input tax rates has limited the effectiveness of this policy.

Chapter VI: Current Policies of the Government & Their Efficacy

Current GST provisions:

- Provide concessional output tax rate (5%)
- Do not extend similar benefits to input materials and services
- Result in accumulation of ITC without adequate refund mechanisms

This leads to increased operational costs and reduced competitiveness of Indian ship repair yards.

Chapter VII: Discussions with Stakeholders

Stakeholders across the MRO ecosystem have highlighted:

- Need for uniform GST rates across inputs and outputs
 - Inclusion of all services (including OEM services) under concessional GST
 - Removal of anomalies causing ITC accumulation
 - Policy alignment with global best practices
-

Chapter VIII: Views of Domain Experts

Experts in maritime economics and taxation emphasise that:

- Tax neutrality is essential for service-based industries like MRO
 - Uniform taxation enhances competitiveness and attracts global business
 - Eliminating ITC accumulation improves liquidity and operational efficiency
-

Chapter IX: National & Global Best Practices

Globally, maritime hubs:

- Maintain uniform tax rates for inputs and outputs
- Ensure seamless credit flow without accumulation
- Provide tax incentives to promote MRO activities

Dubai, for example, applies a **uniform 5% tax rate** across all MRO-related inputs and services, ensuring cost efficiency and global competitiveness.

Chapter X: Suggested Policies

1. Uniform GST Rate Implementation

- Apply a **uniform GST rate of 5%** on all input materials and services used in ship repair/MRO

2. Inclusion of OEM Services

- Extend concessional GST rate (5%) to installation, commissioning, and other OEM-related services

3. Elimination of ITC Accumulation

- Align input and output tax rates to remove inverted duty structure

4. Simplification of GST Framework

- Provide clear guidelines for classification and applicability of GST rates in MRO activities

5. Enhancing Competitiveness

- Align India's GST framework with global maritime hubs to attract international ship repair business

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake necessary amendments in the GST framework to ensure uniform taxation of all inputs and outputs in the ship repair and MRO sector at a rate of **5%**.

Such reforms will:

- Eliminate accumulation of input tax credit
- Reduce operational costs for shipyards
- Improve liquidity and working capital efficiency
- Enhance India's competitiveness as a global MRO hub
- Support the broader objectives of *MAKV 2047*

Addressing these structural tax inefficiencies is essential for unlocking the full potential of India's ship repair industry and positioning the country as a preferred destination for global maritime services.

NSB Proposal & Recommendation – 10

Promoting Indigenous Ship Design and Engineering Capabilities in India

Chapter I: Introduction

India has articulated an ambitious roadmap for maritime growth under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, with the objective of emerging as one of the top global shipbuilding nations. While significant progress is being made in shipyard capacity and construction capabilities, the development of indigenous ship design and engineering remains a critical pillar for achieving self-reliance and global competitiveness.

Chapter II: Statement of the Problem

The Indian shipbuilding industry currently lacks sufficient indigenous design capabilities, particularly for large and complex vessels. Dependence on foreign design houses—primarily European—continues to persist, limiting technological advancement, increasing project costs, and constraining the industry’s ability to compete globally.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations, particularly in Europe, have well-established design ecosystems supported by strong R&D funding, innovation incentives, and decades of expertise.

In India, existing design houses are primarily engaged in basic and detailed design of smaller vessels such as barges, ferries, tugs, and dredgers. Capability for designing large, complex vessels compliant with international efficiency standards remains limited.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited number of established Indian ship design firms
- Dependence on foreign design houses for advanced vessel design
- Lack of access to advanced design software and tools
- Absence of adequate model testing facilities (e.g., tank testing)
- Limited compliance capabilities for global standards such as EEDI
- Shortage of skilled manpower in ship design engineering

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives have primarily focused on shipbuilding capacity and financial support to shipyards. While these measures have strengthened construction capabilities, limited emphasis has been placed on developing indigenous design ecosystems and R&D infrastructure.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks support shipbuilding growth but do not adequately address:

- Development of design capabilities
- Access to shared R&D infrastructure
- Incentivisation of indigenous design usage

As a result, the design segment remains underdeveloped relative to construction capacity.

Chapter VII: Discussions with Stakeholders

Industry stakeholders, including shipyards and design firms, have highlighted:

- Urgent need for government-backed design infrastructure
 - Requirement for financial incentives to promote indigenous design
 - Need for capacity building in advanced design and compliance capabilities
 - Importance of skill development initiatives
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Design capability is a strategic differentiator in shipbuilding
 - Indigenous design reduces dependency and enhances value addition
 - Investment in R&D and testing infrastructure is critical
 - Skill development is essential for long-term sustainability
-

Chapter IX: National & Global Best Practices

Globally, leading maritime nations:

- Provide strong R&D funding and innovation grants
- Support shared infrastructure such as model testing facilities
- Offer incentives for use of domestic design firms
- Promote skill development through specialised training programs

These practices have enabled sustained leadership in ship design and innovation.

Chapter X: Suggested Policies

1. **Creation of Design Infrastructure (Software Bank)**
 - Establish a government-supported **design software bank** accessible to Indian designers at nominal cost
2. **Development of Model Testing Facilities**
 - Set up **tank model testing facilities** to support design validation and compliance with international standards
3. **Incentivising Use of Indigenous Design**

- Provide **additional financial assistance (3–5%)** to shipyards using Indian design firms
 - Introduce a **sunset clause** (10–15 years) for such incentives
 - 4. **Subsidy for Design Tools**
 - Offer **50% subsidy** on procurement of advanced design software by Indian design houses
 - 5. **Export Incentives for Design Services**
 - Introduce a scheme similar to **Service Exports from India Scheme (SEIS)** to promote export of design services
 - 6. **Skill Development Initiatives**
 - Introduce **ship design-specific courses** in ITIs and diploma institutions
 - Develop a pipeline of skilled designers and technical professionals
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government implement a comprehensive policy framework to promote indigenous ship design and engineering capabilities through infrastructure development, financial incentives, and skill development initiatives.

Such measures will:

- Reduce dependence on foreign design houses
- Enhance value addition within India
- Strengthen innovation and R&D capabilities
- Improve global competitiveness of Indian shipbuilding
- Support the objectives of *Atmanirbhar Bharat*, *MIV 2030*, and *MAKV 2047*

Promoting indigenous design capabilities is essential for transforming India into a globally competitive shipbuilding hub and achieving long-term strategic and economic objectives.

NSB Proposal & Recommendation – 11

Policy Paper on Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding

Chapter I: Introduction

India's maritime sector is a key pillar of economic growth under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. Inland waterways are increasingly being promoted as a cost-effective, sustainable, and efficient mode of transportation. However, infrastructure planning—particularly bridge construction over navigable rivers—must align with long-term maritime objectives. The issue of low-height bridges has emerged as a critical constraint impacting inland navigation and shipbuilding activities.

Chapter II: Statement of the Problem

The construction of **low vertical clearance bridges** over navigable rivers is significantly restricting vessel movement, adversely affecting inland water transport (IWT) and shipbuilding operations.

A specific instance is the proposed **Borim Bridge over the Zuari River in Goa**, with a planned clearance of approximately **14 meters above High Tide Level (HTL)**. Such limited clearance is inadequate for the safe passage of many vessels, thereby creating long-term operational bottlenecks.

Chapter III: Present Status of the Issue (Global & National)

Global Scenario

Globally, countries with advanced inland waterway systems ensure **adequate vertical and horizontal clearances** in bridge design to accommodate current and

future vessel requirements. Infrastructure is planned in an integrated manner to support navigation growth.

National Scenario (India)

India is actively developing inland waterways through the Inland Waterways Authority of India (IWAI). However, instances of **low-height bridge construction across state rivers** continue to emerge, reflecting gaps in coordination between infrastructure planning and maritime requirements.

The Borim Bridge case highlights this disconnect, where navigation needs appear secondary to road infrastructure planning.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key Stakeholders:

- Shipyards and shipbuilders
- Inland vessel operators
- Coastal and riverine logistics providers
- State governments and infrastructure agencies

Challenges:

- Restricted vessel movement due to low bridge clearance
 - Inability to design/build larger or efficient vessels
 - Increased operational risks and navigation constraints
 - Reduced economic viability of inland waterways
 - Long-term impact on shipyard order books and investments
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has undertaken significant initiatives such as:

- Development of National Waterways
- Promotion of inland water transport

- Investments under Sagarmala and related programmes

However, **lack of integrated planning between bridge construction and navigation requirements** has limited the effectiveness of these policies in certain regions.

Chapter VI: Current Policies of the Government & Their Efficacy

Current frameworks support inland waterways development, but:

- There is **no uniform national standard** mandating minimum navigational clearance for bridges
- Coordination between **MoPSW, IWAI, and State Governments** remains limited
- Project approvals do not consistently factor in **future vessel size and traffic growth**

As a result, infrastructure is sometimes created that **restricts, rather than enables, navigation**.

Chapter VII: Discussions with Stakeholders

Stakeholders, including the Shipyards Association of India (SAI), have highlighted:

- The need to avoid low-height bridges on navigable waterways
- Importance of aligning infrastructure with maritime growth projections
- Requirement for mandatory consultation with maritime authorities before approvals

The representation forwarded by the Ministry reflects these industry concerns .

Chapter VIII: Present Status & Challenges Faced by the Stakeholders

The issue leads to broader sectoral challenges:

- **Reduced competitiveness** of inland waterways
 - **Design limitations** for new vessels
 - **Underutilisation of shipyard capacity**
 - **Discouragement of private investment**
 - Long-term **economic inefficiencies in logistics chains**
-

Chapter IX: Views of Domain Experts

Domain experts emphasize that:

- Bridge clearance must be planned based on **future navigation needs**, not current minimal requirements
 - Retrofitting or modifying bridges later is **costly and impractical**
 - Integrated planning between transport modes is essential for sustainable infrastructure development
-

Chapter X: National & Global Best Practices to Resolve the Issue

Best practices include:

- Mandatory **navigation clearance standards** for bridges
 - Integrated infrastructure planning involving maritime authorities
 - Use of **movable/span bridges** where required
 - Long-term forecasting of vessel sizes and traffic
 - Regulatory frameworks ensuring **no obstruction to navigable waterways**
-

Chapter XI: Suggested Policies

1. **Minimum Navigational Clearance Standards**
 - Establish national guidelines for vertical and horizontal clearance for all bridges over navigable waterways
2. **Mandatory Stakeholder Consultation**

- Require consultation with IWAI, MoPSW, and industry bodies before project approval
 - 3. **Integrated Planning Framework**
 - Align bridge construction with inland waterway development plans
 - 4. **Review of Ongoing Projects**
 - Reassess projects like Borim Bridge to ensure adequate navigational clearance
 - 5. **Future-Proof Infrastructure Design**
 - Design bridges considering long-term vessel growth and traffic expansion
 - 6. **Regulatory Oversight Mechanism**
 - Introduce a central approval system for infrastructure impacting navigable waterways
-

Chapter XII: Final Policy Recommendation to Achieve MAKV-2047 Goal

It is recommended that the Government adopt a **holistic and forward-looking policy framework** to ensure that infrastructure development over inland waterways does not hinder maritime growth.

Avoiding low-height bridges and ensuring adequate navigational clearance will:

- Enable efficient inland water transport
- Support shipbuilding growth
- Attract private investment
- Reduce logistics costs
- Strengthen India's position as a maritime nation

Such measures are essential to achieve the objectives of **Maritime Amrit Kaal Vision 2047** and to ensure that infrastructure development complements, rather than constrains, India's maritime ambitions.

Policy Paper on Addressing Low-Height Bridge Constraints for Inland Waterways and Shipbuilding Growth

Chapter I: Introduction

India's maritime sector is undergoing a transformational phase under flagship initiatives such as **Sagarmala** and **PM Gati Shakti**, aimed at enhancing multimodal connectivity, strengthening logistics efficiency, and promoting shipbuilding infrastructure. Inland Water Transport (IWT) is a critical pillar of this vision, offering cost-effective, sustainable, and efficient cargo movement.

The Shipyards Association of India (SAI), representing a wide network of shipbuilding and ship repair entities, is actively contributing to this national objective by expanding shipyard capacities, including investments in hinterland regions. However, infrastructure constraints—particularly low-height bridges over navigable rivers—pose a significant barrier to achieving these goals.

Chapter II: Statement of the Problem

The construction of low-height bridges across state rivers, especially in coastal and hinterland regions, is severely restricting:

- Navigation of inland vessels
- Movement of larger ships for shipbuilding and repair
- Development of new shipyards in upstream locations

A key example is the **Netravati River in Mangalore, Karnataka**, where ongoing and planned low-clearance bridge construction under urban development initiatives is adversely impacting the viability of shipbuilding and inland waterway operations.

Chapter III: Present Status of the Issue Under Consideration (Globally and Nationally)

Global Scenario

Globally, maritime nations prioritize navigational clearance in bridge design across inland waterways. Countries such as:

- The Netherlands
- Germany
- China

have adopted advanced engineering solutions such as movable bridges, vertical lift bridges, and high-clearance fixed bridges to ensure seamless vessel movement.

National Scenario (India)

India has made significant strides through:

- Sagarmala Programme
- Inland Waterways Authority of India (IWAI) initiatives
- National Waterways development

However, a lack of standardized guidelines for bridge clearance across state-controlled rivers has resulted in fragmented planning, leading to navigational bottlenecks.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key Challenges

- **Shipyards:** Restricted access for larger vessels, limiting expansion and investment viability
- **Logistics Operators:** Increased costs due to modal shifts and inefficiencies
- **State Governments:** Balancing urban infrastructure with long-term maritime growth
- **Investors:** Reduced confidence due to regulatory and infrastructure uncertainties

Specific Case: Netravati River

- Low-height bridges under the Smart Cities Mission in Mangalore
 - Direct impact on potential shipyard development
 - Obstruction to inland navigation and cargo movement
-

Chapter V: Past Policies of the Government and Their Efficacy

Historically, infrastructure development in India has been sector-specific rather than integrated. Bridge construction projects have largely focused on:

- Road connectivity
- Urban mobility

without adequate consideration of:

- Navigational requirements
- Maritime growth potential

This has led to sub-optimal outcomes in regions with inland waterway potential.

Chapter VI: Current Policies of the Government & Their Efficacy

Key Policies

- **Sagarmala Programme**
- **PM Gati Shakti National Master Plan**
- **Smart Cities Mission**

Assessment

While these policies emphasize integrated infrastructure development, there is:

- Limited inter-ministerial coordination
 - Lack of enforceable design standards for navigational clearance
 - Inadequate alignment between urban development and maritime priorities
-

Chapter VII: Discussions with Stakeholders

SAI has engaged with:

- Member shipyards

- Industry experts
- Logistics stakeholders

Key Insights

- Strong willingness among shipyards to invest in hinterland expansion
 - Consensus on the need for navigationally compliant bridge infrastructure
 - Demand for policy clarity and financial support mechanisms
-

Chapter VIII: Views of Domain Experts

Experts in maritime infrastructure and inland waterways emphasize:

- Adoption of **minimum vertical clearance standards** for bridges
- Integration of **navigation impact assessments** in project approvals
- Use of **innovative bridge technologies** (e.g., bascule, swing, lift bridges)

They also highlight that early-stage planning interventions are significantly more cost-effective than retrofitting infrastructure.

Chapter IX: National & Global Best Practices to Resolve the Issue

Global Best Practices

- Mandatory navigational clearance norms
- Centralized regulatory oversight
- Use of smart and movable bridge technologies

National Opportunities

- Development of uniform guidelines through MoPSW
 - Integration with IWAI planning frameworks
 - Leveraging Sagarmala funding for maritime-aligned infrastructure
-

Chapter X: Suggested Policies

- | | | | |
|---|-----------|---------------------|-----------------------|
| 1. Issuance | of | National | Guidelines |
| Standardize minimum navigational clearance for bridges across all navigable rivers | | | |
| 2. Mandatory | | Clearance | Assessment |
| Introduce navigation impact assessment as part of project approvals | | | |
| 3. Promotion | of | Advanced | Bridge Designs |
| Encourage openable, lift, or high-clearance bridges | | | |
| 4. Financial | | | Incentives |
| Provide funding support under Sagarmala and Gati Shakti for compliant bridge construction | | | |
| 5. Inter-Ministerial | | Coordination | Framework |
| Establish coordination between MoPSW, MoHUA, and State Governments | | | |
-

Chapter XI: Final Policy Recommendations to Achieve MAKV-2047 Goal

To realize India's Maritime Amrit Kaal Vision (MAKV-2047), it is imperative to:

- **Immediately review and redesign low-height bridges**, particularly over the Netravati River in Mangalore
- **Issue directives to Smart City authorities** to align infrastructure with maritime priorities
- **Facilitate shipyard expansion in hinterland regions** by ensuring navigational access
- **Institutionalize maritime considerations in all infrastructure planning frameworks**

SAI reiterates its commitment to supporting the Government with technical expertise, feasibility assessments, and design recommendations to ensure that infrastructure development aligns with national maritime ambitions.

NSB Proposal & Recommendation – 12

Deregulation and Policy Interventions for the Shipbuilding Sector

Chapter I: Introduction

The shipbuilding sector is central to India's maritime ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, which aim to position India among the top global shipbuilding nations. While policy initiatives have supported growth, regulatory complexities, fragmented governance, and procedural inefficiencies continue to constrain competitiveness, investment, and timely project execution. A comprehensive deregulation framework is therefore essential.

Chapter II: Statement of the Problem

The Indian shipbuilding ecosystem is characterised by:

- Multiple overlapping approvals and licensing requirements
- Complex environmental and land clearance processes
- High compliance burden and regulatory fragmentation
- Inefficient customs and import procedures
- Limited access to finance and infrastructure incentives

These issues collectively increase project timelines, costs, and uncertainty, reducing India's attractiveness as a global shipbuilding hub.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations operate under streamlined regulatory frameworks with:

- Single-window clearance systems
- Simplified licensing regimes
- Strong institutional coordination
- Export-oriented and investor-friendly policies

In contrast, India's shipbuilding sector operates within a multi-agency regulatory environment, resulting in delays and inefficiencies.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key challenges include:

- Delays due to multiple approvals from central and state authorities
 - Stringent environmental and CRZ compliance requirements
 - Lack of uniform land leasing policies
 - Limited access to affordable credit
 - Customs delays and import licensing complexities
 - High compliance burden and absence of unified governance
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives such as financial assistance schemes and infrastructure recognition have supported shipbuilding growth. However, regulatory reforms have not kept pace, limiting the effectiveness of these initiatives in improving ease of doing business.

Chapter VI: Current Policies of the Government & Their Efficacy

Existing frameworks involve multiple ministries and regulatory bodies, resulting in:

- Fragmented governance
- Procedural delays
- High compliance costs

While sectoral policies are progressive, their implementation is constrained by regulatory bottlenecks.

Chapter VII: Discussions with Stakeholders

Stakeholders across shipyards, industry associations, and service providers have consistently highlighted:

- Need for a unified regulatory framework
 - Simplification of approvals and licensing
 - Reduction in compliance burden
 - Streamlining of customs and import processes
 - Policy alignment to support investment and exports
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Regulatory efficiency is critical for global competitiveness
 - Institutional coordination must be strengthened
 - Digitalisation and self-certification can reduce compliance burden
 - Policy certainty and transparency are essential for investment
-

Chapter IX: National & Global Best Practices

Global shipbuilding hubs adopt:

- Integrated single-window clearance systems
- Pre-approved industrial zones with environmental clearances
- Liberalised import and export regimes
- Dedicated maritime authorities
- Simplified tax and compliance frameworks

These practices significantly reduce project timelines and costs.

Chapter X: Suggested Policies

1. Statutory and Licensing Framework

- Establish a **National Maritime Single-Window Portal** integrating all approvals
- Introduce a **Unified Shipyard Operating Licence**
- Enable **fully digital vessel registration and certification**
- Delegate minor vessel registration to **State Maritime Boards/classification societies**
- Implement a **unified safety and labour compliance code** with self-certification

2. Land, Infrastructure, and Environmental Clearances

- Notify **Shipyard Development Zones (SDZs)** with pre-approved clearances
- Simplify **CRZ norms** for shipbuilding and repair activities
- Provide **deemed approvals** for dredging and berth expansion within designated zones
- Standardise **land lease policies** across ports
- Introduce **fast-track approvals** for brownfield expansion

3. Financial and Taxation Measures

- Implement an **automatic digital Shipbuilding Financial Assistance Scheme**
- Classify shipbuilding under **priority sector lending**
- Exempt **critical shipbuilding inputs** from customs duty
- Recognise shipbuilding as a **manufacturing activity with full ITC eligibility**
- Provide **tax incentives for domestic shipbuyers**

4. Capacity Expansion, Technology, and Exports

- De-license **non-defence marine equipment manufacturing**
 - Allow **automatic approval for foreign joint ventures** in non-strategic areas
 - Grant **infrastructure status to shipyards**
 - Treat export shipbuilding contracts as **deemed exports**
 - Allow **repair yard conversion through self-declaration**
-

5. Institutional and Governance Reforms

- Establish a **National Shipbuilding Authority (NSA)** as a nodal body
 - Enable **digital self-certification with risk-based audits**
 - Set up a **Maritime Arbitration Centre**
 - Develop a **single maritime data integration platform**
-

6. Import Licensing and Customs Procedures

- Adopt a **negative list approach** for import licensing
 - Introduce **project-based master import authorisations**
 - Allow **duty deferment** for shipbuilding imports
 - Grant **Authorized Economic Operator (AEO) status** to shipyards
 - Provide **zero-duty and fast-track clearance for green technologies**
-

7. Reforms in Gas Cylinder Rules, 2016

- Permit **type-approval-based clearance** of gas cylinders, similar to other equipment
- Exempt **non-toxic, non-flammable cylinders (up to 200 units)** from licensing if class-approved
- Recognise firefighting systems as **integrated components** of shipbuilding
- Eliminate redundant PESO licensing where **international class approvals exist**
- Ensure faster customs clearance to avoid delays in vessel delivery and exports

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake a comprehensive deregulation initiative for the shipbuilding sector, focusing on simplification, digitalisation, and institutional integration.

Such reforms will:

- Reduce project timelines and compliance burden
- Enhance ease of doing business
- Improve cost competitiveness of Indian shipyards
- Attract domestic and foreign investment
- Strengthen export capabilities
- Accelerate achievement of *MAKV 2047* targets

A coordinated and time-bound implementation of these measures will be instrumental in transforming India into a globally competitive shipbuilding hub.

NSB Proposal & Recommendation – 13

Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat

Chapter I: Introduction

India's maritime ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047* are closely aligned with national initiatives such as *Aatmanirbhar Bharat*, *Make in India*, and *Vocal for Local*. While significant progress has been made in shipbuilding and maritime infrastructure, the sustainability of critical component manufacturing—particularly marine propulsion systems like marine gearboxes—remains a matter of strategic importance.

Chapter II: Statement of the Problem

The indigenous marine gearbox manufacturing sector is currently facing severe challenges due to **unregulated and underpriced imports**, particularly from China. These imports, often priced below fair market value, are displacing domestic manufacturers, resulting in loss of competitiveness and threatening the survival of this strategic industry.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading maritime nations actively protect and promote their domestic marine equipment industries through policy support, subsidies, and tariff measures.

In India, despite a large and growing maritime sector supported by initiatives such as Sagarmala and inland waterways development, the domestic marine gearbox manufacturing ecosystem remains limited, with only a few capable players. This

sector is increasingly vulnerable due to import pressures and structural cost disadvantages.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Stakeholders in the indigenous manufacturing ecosystem face:

- Aggressive price undercutting by imported gearboxes
 - High domestic production costs (GST burden, electricity tariffs, raw materials, labour compliance, financing costs)
 - Lack of tariff safeguards and policy protection
 - Declining order books and underutilisation of manufacturing capacity
 - Increasing difficulty in sustaining skilled workforce and supply chains
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives under *Make in India* and *Aatmanirbhar Bharat* have encouraged domestic manufacturing and investment. However, the absence of sector-specific protective measures for marine equipment manufacturing has limited the effectiveness of these policies in safeguarding critical component industries.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks support shipbuilding and maritime infrastructure but lack targeted interventions for component manufacturing such as marine gearboxes. As a result:

- Domestic manufacturers remain exposed to unfair competition
 - No dedicated incentives or protection mechanisms exist
 - Import dependency continues to rise
-

Chapter VII: Discussions with Stakeholders

Stakeholders, including shipyards, manufacturers, and industry associations, have highlighted:

- Urgent need for tariff and non-tariff safeguards
 - Requirement for financial and fiscal support mechanisms
 - Need for policy alignment to support ancillary industries
 - Importance of creating a robust domestic ecosystem for marine components
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Marine propulsion systems are strategic assets for maritime nations
 - Loss of indigenous manufacturing capability can create long-term supply chain vulnerabilities
 - Balanced trade policies are essential to ensure fair competition
 - Supporting MSMEs in critical sectors is vital for economic resilience
-

Chapter IX: National & Global Best Practices

Globally, countries with strong maritime industries:

- Impose anti-dumping duties and safeguard measures
 - Provide production-linked incentives and subsidies
 - Support domestic manufacturers through tax benefits and concessional utilities
 - Develop integrated policies covering both shipbuilding and component manufacturing
-

Chapter X: Suggested Policies

1. Tariff and Trade Measures

- Impose **appropriate customs/safeguard duties** on imported marine gearboxes
 - Initiate **anti-dumping investigations** where pricing distortions are evident
 - 2. Financial Incentives**
 - Introduce a **Production Linked Incentive (PLI)** scheme or targeted capital subsidies
 - Provide **GST rationalisation or refund mechanisms** for domestic manufacturers
 - 3. Cost Competitiveness Support**
 - Extend **concessional power tariffs** to marine equipment manufacturing units
 - Reduce cost disadvantages through policy support
 - 4. Institutional Mechanisms**
 - Constitute a **High-Level National Committee** to address issues of the marine equipment ecosystem
 - Ensure coordinated inter-ministerial action
 - 5. Ecosystem Development**
 - Formulate a **National Small Craft & Coastal Vessel Policy** integrating indigenous component manufacturing
 - Strengthen ancillary industries and MSME clusters
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government adopt a comprehensive policy framework to safeguard and promote indigenous marine gearbox manufacturing through targeted tariff measures, financial incentives, and ecosystem development initiatives.

Such interventions will:

- Protect domestic manufacturing capacity
- Preserve skilled employment and MSME ecosystems
- Reduce import dependency and enhance supply chain resilience
- Strengthen India's maritime industrial base
- Align with national initiatives such as *Aatmanirbhar Bharat* and *MAKV 2047*

Timely and decisive policy action is critical to prevent irreversible erosion of this strategic sector and to ensure that India's maritime growth is supported by a strong and self-reliant industrial ecosystem.

NSB Proposal and Recommendation- 14

Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding

Chapter I: Introduction

This proposal draws attention to a significant policy gap that is adversely affecting the growth of India's shipbuilding sector.

The sustained efforts of the Ministry of Ports, Shipping and Waterways (MoPSW) in promoting domestic shipbuilding, strengthening maritime infrastructure, and positioning India as a global maritime hub are commendable. These initiatives are well aligned with the Government's long-term vision under Maritime India Vision (MIV) 2030 and Maritime Amrit Kaal Vision (MAKV) 2047.

However, certain prevailing practices—most notably the unregulated import of second-hand vessels—are diluting the impact of these initiatives and call for urgent policy intervention.

Chapter II: Statement of the Problem

The unrestricted import of old/second-hand vessels into India has emerged as a major impediment to the growth of domestic shipbuilding.

India is increasingly becoming a destination for ageing and environmentally inefficient vessels. This trend not only raises environmental concerns, including increased carbon emissions, but also significantly reduces demand for new vessels built in Indian shipyards.

As a result, the domestic industry faces reduced order inflow, underutilization of capacity, and limited incentives for technological advancement and green transition.

Chapter III: Present Status of the Issue (Global and National)

Global

Scenario:

Leading shipbuilding nations such as China, South Korea, and Japan have implemented protective and promotional measures to safeguard their domestic industries. These include import restrictions, fiscal incentives, and strong regulatory frameworks to discourage the use of outdated vessels.

National

Scenario:

In India, there are currently no stringent restrictions on the import of second-hand vessels, particularly in the segment below 6000 GT. Shipowners continue to prefer importing older vessels due to their lower upfront cost, despite the availability of domestic shipbuilding capability.

This has led to a distortion in market dynamics, adversely impacting Indian shipyards—especially MSME and mid-sized yards.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards:

- Declining order books, particularly in the small vessel segment
- Underutilized infrastructure and workforce
- Limited investment in modernization and green technologies

Shipowners:

- Preference for low-cost imports over long-term efficiency
- Lack of incentives to procure domestically built vessels

Ancillary Industries:

- Reduced demand affecting component manufacturers and service providers
- Slower growth of the maritime supply chain ecosystem

Government:

- Difficulty in achieving capacity expansion and employment generation targets
 - Environmental concerns due to older vessel operations
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has introduced several initiatives to promote shipbuilding, including:

- Shipbuilding Financial Assistance Policy (SBFAP)
- Infrastructure status for shipyards
- Ease of Doing Business reforms

While these measures have provided a positive impetus, their impact is being diluted due to parallel inflow of cheaper imported vessels, which offsets domestic demand creation.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks under MIV 2030 and MAKV 2047 aim to:

- Increase shipbuilding capacity to 10 million CGT
- Position India among the top 5 shipbuilding nations globally

However, the absence of import regulation for second-hand vessels remains a significant policy gap, limiting the effectiveness of these initiatives.

Chapter VII: Discussions with Stakeholders

SAI has held extensive consultations with:

- Member shipyards
- Industry stakeholders
- Regulatory bodies

There is a unanimous concern regarding the adverse impact of second-hand vessel imports, particularly in the sub-6000 GT segment, which constitutes a major portion of domestic shipbuilding capability.

Chapter VIII: Views of Domain Experts

Industry experts have emphasized that:

- Protectionist measures are essential during the growth phase of domestic industries
 - Encouraging new builds over imports leads to long-term economic and environmental benefits
 - Green and energy-efficient vessels should be prioritized to meet global sustainability commitments
-

Chapter IX: National & Global Best Practices

Globally, successful shipbuilding nations have adopted:

- Age restrictions on vessel imports
- Higher import duties on second-hand vessels
- Mandatory compliance with stringent environmental norms
- Incentives for domestic procurement

These practices have ensured sustained growth of domestic shipbuilding industries while maintaining environmental standards.

Chapter X: Suggested Policy Measures

In light of the above, the following measures are proposed:

- a) Formulation and immediate implementation of comprehensive policy guidelines for vessel imports in consultation with the Directorate General of Shipping (DGS) and industry stakeholders.
 - b) Prohibition of import of second-hand/older vessels below 6000 GT for commercial operations in Indian territorial waters and Exclusive Economic Zone (EEZ).
 - c) Restriction on import of new vessels below 6000 GT, permitting them only for critical national or strategic projects.
 - d) Introduction of deterrent measures such as higher import duties on vessels to protect domestic shipbuilding.
 - e) Alignment of these measures with national visions under MIV 2030 and MAKV 2047.
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

To realize the vision of MAKV 2047 and establish India as a leading global shipbuilding nation, it is imperative to ensure a level playing field for domestic shipyards.

Immediate policy intervention to regulate and restrict the import of second-hand vessels—particularly in the sub-6000 GT segment—is essential. This will:

- Stimulate domestic demand
- Enable capacity utilization and expansion
- Promote job creation and ancillary industry growth
- Accelerate adoption of green and sustainable technologies

A decisive and timely policy action will not only safeguard the interests of the domestic shipbuilding industry but also reinforce India's commitment to becoming a self-reliant and globally competitive maritime nation.

NSB Proposal & Recommendation – 1

Revision of Eligibility Criteria for Infrastructure Status to Ships

Chapter I: Introduction

The Government of India has been actively promoting the maritime sector through various policy interventions under initiatives such as *Make in India*, *Maritime India Vision 2030*, and *Maritime Amrit Kaal Vision (MAKV) 2047*. Granting “Infrastructure Status” to shipping is a significant step aimed at enabling access to long-term, low-cost financing for vessel acquisition. However, the current eligibility criteria for infrastructure status have raised serious concerns among industry stakeholders, particularly the Shipyards Association of India (SAI), due to their limited inclusivity.

Chapter II: Statement of the Problem

The present notification restricts infrastructure status to:

- Indian-owned and flagged vessels of **10,000 GT and above**, or
- Indian-built, owned, and flagged vessels of **1,500 GT and above**

This excludes a substantial portion of India’s coastal fleet and creates barriers for MSME shipyards, thereby limiting sectoral growth and contradicting national maritime objectives.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations such as China, South Korea, and Japan provide comprehensive policy support across vessel categories, including small and medium-tonnage ships.

Nationally, India has approximately **1,550 registered vessels**, of which nearly **1,000 are coastal vessels**. A majority of these fall below the current eligibility threshold, effectively excluding over 50% of the domestic fleet from infrastructure benefits.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited access to affordable financing for coastal shipping operators
 - Reduced order inflow for MSME shipyards
 - High capital and operational costs
 - Inadequate infrastructure support for smaller shipbuilders
-

Chapter V: Past Policies of the Government and Their Efficacy

Previous policies encouraged indigenous shipbuilding through financial assistance schemes, subsidy support, and stakeholder consultations. These policies enabled gradual capacity building in MSME shipyards and increased domestic participation.

Chapter VI: Current Policies of the Government & Their Efficacy

While the current policy aims to strengthen shipping through infrastructure status, its restrictive eligibility criteria limit its effectiveness. The intended benefits are skewed towards large vessels, leaving out the backbone of coastal shipping.

Chapter VII: Discussions with Stakeholders

Extensive consultations involving SAI, INSA, DGS, and MoPSW had resulted in a consensus recommending eligibility criteria of:

- **24 meters vessel length, or**
- **500 Gross Tonnage (GT)**

These recommendations have not been incorporated in the current notification.

Chapter VIII: Views of Domain Experts

Industry experts highlight that:

- Coastal vessels are critical for port operations and offshore logistics
 - MSME shipyards are essential for decentralized industrial growth
 - Inclusive policies are required to ensure sectoral sustainability
-

Chapter IX: National & Global Best Practices

Globally, maritime nations:

- Provide financial incentives across vessel categories
- Promote domestic shipbuilding through inclusive policies
- Support MSMEs through targeted funding and infrastructure access

India can adopt similar practices to ensure balanced growth.

Chapter X: Suggested Policies

- Revise eligibility criteria to include vessels of **24 meters length or 500 GT**
 - Extend infrastructure benefits to coastal shipping
 - Provide targeted financial support to MSME shipyards
 - Align policies with Maritime India Vision and MAKV 2047
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government issue suitable directives to the Ministry of Finance to revise the notification and adopt the proposed eligibility criteria of **24 meters length or 500 GT**, initially for a period of five years, with periodic review thereafter.

Such a revision will:

- Enable access to affordable financing for coastal shipping
- Boost MSME shipyard growth
- Reduce dependence on foreign-built vessels
- Strengthen indigenous shipbuilding capabilities
- Support national objectives under *Make in India*

Failure to revise the criteria may lead to increased reliance on imported vessels, missed MAKV 2047 targets, and stagnation of the domestic shipbuilding ecosystem.

Annexure II

NSB Proposal & Recommendation – 2

Financial Assistance for Electric/Green Vessels Costing Below ₹100 Crore under SBFAS Guidelines

Chapter I: Introduction

India's maritime sector is undergoing a transformative phase under *Maritime Amrit Kaal Vision (MAKV) 2047*, which targets a shipbuilding output of 4.5 million GT and ship ownership of 100 million GT. The introduction of the Shipbuilding Financial Assistance Scheme (SBFAS) is a progressive step toward strengthening domestic shipbuilding. However, in light of India's commitment to the International Maritime Organization (IMO) Net-Zero 2050 goals, there is a pressing need to align financial incentives with sustainable and green maritime technologies.

Chapter II: Statement of the Problem

The current SBFAS Guidelines do not provide additional financial incentives for electric, hybrid, or green-fuel vessels costing below ₹100 crore. Instead, these vessels receive financial assistance at par with conventional diesel vessels (15%), effectively reducing earlier benefits and discouraging green adoption.

Chapter III: Present Status of the Issue (Global & National)

Globally, countries are actively incentivizing green shipping through subsidies, tax benefits, and dedicated funding mechanisms.

Nationally, India has an extensive **11,000 km inland waterways network**, where nearly **90% of operations depend on small vessels**. Electric and solar vessels, capable of reducing emissions by **80–100%**, are critical for sustainable inland and coastal transport.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- High capital cost of electric and hybrid vessels
 - Lack of differential financial incentives
 - Limited commercial viability compared to diesel vessels
 - Reduced willingness of shipowners to invest in green vessels
 - MSME shipyards facing reduced demand for green vessel construction
-

Chapter V: Past Policies of the Government and Their Efficacy

Under earlier schemes such as SBFAP 2023:

- Electric/Hybrid vessels received up to **20% assistance**
- Green fuel vessels received up to **30% assistance**

These policies provided meaningful incentives and encouraged early adoption of sustainable technologies.

Chapter VI: Current Policies of the Government & Their Efficacy

Under SBFAS 2025:

- All vessels below ₹100 crore receive **15% financial assistance**, irrespective of fuel type
- Though green vessels are categorized as “specialised,” the benefit is ineffective for vessels under ₹100 crore

This results in a **5–15% effective reduction** in incentives for green vessels compared to earlier schemes.

Chapter VII: Discussions with Stakeholders

Stakeholders including MSME shipyards from Kerala, Goa, and Gujarat have expressed concerns that:

- The absence of additional incentives reduces competitiveness of green vessels
 - Shipowners are reluctant to place orders due to higher costs
 - The policy does not reflect the national sustainability agenda
-

Chapter VIII: Views of Domain Experts

Experts emphasize that:

- Electric vessels are essential for decarbonizing inland and coastal shipping
 - Policy incentives are critical to offset higher upfront costs
 - Without targeted support, India may lag in green maritime transition
-

Chapter IX: National & Global Best Practices

Globally, maritime nations:

- Provide higher subsidies for green vessels
- Offer tax incentives and carbon credits
- Support R&D and infrastructure for green fuels

Adopting such measures will accelerate India's transition to sustainable shipping.

Chapter X: Suggested Policies

- Introduce an **additional 5–10% financial assistance** for electric, hybrid, and green vessels below ₹100 crore
- Create a **separate incentive slab** for green vessels under SBFAS
- Encourage adoption through **viability gap funding and tax incentives**
- Align SBFAS provisions with IMO Net-Zero goals and MAKV 2047

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government review and amend the SBFAS Guidelines to provide meaningful and differentiated financial incentives for electric, solar, and green-fuel vessels, particularly those costing below ₹100 crore.

Such amendments will:

- Promote adoption of sustainable maritime technologies
- Enhance commercial viability of green vessels
- Support MSME shipyards specializing in smaller vessels
- Reduce dependence on fossil fuels
- Accelerate India's progress towards IMO Net-Zero 2050 targets

Without such revisions, the current framework risks discouraging green investments and slowing India's transition to a sustainable maritime ecosystem, thereby impacting the long-term goals of MAKV 2047.

NSB Proposal & Recommendation – 3

Shipyards’ Concerns on Recently Approved SBFAS Guidelines

Chapter I: Introduction

The Shipbuilding Financial Assistance Scheme (SBFAS) is a key policy initiative aimed at strengthening India’s shipbuilding ecosystem in line with *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. While the notification of SBFAS Guidelines is a progressive step, a detailed review by industry stakeholders, particularly shipyards, indicates certain critical gaps that may limit its effectiveness in achieving the intended objectives.

Chapter II: Statement of the Problem

Despite its intent, the current SBFAS framework does not adequately address several operational, financial, and structural challenges faced by shipyards. Key issues include stringent domestic content requirements, reduced incentives for green vessels, limited infrastructure support, ambiguity in contract price adjustments, and transitional challenges between SBFAP and SBFAS.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations adopt flexible and phased approaches to localisation, incentivise green technologies, and provide comprehensive infrastructure support.

In India, the shipbuilding ecosystem—particularly for commercial vessels—is still evolving. While significant policy support exists, critical gaps remain in equipment manufacturing, financing mechanisms, and infrastructure readiness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited domestic availability of high-value marine equipment
 - Reduced financial incentives for electric and green vessels
 - Inadequate infrastructure for capacity expansion
 - Financial and contractual uncertainties
 - Transition-related challenges between policy regimes
 - Limited support for specialised assets like Floating Dry Docks
-

Chapter V: Past Policies of the Government and Their Efficacy

Earlier policies such as SBFAP provided targeted incentives for shipbuilding, including higher assistance for specialised and green vessels. These policies contributed to gradual growth in domestic shipbuilding capacity and encouraged stakeholder participation.

Chapter VI: Current Policies of the Government & Their Efficacy

The SBFAS Guidelines aim to provide structured financial assistance and promote indigenisation. However:

- Uniform assistance rates dilute incentives for green vessels
- Domestic content requirements may not be practical at present
- Infrastructure support is limited in scope
- Transitional provisions create uncertainty

As a result, the policy's effectiveness in driving rapid sectoral growth may be constrained.

Chapter VII: Discussions with Stakeholders

Consultations with shipyards and industry bodies have highlighted the need for:

- Relaxation and phased implementation of domestic content norms

- Enhanced incentives for green and hybrid vessels
 - Expanded infrastructure support
 - Clarity in contractual and transitional provisions
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Localisation in commercial shipbuilding requires time and ecosystem development
 - Green vessel adoption depends heavily on financial viability
 - Infrastructure augmentation is critical for scaling shipbuilding capacity
 - Policy clarity is essential to build investor and shipowner confidence
-

Chapter IX: National & Global Best Practices

Global shipbuilding leaders:

- Adopt phased localisation strategies
- Provide higher incentives for green technologies
- Invest heavily in shipyard infrastructure and workforce development
- Recognise specialised assets like floating docks under dedicated categories

These practices provide a roadmap for strengthening India's policy framework.

Chapter X: Suggested Policies

7. Domestic Content Requirement

- Allow 'Nil' domestic content for **3 years (domestic orders)** and **5 years (export orders)**
- Introduce phased localisation thereafter
- Mandate gradual involvement of Indian design houses
- Reassess parity with defence shipbuilding requirements

8. Financial Assistance for Green Vessels

- Provide **additional 5–10% financial assistance** for electric, hybrid, and green vessels below ₹100 crore
 - Ensure meaningful differentiation from conventional vessels
- 9. Infrastructure Augmentation under SbDS**
- Extend capital assistance to include:
- Paint, machine, and pipe shops
 - Warehousing and logistics
 - Training and accommodation facilities
 - Breakwater structures and capital dredging
- 10. Inclusion of Floating Dry Docks (FDDs)**
- Classify FDDs (≥135m length and ≥35m width) as **Specialised Vessels**
 - Recognise their technical complexity and capital intensity
- 11. Amendment to Shipbuilding Contract Provisions**
- Consider revised contract prices (post scope change) for SBFA applicability
 - Base eligibility on final contract value paid by the buyer
- 12. Applicability of SBFAP and SBFAS**
- Provide an extension up to **15 May 2026** for obtaining Approval-in-Principle
 - Align timelines for contract registration, fair price evaluation, and approvals
 - Reduce uncertainty for ongoing contract negotiations

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the SBFAS Guidelines be suitably amended to address the above concerns in a comprehensive manner.

Such revisions will:

- Enable realistic and phased indigenisation
- Promote adoption of green technologies
- Strengthen MSME shipyards and infrastructure
- Enhance investor and shipowner confidence
- Reduce dependence on imports
- Accelerate achievement of MAKV 2047 targets

Without these amendments, the current framework may limit the growth potential of the shipbuilding industry and hinder India's ambition to emerge as a global shipbuilding hub.

NSB Proposal & Recommendation – 4

Inclusion of 60T & 70T BP Diesel-Electric Tugs under ASTDS Specifications

Chapter I: Introduction

India's maritime sector is undergoing a strategic transition towards sustainability under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. The **Green Tug Transition Programme (GTTP)** introduced by the Ministry of Ports, Shipping and Waterways (MoPSW) and Indian Ports Association (IPA) aims to transition port tug fleets to greener alternatives by 2030, in alignment with India's commitments under the Paris Agreement (CoP-26). Harbour tugs present a significant opportunity for reducing emissions at ports, and early adoption efforts have already begun across Indian shipyards.

Chapter II: Statement of the Problem

Despite progressive policy intent, the current ASTDS specifications recognise only **Diesel Mechanical Propulsion (DMP)** tugs and do not permit **Diesel Electric Propulsion (DEP)** tugs. Additionally, recent tenders issued by ports continue to favour conventional propulsion systems, coupled with stringent delivery timelines of 18 months, which are not aligned with current global supply chain realities for propulsion systems.

Chapter III: Present Status of the Issue (Global & National)

Globally, ports are increasingly adopting hybrid and electric propulsion systems for harbour tugs to reduce emissions and improve efficiency.

In India, approximately **12–15 green tugs** have already been ordered. However, a significant number of ongoing tenders still specify conventional diesel tugs, limiting the adoption of cleaner technologies. Furthermore, global supply chains for

propulsion systems currently have lead times of **around 24 months**, creating practical challenges in meeting tender timelines.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Misalignment between tender timelines and equipment delivery schedules
 - Limited flexibility in ASTDS specifications
 - Continued reliance on conventional propulsion systems
 - Supply chain constraints for imported propulsion packages
 - Pressure on shipyards and tug operators to meet unrealistic timelines
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives such as GTTP and broader maritime decarbonisation efforts have created a strong policy foundation. These initiatives have successfully initiated the transition towards green tugs and encouraged domestic shipbuilding participation.

Chapter VI: Current Policies of the Government & Their Efficacy

While GTTP promotes green transition, the ASTDS specifications remain restrictive by permitting only DMP tugs. This creates a disconnect between policy intent and implementation. Additionally, current tender conditions—particularly delivery timelines and fuel consumption criteria—further limit the adoption of alternative propulsion technologies.

Chapter VII: Discussions with Stakeholders

Consultations with shipyards, tug operators, and technical experts indicate strong support for:

- Inclusion of Diesel Electric Propulsion (DEP) tugs

- Greater flexibility in propulsion system selection
- Alignment of tender timelines with supply chain realities

A detailed feasibility study conducted by industry experts also supports the adoption of DEP tugs.

Chapter VIII: Views of Domain Experts

Domain experts and naval architects have highlighted that DEP tugs offer several advantages:

- Availability of DG sets within **10–12 months**
- Higher indigenous content through locally manufactured components
- Reduced foreign exchange outflow (approximately 20%)
- Lower fuel consumption and improved operational efficiency
- Reduced maintenance and lifecycle costs

These attributes make DEP tugs a practical and sustainable alternative to DMP systems.

Chapter IX: National & Global Best Practices

Globally, leading ports:

- Adopt hybrid and electric propulsion systems
- Encourage flexible technical specifications
- Align procurement frameworks with sustainability goals

India can benefit from adopting similar flexible and technology-neutral approaches.

Chapter X: Suggested Policies

- Amend ASTDS specifications to include **Diesel Electric Propulsion (DEP)** as an approved alternative

- Replace restrictive terminology with “**mechanical/electrical propulsion**”
 - Align tender timelines with realistic equipment delivery schedules
 - Promote indigenous manufacturing of propulsion components
 - Encourage adoption of green technologies through policy flexibility
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government approve amendments to ASTDS specifications to allow both Diesel Mechanical and Diesel Electric propulsion systems for 60T and 70T BP tugs.

This policy intervention will:

- Enable timely delivery of tugs
- Accelerate adoption of green and efficient propulsion technologies
- Promote indigenous manufacturing and reduce import dependency
- Support the objectives of GTTP and India’s decarbonisation commitments
- Strengthen India’s shipbuilding ecosystem and contribute to MAKV 2047 goals

Such an amendment will ensure alignment between policy intent and implementation, while providing shipowners and ports the necessary flexibility to transition towards sustainable maritime operations without disrupting ongoing procurement processes.

NSB Proposal & Recommendation – 5

Addressing Challenges Faced by Shipyards with Customs Authorities

Chapter I: Introduction

The Government of India has taken significant steps to promote indigenous shipbuilding under Maritime India Vision 2030 and Maritime Amrit Kaal Vision (MAKV) 2047. The Ministry of Ports, Shipping and Waterways (MoPSW) has played a proactive role in engaging with shipyards and fostering a conducive ecosystem for growth. However, certain operational challenges arising from interactions with customs authorities continue to impede the efficiency and competitiveness of Indian shipyards, ship repair facilities, indigenous marine equipment manufacturers, OEMs, and service providers, particularly MSMEs. Addressing these customs-related issues is essential for strengthening India's maritime manufacturing ecosystem and positioning the country as a global hub for shipbuilding and ship repair.

Chapter II: Statement of the Problem

Shipyards, marine equipment manufacturers, OEMs, and ship repair service providers are facing recurring procedural and interpretative challenges with customs authorities during the clearance of imported consignments meant exclusively for vessel construction, ship repair, and marine equipment manufacturing. These issues result in delays, financial penalties, increased compliance costs, prolonged vessel turnaround time, and reduced competitiveness of Indian shipbuilding and ship repair facilities, thereby affecting the overall viability of the domestic maritime industry.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding and ship repair nations provide streamlined customs frameworks with clear exemptions and facilitate procedures for imports related to shipbuilding, ship repair, and marine equipment manufacturing, ensuring minimal delays in project execution and vessel turnaround.

In India, despite policy provisions supporting shipbuilding under DGFT regulations and Chapter 89 of the ITC (HS) Classification, procedural inconsistencies, digital portal issues, and varied interpretations by customs authorities continue to create bottlenecks in import clearance processes. Similar challenges are also experienced by marine equipment manufacturers importing critical components and by OEMs undertaking urgent ship repair operations.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards, especially MSMEs, face the following key challenges:

- **SIMS (Steel Import Monitoring System):** Delays in registration due to DGFT portal issues often lead to penalties and shipment hold-ups.
- **EPR (Extended Producer Responsibility):** Requirement of EPR certification for minor packaging materials or components not intended for resale creates unnecessary compliance burden and delays.
- **Import Licensing (WPC/LMPC):** Despite DGFT provisions under Chapter 89 permitting imports without licenses for shipbuilding, customs authorities often insist on such licenses, causing avoidable delays.
- **BIS Certification:** Unwarranted queries on BIS certification for components not covered under mandatory certification norms.
- **Aluminium and Copper Monitoring Systems:** Similar procedural issues create delays and penalties due to portal-related issues and compliance complexities.
- **Targeted Delays:** High-value and time-sensitive shipments, particularly those arriving by air, are often subjected to repeated customs queries resulting in unnecessary delays.

In addition, indigenous marine equipment manufacturers, OEMs, authorised workshops, and service providers engaged in shipbuilding and ship repair face the following customs-related challenges:

- **Delays in Customs Clearance of Ship Repair Spare Parts:** Critical imported spare parts required for vessel repairs frequently take 5–7 days for customs clearance after arrival at Indian airports before delivery to shipyards or vessels. In contrast, competing maritime hubs such as Singapore and Colombo generally complete such clearances within 24 hours, enabling faster vessel turnaround.
- **Customs Duty on Ship Repair Spare Parts:** While ship owners receive customs duty exemption on spares supplied directly to vessels, OEMs, authorised workshops, and marine service providers importing identical spare parts for stocking and emergency repairs are required to pay customs duty. This discourages inventory stocking in India, limits immediate availability of critical spares, increases repair turnaround time, and reduces India's attractiveness as a regional ship repair destination.
- **Procedural Delays in Movement of Repair Equipment:** Ship repair operations require frequent movement of engines, machinery, components, and specialised tools into and out of port premises. Multiple approvals, documentation requirements, and prolonged gate clearance procedures often delay such movements by several days.
- **Customs Duty on Components for Indigenous Marine Equipment Manufacturing:** Manufacturers producing marine propulsion systems, engines, and specialised marine equipment under the Make in India initiative continue to pay customs duty on imported high-value components that are not presently manufactured in India, while imported finished equipment supplied to Indian shipyards enjoys customs duty exemptions. This creates an uneven competitive environment and discourages investments in indigenous manufacturing.

Government initiatives have aimed at simplifying trade, promoting ease of doing business, and encouraging indigenous shipbuilding. Policies under DGFT, including provisions under Chapter 89, were designed to facilitate imports of restricted items required for shipbuilding without licensing requirements.

While these measures have significantly improved the policy framework, their intended benefits have not been fully realized due to implementation-level challenges, inconsistent interpretation by customs authorities, and absence of similar facilitative provisions for ship repair operations and indigenous marine equipment manufacturing.

Chapter VI: Current Policies of the Government & Their Efficacy

Current Government policies provide an enabling framework for shipbuilding and maritime manufacturing. However, their effectiveness is diluted by inconsistent interpretation and enforcement by customs authorities, resulting in delays, increased compliance burden, and additional financial implications.

The absence of dedicated customs facilitation measures for ship repair operations, lack of uniform implementation across ports, and duty anomalies affecting domestic marine equipment manufacturers continue to reduce India's competitiveness as a maritime manufacturing and repair hub.

Chapter VII: Discussions with Stakeholders

Interactions with shipyards, industry associations, OEMs, marine equipment manufacturers, and service providers indicate widespread concern regarding:

- Lack of uniformity in customs procedures.
- Excessive compliance requirements for non-applicable cases.
- Delays arising from DGFT portal inefficiencies and procedural rigidity.
- Increased operational and financial burden.
- Prolonged customs clearance timelines for urgent ship repair spare parts.

- Customs duty on spare parts stocked by authorised OEMs and service providers for emergency repairs.
- Cumbersome port procedures governing inward and outward movement of repair equipment.
- Competitive disadvantage faced by indigenous marine equipment manufacturers due to customs duty on imported components used for domestic manufacturing.
- Absence of dedicated fast-track customs mechanisms for ship repair activities.

Stakeholders unanimously emphasised that improving customs procedures for shipbuilding, ship repair, and indigenous marine equipment manufacturing is essential for positioning India as a globally competitive maritime manufacturing and repair hub. They also highlighted the need for coordinated intervention by the Ministry of Ports, Shipping and Waterways, Ministry of Finance, DGFT, and Customs authorities.

Chapter VIII: Views of Domain Experts

Domain experts have observed that:

- Procedural inefficiencies significantly impact project timelines and cost competitiveness.
- MSME shipyards are disproportionately affected.
- Simplified and standardised customs processes are critical for enhancing ease of doing business.
- Policy clarity and stronger inter-ministerial coordination are essential.
- Ship repair competitiveness depends largely on vessel turnaround time rather than labour cost alone.
- Customs clearance delays significantly diminish India's ability to attract international repair business.
- Customs policies should distinguish between commercial imports and imports intended exclusively for shipbuilding and ship repair.

- Creating parity between imported finished marine equipment and domestically manufactured equipment is essential for achieving the objectives of the Make in India initiative.
-

Chapter IX: National & Global Best Practices

Leading shipbuilding and maritime nations such as Singapore, South Korea, and Sri Lanka (Colombo) have adopted facilitative customs frameworks that:

- Provide clear exemptions for shipbuilding imports.
- Minimise compliance requirements for non-commercial imports.
- Ensure robust and efficient digital systems.
- Maintain coordination between regulatory authorities.
- Provide expedited customs clearance of marine spare parts.
- Permit duty-free import of repair spares supplied to vessels.
- Establish dedicated customs procedures for ship repair operations.
- Facilitate seamless movement of repair equipment within ports.
- Provide fiscal incentives supporting indigenous marine equipment manufacturing.

These measures have substantially strengthened their competitiveness in both shipbuilding and ship repair. Adoption of similar practices would significantly improve India's maritime ecosystem.

Chapter X: Suggested Policies

11. Streamlining SIMS and Monitoring Systems

- Introduce flexibility in timelines for SIMS and similar registrations.
- Exempt small-quantity imports meant exclusively for shipbuilding purposes.

12. Rationalisation of EPR Requirements

- Exempt shipyards from EPR compliance for imports meant for direct installation and not for resale.

13. Clarification on Import Licensing

- Issue clear directions to customs authorities regarding DGFT Chapter 89 provisions.
- Allow imports without WPC/LMPC licenses based on shipbuilding undertakings.

14. Simplification of BIS Compliance

- Restrict BIS queries only to notified items.
- Avoid unnecessary delays due to misinterpretation.

15. Digital System Improvements

- Strengthen DGFT portal functionality.
- Introduce an effective grievance redressal mechanism for time-bound resolution.

16. Standard Operating Procedures (SOPs)

- Develop uniform SOPs for customs clearance of shipbuilding imports.
- Ensure consistency across ports and customs jurisdictions.

17. Fast-Track Customs Clearance for Ship Repair Spares

- Establish dedicated customs clearance channels for spare parts imported exclusively for ship repair.
- Introduce time-bound customs processing, preferably within 24 hours.
- Implement electronic pre-arrival customs clearance mechanisms for urgent consignments.

18. Customs Duty Exemption on Ship Repair Spare Parts

- Extend customs duty exemption to spare parts imported by authorised OEMs, workshops, and service providers exclusively for ship repair.

- Permit stocking of duty-free marine spare parts under suitable end-use monitoring mechanisms.

19. Simplification of Port Goods Movement Procedures

- Develop a uniform national SOP governing movement of repair equipment into and out of Indian ports.
- Digitise gate pass approvals and documentation.
- Benchmark Indian port procedures against international best practices.

20. Level Playing Field for Indigenous Marine Equipment Manufacturing

- Extend customs duty exemption to imported components used for manufacturing marine engines and marine equipment where domestic alternatives are unavailable.
- Ensure parity between imported finished marine equipment and equipment manufactured in India for supply to Indian shipyards.
- Encourage localisation by rationalising customs duties on critical imported inputs until domestic manufacturing capabilities mature.

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government prioritise coordinated action between the Ministry of Ports, Shipping and Waterways, Ministry of Finance, DGFT, and Customs authorities to address the above challenges through policy clarification, procedural simplification, digital system improvements, and uniform implementation across all ports.

The Government may also consider introducing a comprehensive customs facilitation framework covering shipbuilding, ship repair, and indigenous marine equipment manufacturing. Such a framework should include fast-track customs clearance, rationalisation of customs duties, simplified port logistics, dedicated customs procedures for ship repair, and standardised implementation of customs regulations nationwide.

These reforms would:

- Reduce delays, demurrage, detention charges, and vessel turnaround time.
- Improve operational efficiency of shipyards and ship repair facilities.
- Enhance ease of doing business across the maritime sector.
- Promote domestic manufacturing of marine equipment under the Make in India initiative.
- Encourage OEMs to establish manufacturing, service, and repair facilities in India.
- Strengthen MSME participation in the maritime supply chain.
- Increase India's competitiveness as a regional and global shipbuilding and ship repair hub.
- Accelerate achievement of the objectives of Maritime India Vision 2030 and Maritime Amrit Kaal Vision (MAKV) 2047.

Addressing these customs-related issues through a coordinated and facilitative policy framework is critical for creating a globally competitive, self-reliant, and resilient maritime manufacturing ecosystem in India.

NSB Proposal & Recommendation – 6

Fiscal and Taxation Reforms for Enhancing the Competitiveness of the Shipbuilding Sector

Chapter I: Introduction

The maritime sector has emerged as a strategic priority for India's economic development, industrial growth, and national security. Recognising its transformative potential, the Government of India has introduced several policy initiatives, including *Maritime India Vision 2030* and the *Maritime Amrit Kaal Vision 2047*, aimed at strengthening the country's maritime ecosystem through the expansion of ports, shipping, inland waterways, shipbuilding, and maritime services. As part of these initiatives, shipyards have been accorded infrastructure status with the objective of improving access to finance, encouraging private investment, and enhancing the competitiveness of the domestic shipbuilding industry. However, despite these policy interventions, the anticipated financial and fiscal benefits have not been fully realised due to structural constraints within the existing regulatory and taxation framework.

The shipbuilding industry occupies a unique position in the manufacturing sector because of its significant contribution to economic development, technological advancement, employment generation, and strategic self-reliance. Historically, nations that evolved into major manufacturing economies—such as the United Kingdom, the United States, Japan, the Republic of Korea, and more recently China—also emerged as global leaders in shipbuilding. Their experience demonstrates a close relationship between industrial development and a strong domestic shipbuilding base. Beyond its direct economic contribution, shipbuilding stimulates the growth of numerous allied industries, including steel, aluminium, electrical equipment, marine engineering, logistics, and ancillary manufacturing, thereby generating substantial multiplier effects across the economy.

For India, the strategic importance of shipbuilding extends beyond its economic value. As a peninsular nation with an extensive coastline, approximately 1,200 islands, and a central location in the Indian Ocean Region, India depends significantly on maritime trade for its economic prosperity and energy security. A robust indigenous shipbuilding industry is therefore essential not only for supporting commercial shipping and reducing dependence on foreign-built vessels but also for strengthening national defence capabilities through the construction of naval and coast guard vessels. Domestic

shipbuilding enhances strategic autonomy by ensuring continuity of maritime logistics during geopolitical disruptions, reducing foreign exchange outflows, and supporting the country's broader vision of self-reliance under initiatives such as *Make in India* and *Atmanirbhar Bharat*.

Despite its considerable potential, India's shipbuilding industry has not developed in proportion to the country's expanding economy, growing trade volumes, and skilled human resource base. The industry experienced substantial growth during the period between 2003 and 2008, supported by rising global demand and government incentives, including shipbuilding subsidies that encouraged significant investments in modern shipyard infrastructure. During this phase, India's share in the global shipbuilding order book increased considerably, creating expectations of sustained expansion. However, the global financial crisis of 2008, coupled with the withdrawal of government subsidies, declining freight markets, falling oil prices, and increasing international competition, severely affected the industry. Export orders were cancelled, several shipyards became financially distressed, and some of the country's largest private shipbuilding companies entered insolvency proceedings. While major shipbuilding nations adopted comprehensive policy measures to revive their industries, India's commercial shipbuilding sector struggled to regain its competitive position, resulting in a negligible share of the global shipbuilding market.

The challenges faced by the industry are further compounded by the distinctive characteristics of shipbuilding as an industrial activity. Unlike conventional manufacturing industries, shipbuilding follows a build-to-order model where contracts are secured before production begins. Shipyards must therefore establish credibility through timely delivery despite operating in a highly competitive global market. Ship construction involves long project cycles, substantial capital investment, extensive working capital requirements, and prolonged financing periods, making access to affordable long-term finance critical for the industry's sustainability. These unique operational characteristics distinguish shipbuilding from most other manufacturing sectors and justify specialised policy support.

Notwithstanding recent setbacks, the long-term prospects of the Indian shipbuilding industry remain substantial. India's expanding domestic trade, increasing coastal shipping, growing inland waterway transportation, rising defence procurement, and favourable geographic location create significant opportunities for indigenous shipbuilding. Government initiatives such as the *Jal Marg Vikas Project* and the development of inland waterways are expected to increase demand for specialised inland vessels, while growth in maritime trade and logistics will require greater domestic shipbuilding capacity. Furthermore, the industry has the potential to generate large-scale direct and indirect employment across engineering, fabrication, design, marine

equipment manufacturing, and associated service sectors. Studies consistently demonstrate that shipbuilding generates significantly higher employment per unit of investment than many other heavy manufacturing industries, making it particularly relevant for a labour-abundant economy like India.

The shipbuilding industry is also recognised as a "mother industry" because of its extensive linkages with ancillary manufacturing sectors. A significant proportion of the value created during ship construction originates from domestic suppliers of machinery, marine equipment, electrical systems, steel products, and specialised engineering services. Consequently, the growth of shipbuilding has the capacity to stimulate industrial diversification, technological innovation, skill development, and regional economic development while strengthening India's overall manufacturing ecosystem.

Recognising these economic and strategic benefits, the Government has sought to position shipbuilding as an infrastructure sector eligible for various policy incentives. However, many of these intended benefits remain constrained by the existing taxation regime. Although infrastructure status was expected to improve investment attractiveness and reduce financing costs, inconsistencies in tax treatment, indirect tax implications, depreciation provisions, and the limited availability of sector-specific fiscal incentives continue to affect the competitiveness of Indian shipyards. These issues assume greater significance given the capital-intensive nature of shipbuilding and the long gestation period associated with ship construction projects.

Against this backdrop, the present study examines the taxation framework applicable to the Indian shipbuilding industry in light of its infrastructure status. It seeks to evaluate whether the existing tax regime adequately supports the policy objectives of promoting domestic shipbuilding, enhancing international competitiveness, attracting investment, and facilitating long-term industrial growth. By analysing the interaction between infrastructure policy and taxation, the study aims to identify the legal and fiscal challenges confronting the sector and to propose reforms that can better align India's tax framework with its broader maritime development objectives.

Chapter II: Statement of the Problem

Although shipyards have been categorised under the "transport" segment through a notification issued by the Ministry of Finance (Department of Economic Affairs) dated 08 April 2016, they are not included in the definition of "infrastructure facility" under **Section 80-IA of the Income Tax Act, 1961**. As a result, shipbuilding entities are not eligible for

income tax benefits available to other infrastructure sectors, thereby limiting the practical utility of infrastructure status.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations provide comprehensive fiscal incentives, including tax benefits, subsidies, and financing support, to enhance competitiveness.

In India, while shipbuilding has been recognised as an infrastructure activity in principle, the absence of alignment with income tax provisions results in a gap between policy intent and actual benefits available to shipyards.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards face the following challenges:

- Absence of income tax benefits under Section 80-IA
 - Lack of parity with other infrastructure sectors such as telecom, highways, and power
 - Limited financial incentives compared to global competitors
 - High capital intensity and long gestation periods without adequate fiscal support
 - Competitive disadvantage vis-à-vis shipping companies benefiting from the tonnage tax scheme
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has undertaken several initiatives to support shipbuilding, including granting infrastructure status and reducing corporate tax rates. While these measures have provided some relief, they have not delivered sector-specific advantages comparable to those available to other infrastructure industries.

Chapter VI: Current Policies of the Government & Their Efficacy

The current framework recognises shipyards under infrastructure through policy notification but does not extend corresponding tax benefits under the Income Tax Act. As a result:

- Infrastructure status remains largely symbolic
 - Shipyards do not receive targeted fiscal incentives
 - Policy effectiveness in promoting investment and growth is limited
-

Chapter VII: Discussions with Stakeholders

Industry stakeholders, including shipyards and associations, have consistently highlighted the need for:

- Inclusion of shipbuilding under Section 80-IA
 - Parity with other infrastructure sectors
 - Enhanced fiscal incentives to improve competitiveness
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Shipbuilding is a capital-intensive industry requiring long-term financial support
 - Tax incentives are critical to attract investment and scale operations
 - Alignment between policy recognition and fiscal provisions is essential for meaningful impact
-

Chapter IX: National & Global Best Practices

Globally, leading shipbuilding nations have adopted a range of policy measures to promote and sustain the growth of their domestic shipbuilding industries. These measures typically include:

- Providing tax holidays and fiscal incentives for shipyards.
- Offering sector-specific tax benefits aligned with infrastructure status.
- Ensuring policy coherence and coordination across ministries and regulatory authorities.

The following countries have successfully fostered the development of their domestic shipping and shipbuilding industries:

i. **China** has extended credit lines to foreign shipping companies to support its domestic shipbuilding industry and generate orders for local shipyards.

ii. **The Philippines** introduced the *Domestic Shipping Development Act* in 2004, which propelled the country to become the world's fourth-largest shipbuilding nation. The Act provides several incentives to the shipbuilding industry, including allowing 100 per cent foreign direct investment (FDI), exemption from import duties and taxes on shipyard equipment, capital goods, spare parts, and other machinery required for the construction, expansion, upgrading, and modernisation of shipyards and related facilities.

iii. **Vietnam** has accorded priority status to the shipbuilding industry and has extended numerous incentives, including the retention of corporate income tax and capital-use tax for reinvestment, preferential corporate income tax rates, special incentives for industrial zones, protection of the domestic shipbuilding industry, exemption from import duties, and promotion of joint ventures to facilitate technology transfer. Vietnam's Master Plan further emphasises the importance of developing the country's shipbuilding industry and adopting modern technologies to enhance the efficiency and competitiveness of shipyards and supporting industries.

Addressing Financial Constraints

The shipbuilding industry is highly capital-intensive and characterised by long project gestation periods. Shipyards engaged in the construction of merchant vessels generally receive a substantial portion of the contract value only upon scheduled delivery of the vessel. Consequently, one of the major challenges faced by shipyards is the shortage of working capital and the burden of servicing long-term debt. Typically, working capital constitutes approximately 25 to 35 per cent of the total cost of a ship throughout the construction period. In India, interest rates on working capital generally range between 10 and 11 per cent, compared with 4 to 8 per cent in most major shipbuilding nations. As a result, Indian shipyards face a significant competitive disadvantage in the global market. Immediate financial support in the form of affordable working capital at concessional interest rates is therefore essential to strengthen the competitiveness of the Indian shipbuilding industry.

An analysis of countries that have successfully emerged as major shipbuilding hubs indicates that this challenge has been effectively addressed through targeted financial assistance, as illustrated below:

i. **Brazil** has established a dedicated *Merchant Marine Fund (FMM)*, which provides loans with repayment periods of up to 20 years at fixed interest rates ranging from 4 to 6 per cent per annum. The Fund also finances up to 90 per cent of the total project cost for shipping companies undertaking the construction or repair of vessels in Brazilian shipyards.

ii. **Malaysia** extends financial assistance to the shipping and shipbuilding industry through *Bank Pembangunan Malaysia Berhad (BPMB)*. The Bank offers financing at interest rates ranging from 4 to 6 per cent, with repayment periods of up to 10 years, in addition to a grace period of two years.

The adoption of similar policy measures and financial support mechanisms would significantly enhance the competitiveness of the Indian shipbuilding industry, strengthen its financial viability, and enable it to compete more effectively in the global shipbuilding market.

Chapter X: Suggested Policy Measures for the Growth of the Indian Shipbuilding Industry

Policy Recommendations

To establish a globally competitive and self-reliant shipbuilding industry, India requires a comprehensive policy framework supported by fiscal, financial, institutional, and regulatory reforms. The following measures are recommended:

Recognition of Shipbuilding as Infrastructure

- Amend **Section 80-IA of the Income Tax Act, 1961** to explicitly recognize shipbuilding as an "Infrastructure Facility".
- Extend tax incentives and deductions available to other infrastructure sectors to the shipbuilding industry.
- Ensure fiscal parity between the shipping and shipbuilding sectors.
- Align taxation and investment policies with India's broader maritime development objectives, including *Make in India*, *Maritime India Vision 2030*, and *Viksit Bharat*.

Grant Strategic Status to Shipbuilding

Shipbuilding should be accorded strategic industry status in view of its significance for national security, industrial development, employment generation, and export growth.

International experience demonstrates that government support has been instrumental in developing globally competitive shipbuilding industries:

- **China** has extended preferential credit to foreign shipping companies that place orders with domestic shipyards.
- **The Philippines** introduced the Domestic Shipping Development Act, 2004, offering tax exemptions on imported shipyard equipment, capital goods, and allowing 100 percent foreign direct investment.
- **Vietnam** has prioritized shipbuilding through concessional taxation, import duty exemptions, incentives for industrial zones, and policies promoting technology transfer and joint ventures.

India should adopt a similar long-term strategic approach.

Improve Access to Affordable Finance

Shipbuilding is a capital-intensive industry characterized by long construction cycles and delayed revenue realization. Indian shipyards continue to face high working capital costs compared to international competitors.

Government should therefore:

- Establish dedicated financing mechanisms for shipbuilding.
- Provide working capital at internationally competitive interest rates.
- Offer long-term credit support through specialized financial institutions.
- Introduce sovereign-backed credit guarantee schemes for shipbuilding projects.

Successful international models include:

- **Brazil's Merchant Marine Fund (FMM)**, which finances up to 90 percent of project costs with concessional interest rates.
- **Malaysia's Bank Pembangunan Malaysia Berhad**, which provides long-term financing at preferential rates.

Reform Payment Mechanisms

Government shipbuilding contracts should replace bank guarantee requirements for stage payments with escrow-based payment mechanisms, thereby improving liquidity while ensuring financial accountability.

Export Promotion

To enhance India's share in global ship exports:

- Develop environmentally sustainable and technologically advanced vessel designs.
- Expand exports to emerging maritime economies.
- Create export credit facilities for overseas buyers of Indian-built vessels.
- Support Indian shipyards through concessional export financing similar to practices adopted by leading shipbuilding nations.

Development of the Marine Ancillary Industry

A competitive ancillary manufacturing ecosystem is indispensable for reducing costs and increasing indigenous value addition.

The Government should:

- Encourage Original Equipment Manufacturers (OEMs) through incentives linked to complete transfer of technology.
- Promote domestic production of marine equipment.
- Mandate minimum domestic sourcing requirements in foreign ship procurement contracts.
- Develop dedicated shipbuilding clusters with strong MSME participation.

These measures will strengthen supply chains, improve economies of scale, and reduce dependence on imported equipment.

Taxation and Fiscal Rationalisation

India's taxation framework should be restructured to ensure global competitiveness.

Recommended measures include:

- Rationalization of taxes applicable to shipbuilding and shipping.
- Elimination of fiscal disadvantages faced by Indian shipyards.

- Uniform taxation between Indian and foreign-flag vessels operating in India.
- Tax exemptions for imported shipbuilding machinery, specialized equipment, and raw materials unavailable domestically.
- Income tax incentives for new shipbuilding investments and reinvestment of profits.

Such reforms are consistent with successful policy frameworks implemented in countries such as the Philippines and Vietnam.

Key legislative initiatives include:

Commercial Shipbuilding Law

Enact legislation providing preference to Indian-built vessels for domestic coastal trade, or grant Indian shipyards the right of first refusal.

Prompt Payment Legislation

Introduce statutory timelines for payments under government shipbuilding contracts to improve cash flow and reduce financial stress.

Shipbuilding Cluster Development

Facilitate cluster-based industrial development with integrated support for MSMEs, vendors, and OEMs.

Shipbuilding Research and Innovation Act

Establish dedicated funding mechanisms for research, innovation, dual-use technologies, digital manufacturing, and advanced marine systems.

National Shipbuilding Plan

India should formulate a comprehensive National Shipbuilding Plan based on consolidated requirements from all maritime stakeholders, including Defence, Commercial Shipowners, Shipping, Fisheries, Home Affairs, Commerce, Earth Sciences, and Inland Waterways.

The implementation strategy should comprise:

Short Term

- Focus on simpler vessel categories.
- Develop design capability.
- Enhance workforce skills.
- Improve productivity.

Medium Term

- Expand shipyard infrastructure.
- Build more sophisticated vessels.
- Meet domestic commercial demand.

Long Term

- Achieve international competitiveness.
- Develop a globally integrated marine manufacturing ecosystem.
- Increase exports of ships and marine equipment.

Institutional Reforms

Dedicated Secretary for Shipbuilding

Given the differing policy objectives of shipping and shipbuilding, a dedicated Secretary for Shipbuilding should be created to oversee:

- Industrial policy
- Legislative reforms
- Skill development
- Technology acquisition
- Competitiveness enhancement

Strengthening the Shipping Sector

Growth of shipbuilding is intrinsically linked to growth of the shipping industry.

Accordingly, Government should:

- Promote greater use of coastal shipping and inland waterways.

- Encourage modal shift from road and rail to water transport.
- Accelerate implementation of Sagarmala and Jal Marg Vikas initiatives.
- Introduce incentives for coastal cargo movement.

Expansion of the domestic merchant fleet will generate sustained demand for Indian shipyards.

Measures to Improve Competitiveness

The following initiatives are recommended:

- Standardize vessel designs for coastal and inland waterways.
- Promote large-scale production of standardized vessels to reduce costs.
- Develop government-owned standard vessel designs through competitive design agencies.
- Expand indigenous manufacturing of standardized marine equipment.

These measures will generate economies of scale and improve industrial efficiency.

State-Level Maritime Initiatives

Maritime States should establish proactive Maritime Boards and formulate dedicated shipbuilding policies.

States may adopt best practices from Gujarat by:

- Developing maritime industrial clusters.
- Providing infrastructure support.
- Facilitating investment.
- Creating an enabling business environment.

Institutional Capacity Building

Dedicated institutions should be established to support policy development, research, technology, and industrial growth.

These include:

- **Indian Shipbuilding Institute** for policy research, benchmarking, demand forecasting, standard designs, and productivity studies.

- **Indian Marine Equipment Research Institute** to promote indigenization, technology transfer, equipment development, and global collaboration.
- Supporting institutions such as:
 - Government Export Credit Agency
 - Indian Offshore and Shipbuilding Association
 - Indian Marine Equipment Association
 - National Marine Equipment Testing and Certification Centre

Conclusion

The Indian shipbuilding industry possesses significant strategic, economic, and employment potential but requires comprehensive policy intervention to achieve sustainable growth. Recognition of shipbuilding as a strategic infrastructure industry should form the cornerstone of future reforms.

A coordinated policy framework encompassing fiscal incentives, affordable finance, regulatory reforms, institutional strengthening, technology development, and human resource capacity building is essential to create a globally competitive shipbuilding ecosystem. Simultaneously, expansion of India's merchant fleet, coastal shipping, inland waterways, and ancillary manufacturing industries will generate the critical demand required for sustained industrial growth.

Long-term competitiveness will depend upon continuous investment in research and development, advanced ship design, green technologies, autonomous vessels, digital twin technologies, hybrid propulsion systems, and indigenous manufacturing capabilities. Collectively, these reforms will not only strengthen India's commercial shipbuilding industry but also enhance national maritime security, support defence preparedness, promote exports, and contribute significantly to India's aspiration of becoming a leading global maritime power.

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government take necessary steps to include shipbuilding within the definition of “infrastructure facility” under Section 80-IA of the Income Tax Act, 1961.

Such an amendment will:

- Enable shipyards to avail income tax benefits

- Improve financial viability and investment attractiveness
- Enhance global competitiveness of Indian shipyards
- Support indigenous manufacturing under *Make in India*
- Accelerate achievement of MAKV 2047 targets

Without this alignment, the existing infrastructure status will remain limited in its impact, thereby constraining the growth potential of the Indian shipbuilding industry.

NSB Proposal & Recommendation – 7

Addressing Accumulation of Input Tax Credit in Shipbuilding

Chapter I: Introduction

The shipbuilding sector is a capital-intensive industry central to India's ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. While policy measures such as the Shipbuilding Financial Assistance Scheme (SBFAS) aim to enhance competitiveness, structural challenges within the GST framework continue to adversely impact shipyards, particularly due to the accumulation of input tax credit (ITC).

Chapter II: Statement of the Problem

Shipbuilding outputs are taxed at **5% GST**, whereas input materials attract **12%–18% GST** and input services are taxed at **18% GST**. This inverted duty structure leads to substantial accumulation of ITC. Current GST provisions allow refund of ITC only on input materials, excluding input services and capital goods, resulting in blocked working capital and increased project costs.

Chapter III: Present Status of the Issue (Global & National)

Globally, shipbuilding nations adopt tax-neutral frameworks or provide full input credit refunds to ensure competitiveness.

In India, the mismatch in GST rates and limited refund eligibility results in accumulation of ITC amounting to approximately **4%–6% of vessel cost**, adversely affecting cost competitiveness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Significant working capital blockage due to unutilised ITC
 - Increased project cost and reduced global competitiveness
 - Ambiguity regarding classification of “parts of vessels” (e.g., steel, pipes, cables, paints)
 - Issuance of show-cause notices (SCNs) due to differing interpretations
 - Exclusion of input services and capital goods from refund eligibility
-

Chapter V: Past Policies of the Government and Their Efficacy

GST reforms introduced a concessional **5% rate for shipbuilding outputs and parts of vessels**, aimed at promoting the sector. However, the absence of a comprehensive refund mechanism has limited the effectiveness of this policy.

Chapter VI: Current Policies of the Government & Their Efficacy

Current GST provisions:

- Permit refund under inverted duty structure only for input materials
- Exclude input services and capital goods from refund
- Lack clarity on classification of ship components

These limitations result in continued ITC accumulation and financial strain on shipyards.

Chapter VII: Discussions with Stakeholders

Stakeholders, including shipyards and industry bodies, have highlighted:

- Need for uniform GST treatment across all inputs
 - Requirement for clarity in classification of vessel components
 - Inclusion of input services and capital goods in refund mechanisms
 - Adoption of certification-based concessional frameworks
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- GST neutrality is essential for export-oriented and capital-intensive industries
 - Blocked ITC reduces liquidity and discourages investment
 - Policy alignment with customs provisions is necessary to eliminate anomalies
-

Chapter IX: National & Global Best Practices

Globally, shipbuilding hubs:

- Ensure full refund of input taxes
- Maintain uniform tax structures across inputs and outputs
- Use certification-based mechanisms for concessional taxation

In India, similar practices are followed in sectors such as oil and natural gas through the use of **Essentiality Certificates**.

Chapter X: Suggested Policies

6. GST Rate Rationalisation

- Align GST Notification No. 1/2017 (Sr. No. 252) with Customs Notification 50/2017 (Sr. No. 559)
- Apply a **uniform GST rate of 5%** on all inputs (materials and services) used in shipbuilding

7. Essentiality Certificate Mechanism

- Introduce a system whereby shipyards can procure inputs at concessional GST rates based on an **Essentiality Certificate**
- Require certification (e.g., CA certificate) confirming usage for shipbuilding purposes

8. Expansion of ITC Refund Scope

- Allow refund of ITC on **input materials, input services, and capital goods**

- Remove restrictions under inverted duty structure provisions
 - 9. Alternative Support Mechanism**
 - Compensate blocked ITC (approximately **4%–6% of vessel cost**) through enhancement of Shipbuilding Financial Assistance (SBFA)
 - 10. Clarification on Classification of Parts**
 - Issue clear guidelines defining “parts of vessels” to eliminate ambiguity and disputes
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake comprehensive GST reforms for the shipbuilding sector by addressing the inverted duty structure, expanding ITC refund eligibility, and introducing a certification-based concessional framework.

Such measures will:

- Eliminate working capital blockage
- Improve cost competitiveness of Indian shipyards
- Reduce litigation and compliance burden
- Encourage domestic manufacturing and exports
- Strengthen India’s position as a global shipbuilding hub

Addressing the issue of ITC accumulation is critical to ensuring the financial viability of shipyards and achieving the targets set under *MAKV 2047*.

NSB Proposal & Recommendation – 8

Addressing Accumulation of Input Tax Credit in MRO (Shipping) / Ship Repair Sector

Chapter I: Introduction

The Maintenance, Repair, and Overhaul (MRO) segment of the maritime industry plays a critical role in sustaining vessel operations and enhancing the lifecycle of assets. Under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, India aims to emerge as a global hub for ship repair and MRO services. However, structural inefficiencies in the GST framework are adversely affecting the competitiveness of this sector.

Chapter II: Statement of the Problem

The current GST regime for ship repair creates an inverted duty structure wherein:

- Output MRO services are taxed at **5% GST**
- Input materials are taxed at **12%–18% GST**
- Non-MRO input services (including OEM services for installation and commissioning) are taxed at **18% GST**

This mismatch results in significant accumulation of Input Tax Credit (ITC), leading to increased costs and working capital blockage.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading maritime hubs maintain tax-neutral regimes for MRO activities. For instance, in major international hubs such as Dubai, all inputs and outputs related to ship repair are taxed uniformly, ensuring no accumulation of tax credits.

In India, input materials constitute approximately **25%–40%** of MRO contract value, making the current tax structure financially burdensome and reducing global competitiveness.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Accumulation of ITC due to inverted duty structure
 - Higher cost of ship repair compared to global competitors
 - Working capital blockage for shipyards
 - Differential GST rates on input services and materials
 - Lack of concessional GST treatment for OEM-related services
 - Reduced attractiveness of Indian ship repair yards for global clients
-

Chapter V: Past Policies of the Government and Their Efficacy

The introduction of concessional GST rates (5%) for ship repair services was a positive step aimed at promoting the MRO sector. However, the absence of alignment with input tax rates has limited the effectiveness of this policy.

Chapter VI: Current Policies of the Government & Their Efficacy

Current GST provisions:

- Provide concessional output tax rate (5%)
- Do not extend similar benefits to input materials and services
- Result in accumulation of ITC without adequate refund mechanisms

This leads to increased operational costs and reduced competitiveness of Indian ship repair yards.

Chapter VII: Discussions with Stakeholders

Stakeholders across the MRO ecosystem have highlighted:

- Need for uniform GST rates across inputs and outputs
 - Inclusion of all services (including OEM services) under concessional GST
 - Removal of anomalies causing ITC accumulation
 - Policy alignment with global best practices
-

Chapter VIII: Views of Domain Experts

Experts in maritime economics and taxation emphasise that:

- Tax neutrality is essential for service-based industries like MRO
 - Uniform taxation enhances competitiveness and attracts global business
 - Eliminating ITC accumulation improves liquidity and operational efficiency
-

Chapter IX: National & Global Best Practices

Globally, maritime hubs:

- Maintain uniform tax rates for inputs and outputs
- Ensure seamless credit flow without accumulation
- Provide tax incentives to promote MRO activities

Dubai, for example, applies a **uniform 5% tax rate** across all MRO-related inputs and services, ensuring cost efficiency and global competitiveness.

Chapter X: Suggested Policies

6. Uniform GST Rate Implementation

- Apply a **uniform GST rate of 5%** on all input materials and services used in ship repair/MRO

7. Inclusion of OEM Services

- Extend concessional GST rate (5%) to installation, commissioning, and other OEM-related services

8. Elimination of ITC Accumulation

- Align input and output tax rates to remove inverted duty structure

9. Simplification of GST Framework

- Provide clear guidelines for classification and applicability of GST rates in MRO activities

10. Enhancing Competitiveness

- Align India's GST framework with global maritime hubs to attract international ship repair business

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake necessary amendments in the GST framework to ensure uniform taxation of all inputs and outputs in the ship repair and MRO sector at a rate of **5%**.

Such reforms will:

- Eliminate accumulation of input tax credit
- Reduce operational costs for shipyards
- Improve liquidity and working capital efficiency
- Enhance India's competitiveness as a global MRO hub
- Support the broader objectives of *MAKV 2047*

Addressing these structural tax inefficiencies is essential for unlocking the full potential of India's ship repair industry and positioning the country as a preferred destination for global maritime services.

NSB Proposal & Recommendation – 10

Promoting Indigenous Ship Design and Engineering Capabilities in India

Chapter I: Introduction

India has articulated an ambitious roadmap for maritime growth under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, with the objective of emerging as one of the top global shipbuilding nations. While significant progress is being made in shipyard capacity and construction capabilities, the development of indigenous ship design and engineering remains a critical pillar for achieving self-reliance and global competitiveness.

Chapter II: Statement of the Problem

The Indian shipbuilding industry currently lacks sufficient indigenous design capabilities, particularly for large and complex vessels. Dependence on foreign design houses—primarily European—continues to persist, limiting technological advancement, increasing project costs, and constraining the industry’s ability to compete globally.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations, particularly in Europe, have well-established design ecosystems supported by strong R&D funding, innovation incentives, and decades of expertise.

In India, existing design houses are primarily engaged in basic and detailed design of smaller vessels such as barges, ferries, tugs, and dredgers. Capability for designing large, complex vessels compliant with international efficiency standards remains limited.

Chapter IV: Present Status & Challenges Faced by Stakeholders

- Limited number of established Indian ship design firms
 - Dependence on foreign design houses for advanced vessel design
 - Lack of access to advanced design software and tools
 - Absence of adequate model testing facilities (e.g., tank testing)
 - Limited compliance capabilities for global standards such as EEDI
 - Shortage of skilled manpower in ship design engineering
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives have primarily focused on shipbuilding capacity and financial support to shipyards. While these measures have strengthened construction capabilities, limited emphasis has been placed on developing indigenous design ecosystems and R&D infrastructure.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks support shipbuilding growth but do not adequately address:

- Development of design capabilities
- Access to shared R&D infrastructure
- Incentivisation of indigenous design usage

As a result, the design segment remains underdeveloped relative to construction capacity.

Chapter VII: Discussions with Stakeholders

Industry stakeholders, including shipyards and design firms, have highlighted:

- Urgent need for government-backed design infrastructure
 - Requirement for financial incentives to promote indigenous design
 - Need for capacity building in advanced design and compliance capabilities
 - Importance of skill development initiatives
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Design capability is a strategic differentiator in shipbuilding
 - Indigenous design reduces dependency and enhances value addition
 - Investment in R&D and testing infrastructure is critical
 - Skill development is essential for long-term sustainability
-

Chapter IX: National & Global Best Practices

Globally, leading maritime nations:

- Provide strong R&D funding and innovation grants
- Support shared infrastructure such as model testing facilities
- Offer incentives for use of domestic design firms
- Promote skill development through specialised training programs

These practices have enabled sustained leadership in ship design and innovation.

Chapter X: Suggested Policies

7. Creation of Design Infrastructure (Software Bank)

- Establish a government-supported **design software bank** accessible to Indian designers at nominal cost

8. Development of Model Testing Facilities

- Set up **tank model testing facilities** to support design validation and compliance with international standards

9. Incentivising Use of Indigenous Design

- Provide **additional financial assistance (3–5%)** to shipyards using Indian design firms
 - Introduce a **sunset clause** (10–15 years) for such incentives
 - 10. Subsidy for Design Tools**
 - Offer **50% subsidy** on procurement of advanced design software by Indian design houses
 - 11. Export Incentives for Design Services**
 - Introduce a scheme similar to **Service Exports from India Scheme (SEIS)** to promote export of design services
 - 12. Skill Development Initiatives**
 - Introduce **ship design-specific courses** in ITIs and diploma institutions
 - Develop a pipeline of skilled designers and technical professionals
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government implement a comprehensive policy framework to promote indigenous ship design and engineering capabilities through infrastructure development, financial incentives, and skill development initiatives.

Such measures will:

- Reduce dependence on foreign design houses
- Enhance value addition within India
- Strengthen innovation and R&D capabilities
- Improve global competitiveness of Indian shipbuilding
- Support the objectives of *Atmanirbhar Bharat*, *MIV 2030*, and *MAKV 2047*

Promoting indigenous design capabilities is essential for transforming India into a globally competitive shipbuilding hub and achieving long-term strategic and economic objectives.

NSB Proposal & Recommendation – 11

Policy Paper on Avoidance of Low-Height Bridges over Inland Waterways to Promote Shipping & Shipbuilding

Chapter I: Introduction

India's maritime sector is a key pillar of economic growth under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*. Inland waterways are increasingly being promoted as a cost-effective, sustainable, and efficient mode of transportation. However, infrastructure planning—particularly bridge construction over navigable rivers—must align with long-term maritime objectives. The issue of low-height bridges has emerged as a critical constraint impacting inland navigation and shipbuilding activities.

Chapter II: Statement of the Problem

The construction of **low vertical clearance bridges** over navigable rivers is significantly restricting vessel movement, adversely affecting inland water transport (IWT) and shipbuilding operations.

A specific instance is the proposed **Borim Bridge over the Zuari River in Goa**, with a planned clearance of approximately **14 meters above High Tide Level (HTL)**. Such limited clearance is inadequate for the safe passage of many vessels, thereby creating long-term operational bottlenecks.

Chapter III: Present Status of the Issue (Global & National)

Global Scenario

Globally, countries with advanced inland waterway systems ensure **adequate vertical and horizontal clearances** in bridge design to accommodate current and

future vessel requirements. Infrastructure is planned in an integrated manner to support navigation growth.

National Scenario (India)

India is actively developing inland waterways through the Inland Waterways Authority of India (IWAI). However, instances of **low-height bridge construction across state rivers** continue to emerge, reflecting gaps in coordination between infrastructure planning and maritime requirements.

The Borim Bridge case highlights this disconnect, where navigation needs appear secondary to road infrastructure planning.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key Stakeholders:

- Shipyards and shipbuilders
- Inland vessel operators
- Coastal and riverine logistics providers
- State governments and infrastructure agencies

Challenges:

- Restricted vessel movement due to low bridge clearance
 - Inability to design/build larger or efficient vessels
 - Increased operational risks and navigation constraints
 - Reduced economic viability of inland waterways
 - Long-term impact on shipyard order books and investments
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has undertaken significant initiatives such as:

- Development of National Waterways
- Promotion of inland water transport

- Investments under Sagarmala and related programmes

However, **lack of integrated planning between bridge construction and navigation requirements** has limited the effectiveness of these policies in certain regions.

Chapter VI: Current Policies of the Government & Their Efficacy

Current frameworks support inland waterways development, but:

- There is **no uniform national standard** mandating minimum navigational clearance for bridges
- Coordination between **MoPSW, IWAI, and State Governments** remains limited
- Project approvals do not consistently factor in **future vessel size and traffic growth**

As a result, infrastructure is sometimes created that **restricts, rather than enables, navigation**.

Chapter VII: Discussions with Stakeholders

Stakeholders, including the Shipyards Association of India (SAI), have highlighted:

- The need to avoid low-height bridges on navigable waterways
- Importance of aligning infrastructure with maritime growth projections
- Requirement for mandatory consultation with maritime authorities before approvals

The representation forwarded by the Ministry reflects these industry concerns .

Chapter VIII: Present Status & Challenges Faced by the Stakeholders

The issue leads to broader sectoral challenges:

- **Reduced competitiveness** of inland waterways
 - **Design limitations** for new vessels
 - **Underutilisation of shipyard capacity**
 - **Discouragement of private investment**
 - Long-term **economic inefficiencies in logistics chains**
-

Chapter IX: Views of Domain Experts

Domain experts emphasize that:

- Bridge clearance must be planned based on **future navigation needs**, not current minimal requirements
 - Retrofitting or modifying bridges later is **costly and impractical**
 - Integrated planning between transport modes is essential for sustainable infrastructure development
-

Chapter X: National & Global Best Practices to Resolve the Issue

Best practices include:

- Mandatory **navigation clearance standards** for bridges
 - Integrated infrastructure planning involving maritime authorities
 - Use of **movable/span bridges** where required
 - Long-term forecasting of vessel sizes and traffic
 - Regulatory frameworks ensuring **no obstruction to navigable waterways**
-

Chapter XI: Suggested Policies

7. **Minimum Navigational Clearance Standards**
 - Establish national guidelines for vertical and horizontal clearance for all bridges over navigable waterways
8. **Mandatory Stakeholder Consultation**

- Require consultation with IWAI, MoPSW, and industry bodies before project approval
 - 9. Integrated Planning Framework**
 - Align bridge construction with inland waterway development plans
 - 10. Review of Ongoing Projects**
 - Reassess projects like Borim Bridge to ensure adequate navigational clearance
 - 11. Future-Proof Infrastructure Design**
 - Design bridges considering long-term vessel growth and traffic expansion
 - 12. Regulatory Oversight Mechanism**
 - Introduce a central approval system for infrastructure impacting navigable waterways
-

Chapter XII: Final Policy Recommendation to Achieve MAKV-2047 Goal

It is recommended that the Government adopt a **holistic and forward-looking policy framework** to ensure that infrastructure development over inland waterways does not hinder maritime growth.

Avoiding low-height bridges and ensuring adequate navigational clearance will:

- Enable efficient inland water transport
- Support shipbuilding growth
- Attract private investment
- Reduce logistics costs
- Strengthen India's position as a maritime nation

Such measures are essential to achieve the objectives of **Maritime Amrit Kaal Vision 2047** and to ensure that infrastructure development complements, rather than constrains, India's maritime ambitions.

Policy Paper on Addressing Low-Height Bridge Constraints for Inland Waterways and Shipbuilding Growth

Chapter I: Introduction

India's maritime sector is undergoing a transformational phase under flagship initiatives such as **Sagarmala** and **PM Gati Shakti**, aimed at enhancing multimodal connectivity, strengthening logistics efficiency, and promoting shipbuilding infrastructure. Inland Water Transport (IWT) is a critical pillar of this vision, offering cost-effective, sustainable, and efficient cargo movement.

The Shipyards Association of India (SAI), representing a wide network of shipbuilding and ship repair entities, is actively contributing to this national objective by expanding shipyard capacities, including investments in hinterland regions. However, infrastructure constraints—particularly low-height bridges over navigable rivers—pose a significant barrier to achieving these goals.

Chapter II: Statement of the Problem

The construction of low-height bridges across state rivers, especially in coastal and hinterland regions, is severely restricting:

- Navigation of inland vessels
- Movement of larger ships for shipbuilding and repair
- Development of new shipyards in upstream locations

A key example is the **Netravati River in Mangalore, Karnataka**, where ongoing and planned low-clearance bridge construction under urban development initiatives is adversely impacting the viability of shipbuilding and inland waterway operations.

Chapter III: Present Status of the Issue Under Consideration (Globally and Nationally)

Global Scenario

Globally, maritime nations prioritize navigational clearance in bridge design across inland waterways. Countries such as:

- The Netherlands
- Germany
- China

have adopted advanced engineering solutions such as movable bridges, vertical lift bridges, and high-clearance fixed bridges to ensure seamless vessel movement.

National Scenario (India)

India has made significant strides through:

- Sagarmala Programme
- Inland Waterways Authority of India (IWAI) initiatives
- National Waterways development

However, a lack of standardized guidelines for bridge clearance across state-controlled rivers has resulted in fragmented planning, leading to navigational bottlenecks.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key Challenges

- **Shipyards:** Restricted access for larger vessels, limiting expansion and investment viability
- **Logistics Operators:** Increased costs due to modal shifts and inefficiencies
- **State Governments:** Balancing urban infrastructure with long-term maritime growth
- **Investors:** Reduced confidence due to regulatory and infrastructure uncertainties

Specific Case: Netravati River

- Low-height bridges under the Smart Cities Mission in Mangalore
 - Direct impact on potential shipyard development
 - Obstruction to inland navigation and cargo movement
-

Chapter V: Past Policies of the Government and Their Efficacy

Historically, infrastructure development in India has been sector-specific rather than integrated. Bridge construction projects have largely focused on:

- Road connectivity
- Urban mobility

without adequate consideration of:

- Navigational requirements
- Maritime growth potential

This has led to sub-optimal outcomes in regions with inland waterway potential.

Chapter VI: Current Policies of the Government & Their Efficacy

Key Policies

- **Sagarmala Programme**
- **PM Gati Shakti National Master Plan**
- **Smart Cities Mission**

Assessment

While these policies emphasize integrated infrastructure development, there is:

- Limited inter-ministerial coordination
 - Lack of enforceable design standards for navigational clearance
 - Inadequate alignment between urban development and maritime priorities
-

Chapter VII: Discussions with Stakeholders

SAI has engaged with:

- Member shipyards

- Industry experts
- Logistics stakeholders

Key Insights

- Strong willingness among shipyards to invest in hinterland expansion
 - Consensus on the need for navigationally compliant bridge infrastructure
 - Demand for policy clarity and financial support mechanisms
-

Chapter VIII: Views of Domain Experts

Experts in maritime infrastructure and inland waterways emphasize:

- Adoption of **minimum vertical clearance standards** for bridges
- Integration of **navigation impact assessments** in project approvals
- Use of **innovative bridge technologies** (e.g., bascule, swing, lift bridges)

They also highlight that early-stage planning interventions are significantly more cost-effective than retrofitting infrastructure.

Chapter IX: National & Global Best Practices to Resolve the Issue

Global Best Practices

- Mandatory navigational clearance norms
- Centralized regulatory oversight
- Use of smart and movable bridge technologies

National Opportunities

- Development of uniform guidelines through MoPSW
 - Integration with IWAI planning frameworks
 - Leveraging Sagarmala funding for maritime-aligned infrastructure
-

Chapter X: Suggested Policies

- | | | | |
|---|-----------|---------------------|-----------------------|
| 6. Issuance | of | National | Guidelines |
| Standardize minimum navigational clearance for bridges across all navigable rivers | | | |
| 7. Mandatory | | Clearance | Assessment |
| Introduce navigation impact assessment as part of project approvals | | | |
| 8. Promotion | of | Advanced | Bridge Designs |
| Encourage openable, lift, or high-clearance bridges | | | |
| 9. Financial | | | Incentives |
| Provide funding support under Sagarmala and Gati Shakti for compliant bridge construction | | | |
| 10. Inter-Ministerial | | Coordination | Framework |
| Establish coordination between MoPSW, MoHUA, and State Governments | | | |
-

Chapter XI: Final Policy Recommendations to Achieve MAKV-2047 Goal

To realize India's Maritime Amrit Kaal Vision (MAKV-2047), it is imperative to:

- **Immediately review and redesign low-height bridges**, particularly over the Netravati River in Mangalore
- **Issue directives to Smart City authorities** to align infrastructure with maritime priorities
- **Facilitate shipyard expansion in hinterland regions** by ensuring navigational access
- **Institutionalize maritime considerations in all infrastructure planning frameworks**

SAI reiterates its commitment to supporting the Government with technical expertise, feasibility assessments, and design recommendations to ensure that infrastructure development aligns with national maritime ambitions.

NSB Proposal & Recommendation – 12

Deregulation and Policy Interventions for the Shipbuilding Sector

Chapter I: Introduction

The shipbuilding sector is central to India's maritime ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047*, which aim to position India among the top global shipbuilding nations. While policy initiatives have supported growth, regulatory complexities, fragmented governance, and procedural inefficiencies continue to constrain competitiveness, investment, and timely project execution. A comprehensive deregulation framework is therefore essential.

Chapter II: Statement of the Problem

The Indian shipbuilding ecosystem is characterised by:

- Multiple overlapping approvals and licensing requirements
- Complex environmental and land clearance processes
- High compliance burden and regulatory fragmentation
- Inefficient customs and import procedures
- Limited access to finance and infrastructure incentives

These issues collectively increase project timelines, costs, and uncertainty, reducing India's attractiveness as a global shipbuilding hub.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading shipbuilding nations operate under streamlined regulatory frameworks with:

- Single-window clearance systems
- Simplified licensing regimes
- Strong institutional coordination
- Export-oriented and investor-friendly policies

In contrast, India's shipbuilding sector operates within a multi-agency regulatory environment, resulting in delays and inefficiencies.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Key challenges include:

- Delays due to multiple approvals from central and state authorities
 - Stringent environmental and CRZ compliance requirements
 - Lack of uniform land leasing policies
 - Limited access to affordable credit
 - Customs delays and import licensing complexities
 - High compliance burden and absence of unified governance
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives such as financial assistance schemes and infrastructure recognition have supported shipbuilding growth. However, regulatory reforms have not kept pace, limiting the effectiveness of these initiatives in improving ease of doing business.

Chapter VI: Current Policies of the Government & Their Efficacy

Existing frameworks involve multiple ministries and regulatory bodies, resulting in:

- Fragmented governance
- Procedural delays
- High compliance costs

While sectoral policies are progressive, their implementation is constrained by regulatory bottlenecks.

Chapter VII: Discussions with Stakeholders

Stakeholders across shipyards, industry associations, and service providers have consistently highlighted:

- Need for a unified regulatory framework
 - Simplification of approvals and licensing
 - Reduction in compliance burden
 - Streamlining of customs and import processes
 - Policy alignment to support investment and exports
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Regulatory efficiency is critical for global competitiveness
 - Institutional coordination must be strengthened
 - Digitalisation and self-certification can reduce compliance burden
 - Policy certainty and transparency are essential for investment
-

Chapter IX: National & Global Best Practices

Global shipbuilding hubs adopt:

- Integrated single-window clearance systems
- Pre-approved industrial zones with environmental clearances
- Liberalised import and export regimes
- Dedicated maritime authorities
- Simplified tax and compliance frameworks

These practices significantly reduce project timelines and costs.

Chapter X: Suggested Policies

1. Statutory and Licensing Framework

- Establish a **National Maritime Single-Window Portal** integrating all approvals
- Introduce a **Unified Shipyard Operating Licence**
- Enable **fully digital vessel registration and certification**
- Delegate minor vessel registration to **State Maritime Boards/classification societies**
- Implement a **unified safety and labour compliance code** with self-certification

2. Land, Infrastructure, and Environmental Clearances

- Notify **Shipyard Development Zones (SDZs)** with pre-approved clearances
- Simplify **CRZ norms** for shipbuilding and repair activities
- Provide **deemed approvals** for dredging and berth expansion within designated zones
- Standardise **land lease policies** across ports
- Introduce **fast-track approvals** for brownfield expansion

3. Financial and Taxation Measures

- Implement an **automatic digital Shipbuilding Financial Assistance Scheme**
- Classify shipbuilding under **priority sector lending**
- Exempt **critical shipbuilding inputs** from customs duty
- Recognise shipbuilding as a **manufacturing activity with full ITC eligibility**
- Provide **tax incentives for domestic shipbuyers**

4. Capacity Expansion, Technology, and Exports

- De-license **non-defence marine equipment manufacturing**
 - Allow **automatic approval for foreign joint ventures** in non-strategic areas
 - Grant **infrastructure status to shipyards**
 - Treat export shipbuilding contracts as **deemed exports**
 - Allow **repair yard conversion through self-declaration**
-

5. Institutional and Governance Reforms

- Establish a **National Shipbuilding Authority (NSA)** as a nodal body
 - Enable **digital self-certification with risk-based audits**
 - Set up a **Maritime Arbitration Centre**
 - Develop a **single maritime data integration platform**
-

6. Import Licensing and Customs Procedures

- Adopt a **negative list approach** for import licensing
 - Introduce **project-based master import authorisations**
 - Allow **duty deferment** for shipbuilding imports
 - Grant **Authorized Economic Operator (AEO) status** to shipyards
 - Provide **zero-duty and fast-track clearance for green technologies**
-

7. Reforms in Gas Cylinder Rules, 2016

- Permit **type-approval-based clearance** of gas cylinders, similar to other equipment
- Exempt **non-toxic, non-flammable cylinders (up to 200 units)** from licensing if class-approved
- Recognise firefighting systems as **integrated components** of shipbuilding
- Eliminate redundant PESO licensing where **international class approvals exist**
- Ensure faster customs clearance to avoid delays in vessel delivery and exports

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government undertake a comprehensive deregulation initiative for the shipbuilding sector, focusing on simplification, digitalisation, and institutional integration.

Such reforms will:

- Reduce project timelines and compliance burden
- Enhance ease of doing business
- Improve cost competitiveness of Indian shipyards
- Attract domestic and foreign investment
- Strengthen export capabilities
- Accelerate achievement of *MAKV 2047* targets

A coordinated and time-bound implementation of these measures will be instrumental in transforming India into a globally competitive shipbuilding hub.

NSB Proposal & Recommendation – 13

Safeguarding Indigenous Marine Gearbox Manufacturing under Aatmanirbhar Bharat

Chapter I: Introduction

India's maritime ambitions under *Maritime India Vision 2030* and *Maritime Amrit Kaal Vision (MAKV) 2047* are closely aligned with national initiatives such as *Aatmanirbhar Bharat*, *Make in India*, and *Vocal for Local*. While significant progress has been made in shipbuilding and maritime infrastructure, the sustainability of critical component manufacturing—particularly marine propulsion systems like marine gearboxes—remains a matter of strategic importance.

Chapter II: Statement of the Problem

The indigenous marine gearbox manufacturing sector is currently facing severe challenges due to **unregulated and underpriced imports**, particularly from China. These imports, often priced below fair market value, are displacing domestic manufacturers, resulting in loss of competitiveness and threatening the survival of this strategic industry.

Chapter III: Present Status of the Issue (Global & National)

Globally, leading maritime nations actively protect and promote their domestic marine equipment industries through policy support, subsidies, and tariff measures.

In India, despite a large and growing maritime sector supported by initiatives such as Sagarmala and inland waterways development, the domestic marine gearbox manufacturing ecosystem remains limited, with only a few capable players. This

sector is increasingly vulnerable due to import pressures and structural cost disadvantages.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Stakeholders in the indigenous manufacturing ecosystem face:

- Aggressive price undercutting by imported gearboxes
 - High domestic production costs (GST burden, electricity tariffs, raw materials, labour compliance, financing costs)
 - Lack of tariff safeguards and policy protection
 - Declining order books and underutilisation of manufacturing capacity
 - Increasing difficulty in sustaining skilled workforce and supply chains
-

Chapter V: Past Policies of the Government and Their Efficacy

Government initiatives under *Make in India* and *Aatmanirbhar Bharat* have encouraged domestic manufacturing and investment. However, the absence of sector-specific protective measures for marine equipment manufacturing has limited the effectiveness of these policies in safeguarding critical component industries.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks support shipbuilding and maritime infrastructure but lack targeted interventions for component manufacturing such as marine gearboxes. As a result:

- Domestic manufacturers remain exposed to unfair competition
 - No dedicated incentives or protection mechanisms exist
 - Import dependency continues to rise
-

Chapter VII: Discussions with Stakeholders

Stakeholders, including shipyards, manufacturers, and industry associations, have highlighted:

- Urgent need for tariff and non-tariff safeguards
 - Requirement for financial and fiscal support mechanisms
 - Need for policy alignment to support ancillary industries
 - Importance of creating a robust domestic ecosystem for marine components
-

Chapter VIII: Views of Domain Experts

Experts emphasise that:

- Marine propulsion systems are strategic assets for maritime nations
 - Loss of indigenous manufacturing capability can create long-term supply chain vulnerabilities
 - Balanced trade policies are essential to ensure fair competition
 - Supporting MSMEs in critical sectors is vital for economic resilience
-

Chapter IX: National & Global Best Practices

Globally, countries with strong maritime industries:

- Impose anti-dumping duties and safeguard measures
 - Provide production-linked incentives and subsidies
 - Support domestic manufacturers through tax benefits and concessional utilities
 - Develop integrated policies covering both shipbuilding and component manufacturing
-

Chapter X: Suggested Policies

6. Tariff and Trade Measures

- Impose **appropriate customs/safeguard duties** on imported marine gearboxes
 - Initiate **anti-dumping investigations** where pricing distortions are evident
 - 7. Financial Incentives**
 - Introduce a **Production Linked Incentive (PLI)** scheme or targeted capital subsidies
 - Provide **GST rationalisation or refund mechanisms** for domestic manufacturers
 - 8. Cost Competitiveness Support**
 - Extend **concessional power tariffs** to marine equipment manufacturing units
 - Reduce cost disadvantages through policy support
 - 9. Institutional Mechanisms**
 - Constitute a **High-Level National Committee** to address issues of the marine equipment ecosystem
 - Ensure coordinated inter-ministerial action
 - 10. Ecosystem Development**
 - Formulate a **National Small Craft & Coastal Vessel Policy** integrating indigenous component manufacturing
 - Strengthen ancillary industries and MSME clusters
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government adopt a comprehensive policy framework to safeguard and promote indigenous marine gearbox manufacturing through targeted tariff measures, financial incentives, and ecosystem development initiatives.

Such interventions will:

- Protect domestic manufacturing capacity
- Preserve skilled employment and MSME ecosystems
- Reduce import dependency and enhance supply chain resilience
- Strengthen India's maritime industrial base
- Align with national initiatives such as *Aatmanirbhar Bharat* and *MAKV 2047*

Timely and decisive policy action is critical to prevent irreversible erosion of this strategic sector and to ensure that India's maritime growth is supported by a strong and self-reliant industrial ecosystem.

NSB Proposal and Recommendation- 14

Policy Intervention on Import of Second-Hand Vessels to Promote Domestic Shipbuilding

Chapter I: Introduction

This proposal draws attention to a significant policy gap that is adversely affecting the growth of India's shipbuilding sector.

The sustained efforts of the Ministry of Ports, Shipping and Waterways (MoPSW) in promoting domestic shipbuilding, strengthening maritime infrastructure, and positioning India as a global maritime hub are commendable. These initiatives are well aligned with the Government's long-term vision under Maritime India Vision (MIV) 2030 and Maritime Amrit Kaal Vision (MAKV) 2047.

However, certain prevailing practices—most notably the unregulated import of second-hand vessels—are diluting the impact of these initiatives and call for urgent policy intervention.

Chapter II: Statement of the Problem

The unrestricted import of old/second-hand vessels into India has emerged as a major impediment to the growth of domestic shipbuilding.

India is increasingly becoming a destination for ageing and environmentally inefficient vessels. This trend not only raises environmental concerns, including increased carbon emissions, but also significantly reduces demand for new vessels built in Indian shipyards.

As a result, the domestic industry faces reduced order inflow, underutilization of capacity, and limited incentives for technological advancement and green transition.

Chapter III: Present Status of the Issue (Global and National)

Global

Scenario:

Leading shipbuilding nations such as China, South Korea, and Japan have implemented protective and promotional measures to safeguard their domestic industries. These include import restrictions, fiscal incentives, and strong regulatory frameworks to discourage the use of outdated vessels.

National

Scenario:

In India, there are currently no stringent restrictions on the import of second-hand vessels, particularly in the segment below 6000 GT. Shipowners continue to prefer importing older vessels due to their lower upfront cost, despite the availability of domestic shipbuilding capability.

This has led to a distortion in market dynamics, adversely impacting Indian shipyards—especially MSME and mid-sized yards.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Shipyards:

- Declining order books, particularly in the small vessel segment
- Underutilized infrastructure and workforce
- Limited investment in modernization and green technologies

Shipowners:

- Preference for low-cost imports over long-term efficiency
- Lack of incentives to procure domestically built vessels

Ancillary Industries:

- Reduced demand affecting component manufacturers and service providers
- Slower growth of the maritime supply chain ecosystem

Government:

- Difficulty in achieving capacity expansion and employment generation targets
 - Environmental concerns due to older vessel operations
-

Chapter V: Past Policies of the Government and Their Efficacy

The Government has introduced several initiatives to promote shipbuilding, including:

- Shipbuilding Financial Assistance Policy (SBFAP)
- Infrastructure status for shipyards
- Ease of Doing Business reforms

While these measures have provided a positive impetus, their impact is being diluted due to parallel inflow of cheaper imported vessels, which offsets domestic demand creation.

Chapter VI: Current Policies of the Government & Their Efficacy

Current policy frameworks under MIV 2030 and MAKV 2047 aim to:

- Increase shipbuilding capacity to 10 million CGT
- Position India among the top 5 shipbuilding nations globally

However, the absence of import regulation for second-hand vessels remains a significant policy gap, limiting the effectiveness of these initiatives.

Chapter VII: Discussions with Stakeholders

SAI has held extensive consultations with:

- Member shipyards
- Industry stakeholders
- Regulatory bodies

There is a unanimous concern regarding the adverse impact of second-hand vessel imports, particularly in the sub-6000 GT segment, which constitutes a major portion of domestic shipbuilding capability.

Chapter VIII: Views of Domain Experts

Industry experts have emphasized that:

- Protectionist measures are essential during the growth phase of domestic industries
 - Encouraging new builds over imports leads to long-term economic and environmental benefits
 - Green and energy-efficient vessels should be prioritized to meet global sustainability commitments
-

Chapter IX: National & Global Best Practices

Globally, successful shipbuilding nations have adopted:

- Age restrictions on vessel imports
- Higher import duties on second-hand vessels
- Mandatory compliance with stringent environmental norms
- Incentives for domestic procurement

These practices have ensured sustained growth of domestic shipbuilding industries while maintaining environmental standards.

Chapter X: Suggested Policy Measures

In light of the above, the following measures are proposed:

a) Formulation and immediate implementation of comprehensive policy guidelines for vessel imports in consultation with the Directorate General of Shipping (DGS) and industry stakeholders.

- b) Prohibition of import of second-hand/older vessels below 6000 GT for commercial operations in Indian territorial waters and Exclusive Economic Zone (EEZ).
 - c) Restriction on import of new vessels below 6000 GT, permitting them only for critical national or strategic projects.
 - d) Introduction of deterrent measures such as higher import duties on vessels to protect domestic shipbuilding.
 - e) Alignment of these measures with national visions under MIV 2030 and MAKV 2047.
-

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

To realize the vision of MAKV 2047 and establish India as a leading global shipbuilding nation, it is imperative to ensure a level playing field for domestic shipyards.

Immediate policy intervention to regulate and restrict the import of second-hand vessels—particularly in the sub-6000 GT segment—is essential. This will:

- Stimulate domestic demand
- Enable capacity utilization and expansion
- Promote job creation and ancillary industry growth
- Accelerate adoption of green and sustainable technologies

A decisive and timely policy action will not only safeguard the interests of the domestic shipbuilding industry but also reinforce India's commitment to becoming a self-reliant and globally competitive maritime nation.

NSB Proposal & Recommendation – 15

Domestic Procurement of Shipbuilding Grade Steel

Chapter I: Introduction

The Government of India has accorded high priority to the development of the shipbuilding sector under flagship initiatives such as **Make in India**, **Maritime India Vision (MIV) 2030**, and **Maritime Amrit Kaal Vision (MAKV) 2047**, with the objective of positioning India among the world's leading shipbuilding nations. To support this vision, the Ministry of Ports, Shipping and Waterways (MoPSW) has introduced several policy initiatives, including the Shipbuilding Financial Assistance Scheme (SBFAS) and demand aggregation for indigenous shipbuilding.

However, the success of these initiatives is critically dependent on the availability of internationally competitive shipbuilding-grade steel. At present, Indian private shipyards continue to face significant challenges in sourcing domestic shipbuilding steel that meets international quality standards, certification requirements, commercial expectations, and delivery schedules. These constraints adversely impact project costs, export competitiveness, indigenous value addition, and timely execution of domestic shipbuilding programmes.

Chapter II: Statement of the Problem

Indian shipyards continue to depend heavily on imported shipbuilding-grade steel, particularly from South Korea, for construction of technologically advanced vessels and export orders.

Although domestic steel manufacturers possess significant production capacity, they are presently unable to consistently provide:

- Internationally accepted quality standards;
- Required IACS-approved certifications;
- Competitive pricing;
- Appropriate plate sizes and grades;
- Reliable delivery schedules; and

- Flexible commercial terms suited to project-based shipbuilding.

Consequently, Indian shipyards are compelled to import steel despite the Government's emphasis on promoting indigenous manufacturing and increasing domestic content.

Chapter III: Present Status of the Issue (Global & National)

Globally, major shipbuilding nations such as **South Korea, China and Japan** have developed integrated ecosystems wherein domestic steel manufacturers work closely with shipyards to ensure availability of internationally certified shipbuilding-grade steel at globally competitive prices.

In India, demand for shipbuilding steel is expected to increase substantially. MoPSW has already aggregated demand for nearly **437 vessels**, with procurement processes already underway for several projects while many more tenders are expected shortly.

Unless domestic steel manufacturers are able to meet the technical and commercial requirements of shipyards, import dependence is likely to increase even for Government-supported domestic projects. This would adversely affect indigenous manufacturing objectives and weaken India's ambition of becoming a global shipbuilding hub.

Chapter IV: Present Status & Challenges Faced by Stakeholders

Major private shipyards have reported the following challenges while procuring domestic shipbuilding-grade steel:

- **Price Disadvantage**

Domestic shipbuilding steel remains costlier than imported alternatives even after considering customs duties and freight. The absence of long-term or index-linked pricing mechanisms significantly affects competitiveness, particularly for fixed-price export contracts.

- **Inconsistent Product Quality**

Frequent variations in mechanical properties, dimensional accuracy, surface finish and flatness result in higher rejection rates, increased rework and production delays. Availability of high-tensile grades such as AH36, DH36 and EH36 also remains inconsistent.

- **Thickness Tolerance**

Indian steel mills generally manufacture plates with broader thickness tolerances. To avoid negative tolerance rejection under classification rules, plates are rolled towards the upper tolerance limits, resulting in approximately **6–7% additional structural weight**, thereby increasing steel consumption, construction cost and reducing vessel deadweight capacity.

- **Limited Plate Dimensions**

Domestic mills offer limited plate sizes and are generally unwilling to supply project-specific quantities or smaller lots. This adversely affects nesting efficiency, increases wastage and often necessitates redesign of structural components.

- **Certification Limitations**

Most domestic mills do not possess comprehensive approvals from all major IACS Classification Societies such as DNV, ABS, LR, BV, NK, KR and others. Export shipowners frequently insist upon these approvals, making imported steel the only practical option.

- **Unreliable Supply Chain**

Lead times remain unpredictable and domestic mills often prioritize larger industrial sectors over shipbuilding, resulting in supply delays and exposure of shipyards to contractual penalties.

- **Restrictive Commercial Practices**

High Minimum Order Quantities (MOQ), advance payment requirements and the absence of standard return or replacement policies for defective material impose significant financial burdens, particularly on MSME and medium-sized shipyards.

Chapter V: Past Policies of the Government and Their Efficacy

The Government has consistently promoted indigenous shipbuilding through initiatives such as:

- Shipbuilding Financial Assistance Scheme (SBFAS);
- Make in India;
- Maritime India Vision 2030;

- Maritime Amrit Kaal Vision 2047;
- Promotion of indigenous content; and
- Demand aggregation of vessels by MoPSW.

These initiatives have considerably improved order visibility for Indian shipyards and encouraged domestic manufacturing. However, corresponding development of a globally competitive domestic supply chain for shipbuilding-grade steel has not kept pace with policy objectives.

Chapter VI: Current Policies of the Government & Their Efficacy

The present policy framework encourages higher indigenous content in shipbuilding and aims to achieve approximately **40% domestic value addition** under SBFAS.

However, domestic steel manufacturers continue to face challenges in supplying internationally compliant shipbuilding steel. Consequently, shipyards remain dependent upon imports to satisfy contractual obligations relating to quality, classification approvals and delivery schedules.

Unless the steel supply ecosystem is strengthened, the objectives of SBFAS and indigenous manufacturing may not be fully realised.

Chapter VII: Discussions with Stakeholders

Shipyards Association of India (SAI) has held detailed consultations with its member shipyards including:

- Chowgule Shipbuilding Division;
- L&T Shipbuilding; and
- SWAN Defence & Heavy Industries (SDHI).

The Association has also participated in stakeholder discussions convened by MoPSW and interacted with the Indian Steel Association (ISA).

The consultations highlighted a broad consensus that improving domestic availability of internationally compliant shipbuilding-grade steel requires coordinated action involving MoPSW, Ministry of Steel, Indian steel manufacturers, Indian Register of Shipping (IRS), Indian Steel Association (ISA), and the shipbuilding industry.

Chapter VIII: Views of Domain Experts

Industry experts have observed that:

- Shipbuilding-grade steel requires significantly tighter manufacturing tolerances than conventional structural steel.
 - International classification approvals are essential for export shipbuilding.
 - Competitive steel pricing is a decisive factor in winning international shipbuilding contracts.
 - Stable domestic steel availability is critical for achieving India's long-term shipbuilding targets under MAKV-2047.
 - Without strengthening domestic steel capabilities, India's dependence on imported steel is likely to continue despite policy support.
-

Chapter IX: National & Global Best Practices

Leading shipbuilding nations have adopted integrated policies that include:

- Dedicated production facilities for shipbuilding-grade steel.
- Close collaboration between steel manufacturers and shipyards.
- Comprehensive IACS certification across product ranges.
- Competitive long-term pricing mechanisms.
- Flexible supply contracts with project-based quantities.
- Reliable just-in-time delivery systems.

Adoption of similar practices would substantially improve India's competitiveness in global shipbuilding.

Chapter X: Suggested Policies

SAI recommends that MoPSW take up the following measures with the Ministry of Steel and domestic steel manufacturers:

- Improve product quality in accordance with IACS Unified Requirements and international shipbuilding standards.
- Expand production of approved high-tensile grades and thicker plates.

- Establish transparent and internationally competitive index-linked pricing mechanisms.
- Rationalize duties and taxes/GST issues to ensure parity between domestic and imported steel for export projects.
- Create a dedicated certification facilitation mechanism with IRS for obtaining approvals from all major IACS Classification Societies.
- Develop a comprehensive catalogue of pre-approved shipbuilding steel grades.
- Reserve dedicated mill capacity for shipbuilding-grade steel.
- Promote long-term framework agreements between steel producers and shipyards.
- Introduce a MoPSW-led demand aggregation mechanism for shipbuilding steel, so that annual steel demands are aggregated & promulgated for Steel yards to plan their production accordingly.
- Standardize commercial terms covering reasonable MOQs, payment schedules and mandatory return/replacement provisions for defective material.

Chapter XI: Final Policy Recommendation to Achieve MAKV-2047 Goals

It is recommended that the Government constitute a **Joint Working Group (JWG)** comprising representatives from:

- Ministry of Ports, Shipping and Waterways (MoPSW);
- Ministry of Steel;
- Indian Steel Association (ISA);
- Domestic steel manufacturers;
- Indian Register of Shipping (IRS); and
- Shipyards Association of India (SAI).

The Joint Working Group may be mandated to prepare and implement a time-bound roadmap for strengthening India's domestic shipbuilding steel ecosystem.

Implementation of these recommendations will:

- Enhance confidence of Indian shipyards in procuring domestically manufactured shipbuilding-grade steel.
- Improve cost competitiveness of Indian shipyards in domestic and export markets.
- Facilitate compliance with indigenous content requirements under SBFAS.
- Strengthen India's shipbuilding supply chain.
- Reduce dependence on imported shipbuilding steel.

- Support successful execution of the aggregated demand for approximately **437 vessels**.
- Promote the objectives of **Make in India, Atmanirbhar Bharat, Maritime India Vision 2030**, and **Maritime Amrit Kaal Vision 2047**, thereby positioning India as a globally competitive shipbuilding nation.

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PART IV
Subcommittee Report No.3

Sub-Committee No. 3

Title:

To prepare a roadmap for Promotion of the Ship Recycling Industries in India to achieve MAKV-2047 Goals

Chairperson: Shri Rahul B. Modi

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PREFACE BY THE CHAIRMAN OF THE SUB-COMMITTEE



Rahul Modi President CCTA

Following the constitution of the Ship Recycling Sub-Committee by the National Shipping Board (NSB) on May 15, 2026, this report outlines a focused strategy to balance commercial growth, environmental rigor, and labor welfare across Indian ship recycling.

Consultations with yard owners, maritime authorities, and worker organizations notably the Alang Sosiya Ship Recycling & General Workers’ Association (ASSRGWA) underscored a critical reality: workforce stability and welfare are vital to long-term industry resilience. While yards have made great strides in infrastructure and Hong Kong Convention (HKC) compliance, equal priority must now be given to formal employment contracts, fair compensation, housing, and transparent downstream waste tracking.

Rather than viewing recycling as isolated dismantling, we must evaluate it as a complete ecosystem. To overcome market cycles and global regulatory pressures, India must shift from individual yard compliance to cluster-wide assured performance. Global shipowners and financiers should be able to verify through a single, transparent chain that every vessel is recycled safely, sustainably, and ethically.

This report offers an actionable blueprint defining clear legal, operational, and financial steps to position Alang and Sachana as benchmark global hubs for green ship recycling.

My sincere thanks to all Sub-Committee members and stakeholders for their invaluable contributions.

Rahul B. Modi
Chairman Sub-Committee on Promotion of Ship Recycling Industries
National Shipping Board

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Finally, we acknowledge the frontline workforce of Alang, whose labor remains the bedrock of India's ship recycling sector.

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LIST OF ABBREVIATIONS

Abbreviation	Full Form
ASSRGWA	Alang Sosiya Ship Recycling & General Workers Association
DASR	Document of Authorization to conduct Ship Recycling
DWT	Deadweight Tonnage
EU SRR	European Union Ship Recycling Regulation
GMB	Gujarat Maritime Board
HKC	Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
IHM	Inventory of Hazardous Materials
ILO	International Labour Organization
LDT	Light Displacement Tonnage
MoEFCC	Ministry of Environment, Forest and Climate Change
MoLE	Ministry of Labour and Employment
MoPSW	Ministry of Ports, Shipping and Waterways
OSH	Occupational Safety and Health
PPE	Personal Protective Equipment
SRFP	Ship Recycling Facility Plan
SRP	Ship Recycling Plan
TSDF	Treatment, Storage and Disposal Facility

EXECUTIVE SUMMARY

India should adopt a National Sustainable Ship Recycling Mission for 2026–2030, designed around five inseparable pillars: legal compliance, globally credible environmental performance, worker-centred employment, commercial competitiveness and circular-economy value.

- Treat post-HKC implementation as a national competitiveness programme, with consistent authorisation, inspection, reporting and enforcement across recycling locations.
- Create a chain-of-custody system from IHM and ship-specific recycling plan through each hazardous and non-hazardous waste stream to its final authorised destination.
- Link the shipbreaking credit-note mechanism and future financial support to verified compliance, timely worker payments, safety performance and transparent downstream disposal.
- Establish a sector-specific workforce framework covering appointment letters or digitally verifiable engagement records, wage transparency, skill grading, continuity benefits, insurance, health surveillance, grievance redress and portable social security.
- Build cluster-level common facilities emergency response, testing, decontamination, temporary hazardous-waste storage, training, worker accommodation and health support so smaller compliant yards are not excluded.
- Pursue EU-SRR recognition through a coordinated India facility-readiness programme, without representing recognition as automatic or substituting it for full regulatory assessment by the European Commission.
- Convert recovered steel and equipment into higher-value circular products through certification, testing, digital material passports, transparent auctions and stronger linkage with Indian shipbuilding and infrastructure.
- Create one national digital platform for vessel arrival, IHM, SRP approval, DASR status, incident reporting, waste manifests, recovered-material outputs and worker credentials.

Priority Actions for the First 180 Days

- ✓ **Constitute an empowered National Sustainable Ship Recycling Mission chaired by MoPSW with MoEFCC, MoLE, State Maritime Boards, CPCB/SPCBs, DG Shipping, industry and worker representation.**
- ✓ **Notify a uniform post-HKC inspection and reporting protocol and publish the list and current status of authorized facilities.**
- ✓ **Launch a digital waste-manifest and downstream-vendor verification pilot at Alang–Sossiya.**
- ✓ **Undertake an independently validated workforce census and employment-condition baseline, including trained-worker retention.**
- ✓ **Issue a model worker engagement letter/record, wage slip, safety passport and benefit-continuity framework after legal vetting.**
- ✓ **Create an India EU-SRR readiness cell to coordinate gap assessments, evidence rooms and corrective-action tracking.**
- ✓ **Operationalize or strengthen cluster emergency response and occupational-health services with response-time standards.**
- ✓ **Design a verified recycled-steel traceability and quality pilot with BIS, steel producers and downstream users.**

CHAPTER I: INTRODUCTION, MANDATE AND METHOD

1.1 Mandate:

The Sub-Committee was constituted to examine the present status, constraints and future pathway of ship recycling in India, with particular attention to India’s international obligations, yard competitiveness, safety and environmental performance, worker welfare, downstream waste management and the potential contribution of the sector to a circular maritime economy.

1.2 Scope:

The review covers end-of-life vessel acquisition; statutory acceptance and certification; IHM and ship-specific planning; yard authorisation; cutting and material handling; emergency preparedness; worker engagement, safety and social protection; hazardous and non-hazardous waste; recovered steel and equipment; finance, insurance and tax interfaces; digital systems; international recognition; and governance.

1.3 Method and Evidence Discipline:

The report combines national and international legal instruments, published government information, maritime-board material, IMO and ILO guidance, and stakeholder submissions. Quantitative stakeholder claims that could not be independently verified are identified as such and recommended for baseline validation. The report does not treat certification, application for recognition or infrastructure expenditure as proof of continuing outcome compliance.

CHAPTER II: INDIA’S SHIP-RECYCLING ECOSYSTEM

2.1 Strategic Importance:

Ship recycling recovers large volumes of ferrous and non-ferrous material, machinery, fixtures and reusable equipment while creating industrial and service employment. Alang–Sosiya is India’s principal cluster. Gujarat Maritime Board states that 153 plots have been developed along approximately 10 km of coast. Official public material also highlights substantial direct and indirect livelihood linkages; such estimates should be periodically reconciled through a transparent methodology.

2.2 Strengths and Constraints:

Issue	Current Status / Impact	Recommended Solution
Cluster scale and experience	India possesses deep operational experience, supply networks and a large market for recovered materials. Performance and documentation, however, may vary across yards and downstream vendors.	Adopt cluster-wide minimum performance standards, common services and a public compliance dashboard.
Cyclical vessel availability	Recycling volumes depend on global freight markets, steel prices, cash-buyer dynamics, exchange rates and competing destinations.	Create market intelligence, risk-management support and predictable working-capital channels linked to verified compliance.
Multiple regulators	Maritime, environment, labour, customs, port, police, fire and local bodies interact with a single vessel and yard.	Create a single digital case file and risk-based joint inspection protocol without diluting statutory responsibility.

Uneven regional development	Alang dominates national capacity; other locations have different infrastructure, tidal, environmental and market conditions.	Develop location-specific feasibility and compliance plans; do not replicate a cluster model without environmental and economic assessment.
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2.3 Vision 2030:

By 2030, every ship recycled in India should be traceable from pre-arrival documentation to final material and waste destination; every worker should have a verifiable skill, engagement, wage and safety record; every authorised facility should meet uniform outcome standards; and India should be recognised as a preferred destination for safe, transparent and resource-efficient recycling.

CHAPTER III: LEGAL AND INTERNATIONAL COMPLIANCE FRAMEWORK

3.1 Hong Kong Convention:

The HKC entered into force on 26 June 2025. It covers ship design and operation, preparation for recycling, operation of recycling facilities, and enforcement through surveys, certification, authorisation, inspection and reporting. Ships destined for recycling require an International Ready for Recycling Certificate and an IHM; authorised facilities require a DASR and a facility plan, while each vessel requires a ship-specific SRP.

3.2 Indian Framework:

India enacted the Recycling of Ships Act, 2019 and notified the Recycling of Ships Rules, 2021. Post-entry into force, administrative systems should be reviewed for full alignment with treaty reporting, certificate verification, no-more-favourable-treatment principles where relevant, and consistent enforcement across jurisdictions.

3.3 Basel and Transboundary-Waste Interface:

The interaction between ships as vessels, end-of-life decisions, hazardous materials and transboundary-waste controls can be legally complex. Government should issue coordinated, publicly accessible guidance that explains documentary expectations without weakening either maritime or environmental obligations.

Issue	Current Status / Impact	Recommended Solution
Uniform post-HKC implementation	Different interpretations or inspection depth can create compliance and commercial uncertainty.	MoPSW should issue a national implementation manual, checklists and auditor competency requirements, updated when IMO guidance changes.
Integrity of IHM and SRP	Poor inventories or generic plans transfer risk to workers and downstream systems.	Require accredited/competent preparation, document sampling, material-specific work packages and non-conformity closure before cutting.

Authorisation continuity	A certificate may not reflect day-to-day performance after issue.	Use risk-based surveillance, incident-triggered audits and transparent suspension/restoration procedures.
Regulatory overlap	Duplicative or uncoordinated checks can increase delay without improving outcomes.	Use a common digital evidence room and coordinated inspection calendar while retaining each authority’s statutory powers.

CHAPTER IV: SHIP ACQUISITION, FINANCE AND SUPPLY COMPETITIVENESS

4.1 Commercial Context:

Vessel acquisition is capital intensive and time sensitive. Purchase price is influenced by LDT, steel and non-ferrous content, fuel and stores, hazardous-material profile, towage or voyage cost, currency, taxes, payment security and the expected sale value of recovered outputs. Compliance expenditure must be priced into bidding rather than treated as a residual cost.

4.2 Policy Direction:

The modified Shipbuilding Financial Assistance Scheme guidelines provide for a Shipbreaking Credit Note for eligible vessels scrapped in India. Implementation should be simple, time-bound and digitally verifiable, while guarding against double benefit, paper-only transactions and weak downstream compliance.

Issue	Current Status / Impact	Recommended Solution
Working capital	High-value vessel purchases and volatile recovery values expose recyclers to liquidity and price risk.	Develop bankable standard due-diligence packs, compliance-linked credit products and partial risk support through eligible maritime-finance mechanisms.
Foreign exchange and payment	Currency movement between bid and payment can alter viability.	Enable transparent hedging access and standard banking guidance for compliant acquisitions.
Credit-note usability	A credit note has value only if transfer, validity, redemption and audit rules are predictable.	Publish an online registry, clear lifecycle, service standards, anti-fraud checks and grievance mechanism.
Unequal cost of compliance	High-quality yards may be undercut by facilities with weak safety or waste practices.	Tie public incentives, finance and shipowner outreach to verified outcome compliance, not only certificate possession.

Vessel supply pipeline	Limited visibility makes workforce and yard planning difficult.	Create a non-confidential market dashboard of global ageing fleet, domestic government/PSU disposals and expected recycling demand.
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4.3 Government and PSU Vessels:

Disposal tenders for government and PSU vessels should evaluate lawful recycling, worker safety, downstream traceability and time-bound completion alongside price. A model green-disposal clause should require IHM quality, authorised-yard use, milestone reporting and access to records.

CHAPTER V: YARD INFRASTRUCTURE, TECHNOLOGY AND OPERATIONAL SAFETY

5.1 From Infrastructure to Outcomes:

Infrastructure upgrades are essential but must be paired with operating discipline. Impermeable working areas, drainage, lifting equipment, access control, fire systems, gas-free controls and spill response should be tested through use, inspection and records. Common cluster infrastructure can reduce the cost burden on smaller yards while improving emergency preparedness.

Issue	Current Status / Impact	Recommended Solution
Primary cutting and material control	Uncontrolled hot work, falling objects, confined spaces and unstable structures remain inherent high-consequence risks.	Mandate vessel-specific cutting sequences, competent-person permits, exclusion zones, gas testing, lifting plans and stop-work authority.
Emergency response	Response capability may differ by plot, shift and incident type.	Establish cluster response centres, 24x7 communication, mapped access, equipment readiness and periodic multi-agency drills with published response KPIs.
Competency	Training attendance does not establish task competence or retention.	Introduce role-based certification, practical assessment, refresher cycles and a portable digital safety passport.
Contractor control	Multiple intermediaries can blur safety responsibility.	Make the authorised facility accountable for contractor onboarding, supervision, wages/records and safety performance within the statutory framework.
Technology adoption	Mechanisation can reduce exposure but may displace or deskill workers if poorly planned.	Support lifting, remote cutting, material scanning and digital permits alongside reskilling and job-transition plans.

Incident learning	Under-reporting prevents system-wide prevention.	Create confidential near-miss reporting, mandatory serious-incident investigation, anonymised learning bulletins and corrective-action closure tracking.
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5.2 Common Facility Priorities:

- Occupational health and trauma care with referral protocols.
- Fire, rescue, confined-space and spill-response capability.
- Calibration, gas-testing and equipment-inspection services.
- Temporary secure storage and sampling for hazardous materials.
- Practical training centre using task simulations.
- Testing and grading facilities for recovered steel and equipment.

CHAPTER VI: ENVIRONMENT, HAZARDOUS MATERIALS AND DOWNSTREAM TRACEABILITY

6.1 Whole-Chain Responsibility:

Safe recycling does not end when a material leaves the plot. Asbestos, oils, sludge, paints, ozone-depleting substances, batteries, electrical and electronic waste, contaminated residues and other controlled streams require identification, segregation, secure storage, transport and treatment through authorised routes. Data should reconcile estimated IHM quantities, actual recovered quantities, dispatch manifests, transporter details and destination acceptance.

Issue	Current Status / Impact	Recommended Solution
IHM-to-waste reconciliation	Differences between estimated and actual material are not always visible in one system.	Create material balance sheets with reason codes, photographs, weighment, manifests and final acceptance certificates.
Downstream vendor assurance	A valid authorisation alone may not prove current capacity or lawful final treatment.	Maintain a live approved-vendor registry with capacity, validity, inspections, GPS-linked movement and exception alerts.
Interim storage	Hazardous waste may accumulate during operational or downstream disruption.	Set category-wise storage limits, compatibility rules, secondary containment and escalation triggers.
Air, water and soil performance	Point-in-time testing may not capture operational variation.	Adopt risk-based continuous/periodic monitoring, calibrated instruments, public aggregate disclosure and corrective thresholds.
Legacy contamination	Historic operations may have created liabilities beyond current plot boundaries.	Undertake phased site assessment, risk mapping and a polluter-pays/remediation funding framework following legal review.
Reusable equipment	Reuse is environmentally beneficial but unsafe or undocumented equipment can transfer risk.	Introduce testing, decontamination, grading, labelling and buyer disclosure standards.

6.2 Digital Waste Passport:

A digital waste passport should assign a unique identity to each vessel and link the IHM, SRP, material-recovery records, transport manifest and final treatment certificate. The platform should allow regulator access, audit trails and data correction with reasons, while protecting legitimate commercial information.

CHAPTER VII: CIRCULAR ECONOMY, RECOVERED MATERIALS AND GREEN STEEL

7.1 Value Beyond Scrap:

The sector should be positioned as a source of traceable secondary raw materials, components and equipment. Higher value requires verified origin, contamination control, testing, dimensional and metallurgical grading, and reliable buyer information. Linkages with domestic shipbuilding, repair, infrastructure and MSME manufacturing can retain more value within India.

Issue	Current Status / Impact	Recommended Solution
Recovered steel quality	Material is often traded primarily by weight and visual category.	Develop BIS-supported sampling, grade certification and digital lot records for suitable applications.
Green claims	Unverified claims of avoided emissions can reduce credibility.	Develop a conservative, independently reviewable lifecycle methodology and prohibit double counting.
Equipment reuse	Machinery and components may retain value but lack standard condition reports.	Create authorised inspection, functional grading, decontamination and warranty-disclaimer protocols.
Market transparency	Fragmented auctions and information asymmetry may reduce value recovery.	Enable transparent digital auctions and market-price indices while preserving competition.
Design for recycling	Indian shipbuilding and recycling operate as separate policy domains.	Create feedback from recyclers to ship designers on material marking, IHM maintenance and modular recovery.

7.2 Circular-Economy Certification:

India may develop a voluntary ‘Verified Circular Ship Recycling’ mark that sits above minimum legal compliance. It should be awarded by an independent, accredited mechanism on the basis of worker, environmental, material-traceability and governance outcomes, and should never substitute for statutory

authorization.

CHAPTER VIII: SUSTAINABLE EMPLOYMENT, DECENT WORK AND COMMUNITY WELFARE

8.1 Stakeholder Representation:

ASSRGWA (Alang Sossiya Ship Recycling & General Workers’ Association) has represented that workers face irregular employment, low or uncertain wages, inadequate living conditions and social-security gaps despite the hazardous and physically demanding nature of ship recycling. It has called for regular employment opportunity, living wages, improved service conditions, gratuity, pension, insurance, healthcare, appointment letters, transparent records, migrant housing and education facilities, and a long-term workforce-retention mechanism.

The representation further states that nearly 1.5 lakh workers have been trained over time, while yards continue to recruit and train workers repeatedly. This numerical estimate is recorded as a stakeholder-submitted figure and should be validated through a workforce census and training-record reconciliation. The policy concern loss of trained personnel and repeated retraining merits immediate attention irrespective of the final number.

8.2 Decent Work as a Compliance and Competitiveness Requirement:

ILO shipbreaking guidance calls for employment contracts and coverage under compensation and social-protection arrangements. HKC facility planning expressly covers worker safety and training. EU-SRR readiness also requires credible evidence regarding safe operations and waste management. Stable, skilled and protected workers are therefore fundamental to production reliability, safety performance and international market access.

Issue	Current Status / Impact	Recommended Solution
Employment identity and records	Informal or layered engagement can make tenure, wage, skill and benefit records difficult to verify.	Require an appointment letter or legally valid digital engagement record, unique worker ID, wage slip, attendance, skill grade and employer/contractor responsibility map.

Employment continuity	Vessel-cycle gaps create irregular work and attrition.	Create a cluster labour pool, cross-yard skill portability, maintenance/training work during gaps and continuity benefits based on cumulative sector service.
Wages	Risk, skill and task complexity may not be consistently reflected.	Commission a tripartite wage study; define transparent skill grades, hazard/task allowances where legally appropriate, overtime controls and direct payment.
Social security	Migrant and mobile workers may lose continuity or awareness of benefits.	Ensure eligible enrolment and portability across EPFO / ESIC / e-Shram / insurance / pension frameworks; provide assisted facilitation and periodic reconciliation.
Health surveillance	Acute injuries and long-latency occupational disease require different systems.	Baseline, periodic and exit medical examinations; exposure-linked records; referral; confidentiality; and long-term retention of records.
Housing and community services	Inadequate accommodation, sanitation, transport and family support contribute to attrition.	Create audited rental housing/hostels, potable water, sanitation, transport, primary health and education facilitation through converged schemes and shared funding.
Grievance and worker voice	Fear of job loss may suppress safety or wage complaints.	Independent multilingual grievance channels, non-retaliation, worker safety committees, time-bound resolution and escalation.
Training quality	Repeated classroom training may not build or retain competence.	Practical role assessment, paid refresher training, recognition of prior learning and employer incentives tied to retention and safe performance.

8.3 PROPOSED SHIP-RECYCLING WORKERS’ WELFARE AND RETENTION FRAMEWORK

- Independent baseline within six months: active workers, contractors, skill categories, origin, tenure, training history, wage bands, benefit coverage, housing and health access.
- Portable Ship Recycling Worker ID and safety passport, interoperable across authorised facilities.
- Tripartite board or standing council with government, employer and worker representation.
- Sector welfare fund design after actuarial and legal review, using a transparent contribution basis and audited utilisation.
- Minimum service package: documented engagement, timely bank payment, PPE without wage deduction, insurance/compensation facilitation, medical surveillance, safe drinking water, sanitation and transport.
- Annual public aggregate report on employment, retention, training, injuries, occupational health, grievances and welfare delivery.

CHAPTER IX: INTERNATIONAL MARKET ACCESS AND EU-SRR READINESS

9.1 Distinct Regulatory Pathways:

HKC compliance and EU-SRR inclusion are related but distinct. Facilities located outside the EU must apply to the European Commission and demonstrate compliance with the requirements applicable to third-country facilities. Applications by Indian facilities and readiness work should be coordinated, but no report should describe a facility as EU-listed until it appears in the operative European List.

Issue	Current Status / Impact	Recommended Solution
Evidence consistency	Individual yards may maintain different formats and levels of proof.	Create a standard EU-readiness evidence index, document-control protocol and independent gap assessment.
Downstream chain	International evaluation extends beyond visible yard infrastructure.	Demonstrate end-destination legality, capacity, traceability, residual handling and audit rights for every relevant waste stream.
Labour and safety evidence	Policies without implementation records are insufficient.	Maintain worker engagement, training, permits, exposure, incident, medical and corrective-action records with privacy protection.
National advocacy	Uncoordinated applications may duplicate effort and leave systemic gaps unanswered.	Establish an India EU-SRR Readiness Cell with industry participation while preserving independent facility accountability.
Shipowner confidence	Owners need reliable pre-contract due diligence and post-completion reporting.	Offer a standard owner assurance pack, secure data room, milestone reports and recycling completion statement.

9.2 International Engagement:

India should use IMO, bilateral maritime dialogues, shipowner forums and technical cooperation to communicate verified improvements, seek mutual learning and address regulatory fragmentation. Outreach should be evidence-led and should publish both achievements and time-bound corrective work.

CHAPTER X: INSTITUTIONAL GOVERNANCE, DATA AND TRANSPARENCY

10.1 National Sustainable Ship Recycling Mission:

A mission-mode structure should connect policy, enforcement, infrastructure, finance, labour welfare, international recognition and circular-economy markets. MoPSW should act as the nodal ministry, with formal roles for MoEFCC, MoLE, Ministry of Steel, Ministry of Finance, DG Shipping, State Maritime Boards, pollution-control authorities, port/customs agencies, industry, workers and technical bodies.

10.2 One Vessel–One Digital Record:

The national platform should not become another data-entry layer. It should reuse verified data and maintain one vessel identity from application to recycling completion. Access should be role-based, changes auditable and aggregate outcomes publicly disclosed.

Issue	Current Status / Impact	Recommended Solution
Fragmented information	Regulators and stakeholders hold separate records with limited reconciliation.	Create interoperable records and APIs with defined data ownership, retention and privacy rules.
Inspection quality	Checklist completion may overshadow risk and outcome.	Accredit inspectors/auditors, rotate high-risk assignments, use photo/geotag evidence and audit audit-quality itself.
Public confidence	Absence of comparable data enables both exaggeration and reputational attacks.	Publish facility status, serious incidents, waste destinations, aggregate workforce coverage and corrective-action performance.
Grievance escalation	Commercial, worker and community issues may move between authorities.	Create a single intake portal with automatic routing, statutory timelines and appeal visibility.

Policy learning	Support schemes may continue without verified additionality.	Use baseline, counterfactual where feasible, periodic independent evaluation and sunset/renewal clauses.
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CHAPTER XI: PRIORITIZED IMPLEMENTATION ROADMAP

No.	Action	Lead Responsibility	Timeline	Priority
1	Constitute National Sustainable Ship Recycling Mission	MoPSW with concerned ministries/states	0–3 months	Highest
2	Issue uniform post-HKC implementation and inspection manual	MoPSW / DG Shipping / State Maritime Boards	0–6 months	Highest
3	Workforce census and employment-condition baseline	MoLE / State Labour Dept. / GMB / tripartite partners	0–6 months	Highest
4	Digital waste-manifest and approved-vendor registry pilot	MoEFCC / CPCB / GPCB / GMB	0–6 months	Highest
5	Model worker engagement, wage and safety record	MoLE / State / industry / worker bodies	0–6 months	Highest
6	EU-SRR readiness cell and standard evidence framework	MoPSW / GMB / industry	0–6 months	High
7	Cluster emergency and occupational-health service standards	GMB / State / industry	0–12 months	Highest
8	Shipbreaking credit-note digital registry and service standard	MoPSW / implementing agency	0–12 months	High
9	One Vessel–One Digital Record platform	MoPSW / DG Shipping / NIC / States	6–18 months	High
10	Portable worker ID, safety passport and benefit facilitation	MoLE / State / GMB / industry	6–18 months	Highest
11	Recovered-steel testing and traceability pilot	Ministry of Steel / BIS / industry	6–18 months	High

12	Common hazardous-material and testing facilities	GMB / State / industry / PPP	6–24 months	High
13	Worker housing, transport, health and education convergence	State / local bodies / industry / MoLE	6–36 months	High
14	Expand proven systems to other recycling locations	MoPSW / State Maritime Boards	18–36 months	Medium–High
15	Independent programme evaluation and 2030 strategy refresh	NSB / MoPSW / independent institution	24–36 months	High

11.1 Phase I – Immediate (0–6 months):

- Establish governance and baselines.
- Close post-HKC procedural gaps.
- Begin worker and downstream digital pilots.
- Create EU-readiness support and emergency-service standards.

11.2 Phase II – Short Term (6–18 months):

- Operationalise digital vessel records and portable worker credentials.
- Deploy cluster common services.
- Link finance/incentives with verified performance.
- Launch steel and equipment traceability.

11.3 Phase III – Medium Term (18–36 months):

- Scale successful systems nationally.
- Complete welfare and community infrastructure convergence.
- Publish independently verified performance trends.
- Refresh policy based on measured outcomes and international developments.

CHAPTER XII: MONITORING, OUTCOMES AND CORE RECOMMENDATIONS

12.1 Core Performance Areas:

Area	Illustrative Measurement	Frequency
Legal compliance	DASR validity, surveillance findings, closure time, certificate discrepancies	Quarterly
Safety	Fatalities, lost-time injuries, near misses, permit compliance, emergency response time	Monthly
Workforce	Active workers, retention, documented engagement, timely wages, skill certification	Quarterly
Social protection	Eligible coverage and successful benefit continuity/facilitation	Half-yearly
Occupational health	Medical surveillance coverage, exposure records, referrals	Half-yearly
Environment	IHM recovery reconciliation, manifest completion, monitoring exceptions	Monthly
Downstream	Authorised destinations, capacity verification, rejected/exception loads	Monthly
Circularity	Material recovery by class, certified steel/equipment lots, disposal residual	Quarterly
Commercial	Vessels/LDT recycled, cycle time, credit-note processing, finance cost	Quarterly
International readiness	Gap closure, applications, owner audits, recognition status	Quarterly

12.2 Fifteen Core Recommendations:

No.	Recommendation
R1	Launch a National Sustainable Ship Recycling Mission for 2026–2030.
R2	Adopt one uniform post-HKC implementation, authorisation and inspection framework.
R3	Create One Vessel–One Digital Record from IHM to recycling completion.

R4	Mandate end-to-end hazardous-material and downstream waste traceability.
R5	Establish common cluster emergency, health, testing and waste-support facilities.
R6	Complete a verified national workforce and training-retention baseline.
R7	Implement documented engagement, wage transparency and portable worker records.
R8	Strengthen social-security portability, insurance, health surveillance and grievance redress.
R9	Develop worker housing, sanitation, transport, healthcare and family-support convergence.
R10	Link public incentives and maritime finance to verified safety, labour and environmental performance.
R11	Operationalise a transparent, time-bound Shipbreaking Credit Note registry.
R12	Create an India EU-SRR Readiness Cell and standard evidence framework.
R13	Certify and trace suitable recovered steel, equipment and circular materials.
R14	Publish comparable facility and cluster performance indicators with privacy safeguards.
R15	Commission independent evaluation and refresh the strategy every three years.

12.3 Expected Outcomes:

- Lower fatality and injury risk, improved emergency readiness and stronger safety culture.
- Higher retention of trained workers and improved livelihood security.
- Credible chain-of-custody for hazardous materials and downstream waste.
- Greater shipowner, financier and regulator confidence in Indian facilities.
- Higher-value use of recovered steel, equipment and materials.
- Reduced regulatory duplication through interoperable evidence.
- Improved access to international markets based on verified performance.

CHAPTER XIII: CONCLUSION AND WAY FORWARD

India has the industrial base, experience and market depth to lead the next generation of global ship recycling. Leadership after 26 June 2025 will be determined not only by the number or tonnage of ships recycled, but by the quality and credibility of each outcome: how workers are engaged and protected, how risks are controlled, how materials are traced, how waste is finally managed, and how openly performance is demonstrated.

The worker representation received by the Sub-Committee is not peripheral to this agenda. Repeated training alongside persistent attrition signals a possible loss of human capital and safety capability. A sustainable industry must offer a credible livelihood pathway as well as a compliant yard. Employment records, wages, social protection, occupational health, housing and worker voice should therefore form a measurable pillar of the national strategy.

The recommended approach is practical: establish governance and baselines immediately; standardise post-HKC implementation; digitise the vessel, worker and waste chain; strengthen common facilities; support commercial viability through performance-linked mechanisms; and pursue international recognition with evidence. Implementation should be reviewed quarterly and reported annually to the National Shipping Board.

ANNEXURES

Annexure A: Consolidated Recommendation Matrix

Theme	Key Action	Lead	Timeline	Success Signal
Governance	National Mission and joint protocol	MoPSW	0–3m	Approved mandate and quarterly dashboard
Compliance	Uniform HKC manual and surveillance	MoPSW / DG Shipping / States	0–6m	Consistent findings and closure
Workers	Census and documented engagement	MoLE / State / GMB	0–6m	Verified baseline and standard record
Workers	Portable ID and benefit facilitation	MoLE / GMB / Industry	6–18m	Coverage and retention improve
Safety	Cluster emergency and health services	State / GMB / Industry	0–12m	Response and surveillance KPIs met
Environment	Digital manifest and vendor registry	MoEFCC / CPCB / GPCB	0–12m	IHM-to-destination reconciliation
Finance	Credit-note registry and compliant finance	MoPSW / Finance ecosystem	0–12m	Time-bound processing
EU access	Readiness cell and gap closure	MoPSW / GMB / Industry	0–18m	Auditable complete evidence
Circularity	Steel/equipment testing and traceability	Steel Ministry / BIS	6–18m	Certified lots and higher value

Transparency	Annual independent ly reviewed report	Mission / NSB	12m onward	Comparable verified outcomes
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Annexure B: Suggested Performance Indicators

Indicator	Definition / Measurement
Authorised capacity	Current DASR-authorised plots and approved capacity, excluding suspended/expired status
Recycling output	Ships and LDT completed, with vessel type and cycle time
Serious safety events	Fatalities, lost-time injuries and high-potential incidents using consistent definitions
Emergency readiness	Drill completion, equipment availability and response time
Worker record coverage	Share of active workers with verified engagement, wage, skill and safety record
Retention	Share of trained workers active after 12 and 24 months, by skill
Wage timeliness	Share paid fully and on time through traceable channels
Social-security facilitation	Eligible workers successfully linked and continuity exceptions resolved
Health surveillance	Share receiving risk-based baseline and periodic examinations
IHM reconciliation	Variance between listed/estimated and recovered controlled materials with reasons
Downstream closure	Share of controlled waste with final authorised acceptance evidence
Monitoring compliance	Air/water/soil exceptions and corrective closure time
Material recovery	Ferrous, non-ferrous, equipment, reusable and residual fractions by weight
Credit-note service	Median processing time, pendency and rejection reasons
Grievance performance	Cases by type, resolution time, appeal and retaliation allegations

Annexure C: Model Worker Welfare & Employment Framework

The following is a policy framework for tripartite consultation and legal vetting; it is not a substitute for applicable central or state labor law.

Element	Minimum Proposed Record / Service
Identity	Unique worker ID; verified name, age, contact, nominee and migration/home-state details with consent
Engagement	Employer/contractor identity, start date, role, skill grade, wage basis, work location and grievance contact
Payment	Attendance, wage calculation, overtime/allowance, deduction basis and bank-payment record
Competence	Induction, task certification, practical assessment, refresher due date and authorisations
Safety	PPE issue, medical fitness relevant to task, exposure, permit roles and stop-work awareness
Social protection	Eligibility and facilitation status for statutory and approved schemes; exception resolution
Health	Baseline/periodic/exit surveillance, exposure linkage, referral and confidential record retention
Continuity	Cumulative sector service across participating yards and applicable continuity benefit
Housing/welfare	Accommodation, sanitation, drinking water, transport, canteen and family-service access
Voice	Worker committee participation, multilingual grievance, non-retaliation and appeal
Exit	Final dues, service/skill record, benefit portability and medical-record access process

Annexure D: Summary of ASSRGWA Representation

Subject: Sustainable employment and decent service conditions for workers in the ship-breaking industry at Alang.

Following the virtual meeting of the NSB Ship Recycling Committee held on 15 May 2026, ASSRGWA resubmitted concerns regarding irregular employment, wages, living conditions and social-security protection. It emphasised that HKC implementation and future EU-SRR competitiveness require equal attention to workers as the backbone of the industry.

The Association requested policy-level action on:

1. Sustainable and regular employment with decent living wages commensurate with hazardous work.
2. Improved working and service conditions aligned with national labour law and international standards.
3. Stronger social security, including gratuity, pension, insurance, healthcare and welfare schemes.
4. Appointment letters and transparent employment records.
5. Housing, healthcare and educational facilities for migrant workers and families.
6. Institutional mechanisms for long-term workforce retention and welfare.

The Sub-Committee’s response is reflected principally in Chapter VIII, the implementation roadmap, Recommendations R6–R9 and Annexure C. The reported training figure should be validated, but validation should not delay immediate measures on documentation, safety, wage transparency, health and benefit facilitation.

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- ✓ Ministry of Ports, Shipping and Waterways, Maritime Amrit Kaal Vision 2047.
- ✓ Ministry of Ports, Shipping and Waterways, modified guidelines for the Shipbuilding Financial Assistance Scheme, including Shipbreaking Credit Note provisions.
- ✓ Gujarat Maritime Board, published information on Alang–Sosiya Ship Recycling Yard and Vision 2047.
- ✓ Regulation (EU) No 1257/2013 on ship recycling and European Commission guidance for third-country facility applications.
- ✓ International Labour Organization, Safety and Health in Shipbreaking: Guidelines for Asian Countries and Türkiye.
- ✓ ASSRGWA representation submitted after the NSB Ship Recycling Committee virtual meeting of 15 May 2026.
- ✓ Stakeholder inputs received from NSB Members and industry representatives listed in this report.

Evidence notes: Public statistics and facility / worker counts should be refreshed against the latest official administrative records before final adoption. Applications for international recognition must not be described as approvals until formally notified by the competent authority.

PART V
Subcommittee Report No.4

Sub-Committee No. 4

Title:

To prepare a roadmap for resolution of Seafarers' issues including increasing share of Indian seafarers in the global shipping market to achieve MAKV-2047 Goals (incl. examination, recruitment, training, curriculum reforms)

Chairperson: Shri Rakesh Singh

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PREFACE BY THE CHAIRPERSON OF THE SUB COMMITTEE



Rakesh Singh President ICCSA

With around 18% of the world's population and a median age of just over 29 years, India possesses a demographic advantage that is the envy of many nations. Coupled with a well-established network of maritime training institutions, a proactive regulatory framework, and a workforce recognised globally for its technical competence and proficiency in the English language, India has all the essential attributes to be the world's leading supplier of seafarers. Yet, despite these strengths, India ranks behind the Philippines, Indonesia, the Russian federation, and China in terms of the proportion of seafarers in its population. This Sub-Committee has examined the domestic constraints that limit India's potential, as well as the growing competition from other seafarer-supplying nations.

The participation of Indian women in the maritime profession also remains significantly below the global average. The cruise and coastal shipping sectors have been identified as offering the greatest potential for increasing women's employment in maritime careers. The Sub-Committee has examined the underlying social factors, prevailing misconceptions, and lack of awareness that contribute to this gender disparity, and has proposed measures to foster greater inclusion and participation.

At the same time, Indian seafarers serving on both Indian and foreign-flagged vessels continue to encounter avoidable difficulties at Indian ports. Their fundamental right to shore leave is frequently denied or unduly restricted on the grounds of security concerns. Similarly, embarkation and disembarkation procedures remain unnecessarily cumbersome, time-consuming, and expensive. Despite repeated representations from industry stakeholders and trade

associations, these longstanding concerns have yet to receive an adequate policy response.

Another matter of serious concern is the disproportionate number of Indian nationals among abandoned seafarers worldwide. More than 70% of all abandoned seafarers globally are reported to be Indian nationals. Recognising the gravity of this issue, the Sub-Committee has proposed measures to strengthen the Recruitment and Placement Services Licence (RPSL) regime, with the objective of minimising the exploitation of Indian seafarers and enhancing accountability within the recruitment process.

The Sub-Committee has also examined the existing gaps in the training, examination, certification, and career progression of seafarers. It recommends measures to ensure an adequate supply of competent seafarers for both the domestic and international markets without compromising quality standards.

Furthermore, as the shipping industry undergoes a transformative shift towards decarbonisation, automation, and digitalisation, the report emphasises the need to equip Indian seafarers with advanced technical competencies that will enable them to thrive in the future of global shipping.

Through this report, the Sub-Committee has endeavoured to identify the root causes of the major challenges confronting the sector and has proposed practical, evidence-based recommendations to address them. The overarching objective is to position India as the global leader in the supply of highly skilled seafarers by removing regulatory and procedural bottlenecks, strengthening capacity-building initiatives, expanding employment opportunities, safeguarding the welfare of seafarers, promoting gender equality, and enhancing India's competitiveness in the evolving global maritime industry.

I also wish to acknowledge the leadership and guidance of the Chairman, National Shipping Board, in constituting this Sub-Committee and entrusting it with a clear and purposeful mandate. The observations, findings, and recommendations contained in this report represent the collective work of the Sub-Committee. Any errors or omissions that may nevertheless remain are entirely my own.

Rakesh Singh
Chairman Sub-committee on Seafarers' Issues
National Shipping Board

ACKNOWLEDGMENTS

The Sub-Committee wishes to thank all those who participated in the deliberations and in particular the representatives from INSA, ICCSA, FOSMA, MASSA, MUI, NUSI, representatives from training institutes, and members of NSB as sub-committee members. The Sub-Committee also acknowledges the guidance provided by the DGMA, National Shipping Board Secretariat and the Ministry of Ports, Shipping and Waterways.

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This report draws heavily on the contribution of the members of the sub-committee and thanks them for their evidence-based contribution and support.

LIST OF ABBREVIATIONS

BNS	Bhartiya Nyay Sanhita
BOI	Bureau of immigration
COC	Certificate of competency
COP	Certificate of proficiency
DGMA	Directorate General of Maritime Administration
FOSMA	Foreign owners ship managers association
GP	General Purpose
GT	Gross Tonnage
ICCSA	ICC Shipping association
ICP	Immigration check post
IMO	International Maritime Organization
INSA	Indian national ship owners’ association
IRS	Indian Register of Shipping
MAKV 2047	Maritime Amrit Kaal Vision 2047
MASSA	Managers and Shipowners
MoPSW	Ministry of Ports, Shipping and Waterways
MUI	Maritime Union of India
NSB	National Shipping Board
NT	Net Tonnage
NUSI	National Union of seafarers of India
OPL	Outside port limit
RPS	Recruitment and placement service
RPSL	Recruitment and placement service license
STCW	Standards of training, certification and watchkeeping
TDS	Tax deduction at source

TOR	Terms of reference
TRB	Training record book

EXECUTIVE SUMMARY

The report has focused on following Key Takeaways:

1	India needs to create more employment opportunities for its youth.
2	The demographic advantage and robust education system shall result in to making India the leading seafarers supplying nation on a sustainable basis.
3	Address gender disparity in Indian maritime sector.
4	Prevent exploitation of Indian seafarers and promote welfare measures.
5	Create robust training and examination system to build capacity (quality and quantity) and cater to evolving technologies in the maritime sector.

Maritime India Vision 2030 (MIV-2030), launched in 2021, and Maritime Amrit Kaal Vision 2047 (MAKV 2047) sets a comprehensive roadmap for maritime transformation in the next 25 years. MIV 2030 envisages India to become top seafaring nation with world class education, research, and training. The target set in MIV -2030 is to take this percentage to 20% by 2030. Seafarers contribute significantly to Indian foreign currency reserves.

The seafarers are identified as “key workers” under the Merchant Shipping Act 2025 and are an integral and critical part of global maritime trade. According to the data available in public domain (BIMCO-ICS report), approximately 2.57 million seafarers are employed globally on sea going merchant ships. Out of which roughly over 1.05 million are officers and around 1.51 million are classified as ratings. Further the BIMCO/ICS (2026) report projects a shortage of around 39100 officers globally requiring an annual average increase of 2%.

According to 2026 data, a little over 3 lakh Indians are employed as seafarer globally. Out of which Indian ships employ around 30000 seafarers (around 11%) and remaining around 2.8 lakh (89%) are employed on foreign going ships

The global performance of India as a seafarer’s supplying nation ranks at no 5 when compared to the overall population of the country, well behind Philippines, Russia and Indonesia.

Countries	Percentage of Seafarers Against Population (%)
Philippines	0.391
Russia federation	0.166
Indonesia	0.064
China	0.022
India	0.021

The terms and conditions of employment of Indian seafarers, their working conditions, welfare measures, etc. are governed through Maritime Labour Convention, 2006 (MLC 2006), as amended, to which India is a signatory. The MLC 2006 (ILO convention) requires maritime administration of the member states to ensure that the recruitment and placement of seafarers are done through entities /agencies holding valid “Recruitment and Placement Service License” (RPSL) issued by the maritime administration of the member state. The Directorate General of Maritime Administration (DGMA) is the maritime administrator for all Indian nationals working as seafarers on Indian and foreign flag ships. Indian shipowners, recruiting seafarers on their ships directly are not required to hold a valid RPS License.

There are recurring reports of Recruitment and Placement Service Licensed (RPSL) agencies either failing to discharge their responsibilities or being complicit in malpractices that result in the exploitation of seafarers, including the abandonment of Indian seafarers abroad. Although the Directorate General of Maritime Affairs (DGMA) has undertaken various initiatives to enhance awareness among seafarers regarding their rights, incidents of exploitation and abandonment continue to persist, particularly among those recruited for service on foreign-flag vessels.

Gender diversity in the seafaring profession continues to remain a significant challenge. Current estimates indicate that women constitute only about 1% of the workforce employed on non-passenger vessels. The representation of women on Indian-flag ships is even lower, highlighting the need for targeted measures to improve gender inclusion and participation in the maritime sector.

The training, examination, and certification of seafarers are governed internationally by the IMO through the STCW Convention and Code. In India, the DGMA is responsible for prescribing and regulating the standards for maritime education and training, competency assessment, examinations, and certification of both existing and prospective seafarers.

As one of the world's leading suppliers of seafarers, India must maintain the highest standards of maritime education and certification to ensure that its seafarers remain competent, and globally competitive. At the same time, there is a pressing need to modernize the existing regulatory and institutional framework to improve both the quality and the quantity of the country's maritime workforce. Strengthening oversight, enhancing training infrastructure, streamlining certification processes, and aligning domestic regulations with evolving international best practices will be essential to achieving these objectives.

Further, there is a lack of uniformity in the procedures adopted by immigration authorities at Indian ports with respect to crew embarkation, disembarkation, and shore leave. As a result, seafarers and shipping companies are often subjected to inconsistent practices based on the discretion and interpretation of local immigration officials. In several ports, Indian seafarers serving on board vessels continue to face restrictions on shore leave, despite such rights being recognized under international conventions. These inconsistencies create operational inefficiencies and adversely affect the welfare of seafarers. Accordingly, there is an urgent need to establish standardized, transparent, and uniformly implemented immigration procedures across all Indian ports, ensuring consistency with India's international obligations while facilitating efficient maritime operations and protecting the rights and welfare of seafarers.

CHAPTER I: ADDRESS ISSUES RELATED TO INDIAN SEAFARERS AND THEIR GRIEVANCES

1.1 Purpose and Scope:

The purpose and scope of this chapter is to undertake a comprehensive study on the various problems faced by Indian nationals employed as seafarers on Indian as well as foreign flag ships. The wide-ranging issues include exploitation by the RPSL agents/principals, non- payment of wages, denial of shore leave in Indian ports, difficulties faced in embarkation (sign on) and disembarkation (sign off) in Indian ports, regulatory restrictions imposed by authorities in examination and certification systems, and general welfare measures.

1.2 Tightening control over RPSL agents and address abandonment of seafarers:

1.2.1 Background:

a. RPSL agent, through an on-line system in DGMA e-governance system, is required to “sign on- ashore” the seafarers recruited for placement and generate e-migration form for leaving India/joining a ship. Within 30 days of “sign on- ashore”, the RPSL agent is required to update the online record with date of “sign on- ship”. This exercise completes the entire process of recruitment and placement.

b. The similar exercise is required to be carried out by a RPSL agent in the reverse order upon disembarkation from ship i.e. “sign off- ship” followed by “sign off- ashore” within 30 days.

c. The seafarer gets an alert of “sign on” and “sign off” on his/her declared e-mail id.

d. The most problems arise or malpractices take place at the time of recruitment and hence the gaps need to be plugged through changes in the existing system.

1.2.2 Identified problems and suggested measure:

i) Seafarer “signed on ashore” (recruited) may not be “signed on ship” (placed)- this problem mostly relates to placement on foreign flag ships.

There are gaps in “3 steps exercise” in the process of recruitment and placement of a seafarer.

DGMA shall enable system to retrieve and provide real time data on Indian nationals recruited and placed as seafarers on Indian and foreign flag ships in following distinct steps.

- a. The number of seafarers “signed on ashore” (e- migration generated)*
- b. The seafarer actually migrated through ICP.*
- c. The seafarer placed on board (signed on ship)*

Linking the systems at ICP and DGMA will throw up the gaps in data and facilitate timely enquiries and identification of malpractices, if any.

ii) Recruiting more seafarers than permitted under the bank guarantee provided by the RPSL agent. One of the modus operandi used by unscrupulous RPSL agent is:

1. Emigrate a seafarer after “sign on ashore”.
2. After he passes through immigration, ‘cancel’ the emigration.
3. This way, the RPSL agent can “send out” more people than his BG permits.

The data on all cases of “cancellation of emigration” shall be available with DGMA in real time for further action and investigation.

iii) Yet another method of breaching the present system is:

1. Complete the entire process of recruitment and placement on ship.
2. “Sign off” the seafarer from ship on DGMA system whilst the seafarer is still on board.
3. Thereafter “Sign off” (ashore- completion of contract) seafarer in the present system of DGMA.

The system at DGMA has no means of capturing the actual “sign off”. This gap can be yet again plugged by ‘linking’ the Immigration system to DGMA system.

Then ‘sign off’ (ashore) should be allowed only when the seafarer has entered into India through ICP.

The measures proposed above would also help in identifying if an “abandoned seafarer” was recruited through an RPSL agent or through “other routes”. The notification/alert sent to seafarers shall have a system of “notifying false alert”.

iv) No- payment of wages by shipowners and subsequent abandonment of seafarers.

Often seafarers do not report “non- payment of wages” or other grievances in prescribed time limits for different reasons including fear of losing employment.

A vigorous awareness campaign is required to be carried out regularly to make seafarers aware of their obligations of reporting.

Legal opinion shall be sought on invoking provisions of human traffic (sections 143 and 144 of BNS) for the violators as an effective deterrent.

1.3 Crew embarkation and disembarkation and shore leave in Indian ports:

1.3.1 Background:

Crew sign on (embarkation) and sign off (disembarkation) in Indian ports from ships and their shore leave is regulated by Bureau of Immigration (BOI), MoHA, GOI. In ports with Immigration Check Post (ICP), the process is controlled directly by BOI. Whereas, in ports where ICP is not established, the state police (SP) are designated to act as ICP.

1.3.2 Identified problems and suggested measures:

- i) There are a number of Ports without ICP or not linked with the nearest ICP to facilitate sign on/sign off/ shore leave to the crew. (Most non- major ports on the coast of Maharashtra, Odisha, etc.)
- ii) Most port prohibit crew change at anchorage and no regular crew change is permitted outside port limits (OPL) in India.
- iii) The state police (when acting as ICP) are either not fully conversant with the norms applicable to seafarers or cite shortage of staff to attend to ships and seafarers. Which results in seafarers being frequently denied right to land ashore or the process is unreasonably delayed.

- iv) The MHA notification dated 20/11/205 exempting Indian flag vessel operating within port limits from immigration checks and control has not been implemented at the time of writing this report.
- v) There is no clarity or transparency on the procedure followed by the BOI for regulating landing of seafarers from ships in Indian ports.
- vi) The problems listed above significantly contribute to India from becoming “a hub for crew change” like Singapore and Fujairah (UAE)
 - a. *The BOI shall streamline and implement uniform procedures for crew sign on/off and shore leave for Indian nationals employed on Indian flag as well as foreign flag vessels calling Indian ports.*
 - b. *In all key Indian ports (major or non-major) ICP shall be set up.*
 - c. *Non major ports without ICP shall be permitted to execute crew change using ICP at the nearest designate port without the need of ship calling ICP ports.*
 - d. *Indian nationals (seafarers and supernumeraries) irrespective of the flag of the vessel shall be granted unrestricted shore leave during the stay of the vessel in Indian port and permitted to sign on/off.*
 - e. *The MoHA notification dated 20/11/205 should be implemented immediately across India and, subsequently, Indian vessels operating between two Indian ports shall be exempted from Immigration checks and clearance.*
 - f. *Further, the MoHA notification dated 22nd June 2026, on “Standardization of immigration process at seaport immigration posts” needs to be implemented for uniformity of procedures and ease of doing business.*
 - g. *A SOP shall be drawn by BOI to execute crew changes at anchorage and OPL around coast of India to promote India as a favorable destination for ships transiting Indian ocean.*

1.4 To align the maritime regulatory regime with International norms and remove unjustified restrictions:

1.4.1 The Background:

The DGMA being the regulatory body for training, examination, and certification of seafarers in India is obligated to comply with the standards prescribed in the STCW Code. The Code also permits the member states to dispense with certain regulatory requirements to suit the national interests. The STCW code prescribes

the requirement of training period (at sea and ashore) for certification eligibility, minimum syllabus for officers and ratings, additional training and certification for specialized ships, etc.

India must ensure a continuous supply of qualified seafarers to meet the manpower requirements of its national fleet while also increasing the representation of Indian seafarers on foreign-flagged vessels. At the same time, the workforce should be prepared for emerging developments in the maritime industry, including the adoption of green fuels and Maritime Autonomous Surface Ships (MASS). To achieve these objectives, the Directorate General of Maritime Affairs (DGMA) should review and modernize its existing examination, certification, and regulatory framework so that it aligns with evolving global standards and technological advancements.

1.4.2 Identified problems and suggested measures:

i) To remove restriction imposed on GP ratings to select a particular career stream (deck/engine):

The essence of General Purpose (GP) rating training program is to give option to seafarers to choose one or both career streams (deck and Engine) during the shipboard training. The STCW code requires 2 months of on-board service (sea time) in a particular stream to be eligible for issue of watch keeping certificate as able-bodied seamen.

DGMA requires seafarers to choose one stream (deck or engine) upon placement on board thereby restricting options and narrowing down competency. DGMA further requires 6 months of service (sea time) instead of 2 months required under STCW code under a chosen stream before issuing a watch keeping certificate.

This sub-committee recommends that a GP rating shall be permitted to carry TRB for deck as well as engine side and be permitted to work in both departments during his/her tenure on board and training imparted on the subjects under a relevant stream may be recorded in TRB and endorsed by Master or Chief Engineer as the case maybe. The requirement of the sea time shall be aligned with the STCW requirement. Upon successful completion of training and service, seafarer shall be issued watch keeping certificates under both streams, where applicable.

The measure shall improve the employability as well as utility of Indian ratings in the international market.

ii) To address anomaly with the issue of COCs to seafarers:

- a. for service on smaller ships (below 500 GT/ below 750 KW), and
- b. by restricting COC to serve on a specific type of ship.

The seafarers working on vessel below 500 GT or 750 KW are required to serve extra sea time as against on bigger GT/Power ships to be eligible for a COC/COP. However, in many such cases despite meeting extra sea-time requirement, the certificate issued to the seafarer is restricted in terms of GT/Power as the case maybe. This beats the very purpose of serving extra sea-time.

Seafarer having served the required extra sea-time shall be issued an “unrestricted certificate” in accordance with the STCW Code.

In case of a deck officers, the CoC is restricted to serve on the type of ship last served. (For example; OSV/Tug).

A person having served on a non- cargo carrying vessel shall be considered competent to serve on all non-cargo carrying vessel (Tug, dredger, OSV, etc.) as there is no specific additional training requirement for such vessels. Such restrictions are detrimental to the interest of seafarer and the employer and shall be reevaluated.

1.5 To augment and promote safety and welfare measures for seafarers:

1.5.1 Background:

The unjustified criminalization of seafarers has emerged as a significant global concern. In many cases, seafarers are detained, arrested, or prosecuted following maritime accidents, pollution incidents, allegation of contraband being carried in the cargo compartments, even when there is no evidence of intentional misconduct or negligence. As a result, they often face prolonged detention, denial of legal assistance, poor living conditions, and violations of their human rights. Such practices adversely affect the morale of seafarers and discourage young people from pursuing maritime careers.

i) Decriminalization of seafarers:

Seafarers on board work under the command of ships manager/owner/charterers. It is next to impossible for the Master of a vessel or the crew to know if the cargo on board (containers and packaged goods) is actually as declared by the shippers.

However, in all case of drug or contraband seizures on ships, the Master and crew are the first victims of law enforcement. There are a number of cases where Indian seafarers are locked up in prisons for years in several countries with unending prosecution. Despite counsellor assistance and efforts by unions, the seafarers continue to suffer.

The GOI shall take initiative in this regard together with ILO and IMO to move an international proposal to “decriminalize” (presumptive innocence) seafarers by proposing following measures:

- a. The burden of proof shall lie with the agency alleging the crime.*
- b. Ensure that criminal proceedings are initiated only where there is clear evidence of willful misconduct or gross negligence.*
- c. Implement and strictly follow international guidelines on the fair treatment of seafarers.*
- d. Guarantee prompt access to legal representation, consular assistance, interpreters, and due process.*
- e. Promote cooperation among flag States, port States, coastal States, shipowners, and insurers to ensure fair and transparent investigations.*
- f. Strengthen training for maritime investigators, prosecutors, and judicial authorities on maritime law and international conventions.*

ii) Facilitate movement of seafarers across India:

The concentration of seafarers in India is no longer restricted to Tier 1 Cities. Majority of the seafarers hail from smaller cities and towns with little or no air connectivity and often have to rely on trains to reach the company’s office or port of joining.

The sub-committee recommends to provide quota in railway and airline bookings for seafarers. This request has been taken up with MoPSW on number of occasions without any positive outcome. The MoPSW is requested to take this matter up with Ministry of Railways for the needful.

CHAPTER II : INCREASE SHARE OF INDIAN SEAFARERS IN GLOBAL MARKET TO 20% FROM CURRENT LEVEL OF ABOUT 12% BY 2030.

2.1 Purpose and Scope:

The purpose and scope of this chapter are to identify the key factors contributing to the shortage of officers on Indian ships, particularly in the coastal shipping sector. It also examines measures to enhance the participation of Indian seafarers in the global maritime workforce, addresses gender disparity in the maritime profession in India, and identifies specific sectors with significant potential for employment growth and skill development.

2.2 To address shortage of officers on Indian ships:

2.2.1 The Background:

The Merchant Shipping Act, 2025 requires Indian flag ships to engage Indian nationals as seafarers on board. Any dispensation in this regard may be granted by the DGMA on case-by-case basis,

Indian nationals serving on Indian flag ships are also required to hold COC/COP issued by the DGMA. The GOI (DGMA) also recognizes COCs issued by certain foreign countries such as U.K. and permits Indian nationals holding these COCs to serve on Indian ships with certain conditions.

Indian ships and in particular coastal ships are facing serious shortage of officers at operational as well as management level. (In case of ratings the situation is reverse though.)

2.2.2 Identified problems and suggested measures:

i) Address taxation (TDS) issue:

One of the key factors contributing to this shortage is the existing Indian taxation framework, which makes employment on foreign-flag vessels comparatively more attractive for seafarers. Earnings from employment on foreign-flag ships are generally not subject to tax deduction at source, and where a seafarer qualifies as a non-resident by virtue of spending more than six months overseas during a financial year, the income earned from such overseas employment may not be subject to tax liability in India. This tax treatment has influenced employment

preferences among Indian seafarers and has contributed to a greater inclination towards foreign-flag vessels over domestic-flag shipping opportunities.

A number of submissions in this regard have been made by the stakeholders to the MoPSW and CBDT to fix a slab rate of 5% as TDS for seafarers serving on Indian flag ships with ultimate responsibility of filing tax returns and tax compliance remaining with seafarers. The sub-committee recommends early implementation of the above submission.

ii) To increase supply of officers:

Seafaring is no longer perceived as an attractive career particularly in bigger cities. As a result, number of candidates appearing for entry level COC has dropped drastically particularly in coastal/near coastal category. According to the data available on DGMA site, the number of COCs issued category wise in the year 2024-25 were as follows:

Rank	Near coastal voyage grade COCs issued
Master	38
1 st Mate	31
2 nd Mate	31
Total	100

As against above 4151 foreign grade COCs were issued during the same period.

In the year 2023-24 a total of 128 NCV grade COCs were issued showing a regular decline in the supply of officers for coastal vessels.

Additionally, around 25 to 30% trainee officers/engineer do not find immediate placement on board ships upon completion of training. This coupled with the time taken to pass exams, creates huge time gap between the commencement of training and certification of a candidate.

The DGMA, in consultation and collaboration with the maritime industry, should take proactive measures to expand onboard training and placement opportunities for cadets and trainees. Where vessels are unable to accommodate additional trainees due to space constraints, shore-based arrangements should be permitted to ensure continuity of training and compliance with competency requirements.

The DGMA should also consider increasing the frequency of examinations and expanding the number of examination centers to reduce waiting periods and improve accessibility for candidates. In parallel, the ongoing digitalization of the examination and certification system should be accelerated to create a more efficient, transparent, and user-friendly framework thereby reducing procedural delays and improving the overall effectiveness of the seafarer certification system.

2.3 Sustained market outreach to increase India’s share in the global market:

2.3.1 The Background:

The majority of Indian seafarers employed on foreign-flag vessels are recruited through member companies of organizations such as MASSA and FOSMA. While the beneficial owners of these vessels may be located in regions such as Europe, Japan, and other maritime centres, many of these ships are registered under open registries. Recruitment of Indian seafarers is generally undertaken through the technical managers of these vessels, who are often based in maritime hubs such as Hong Kong, Singapore, and Cyprus and maintain liaison offices or recruitment networks in India.

This Sub-Committee has identified specific regions and countries where the representation of Indian seafarers remains below its potential. It recommends the implementation of targeted and focused promotional initiatives in these priority regions. Such initiatives should aim to enhance India's visibility as a dependable source of highly skilled, competent, efficient, and cost-effective seafarers, thereby expanding employment opportunities for Indian seafarers in the global shipping industry.

2.3.2 Identified problems and suggested measures:

- i) Limited presence of Indian seafarers on vessels belonging to key maritime nations (Greece, USA, Norway, Singapore, etc.)
- ii) Lack of institutional support to promote Indian seafarers.
- ii) Lack of incentives to performing RPSL companies.

The government together with the stakeholder need to identify untapped potentials for employment of seafarers.

A coordinated framework involving the DGMA, maritime training institutions, industry associations, and overseas stakeholders should be developed to promote Indian seafarers. Such a framework may include international marketing initiatives, participation in global maritime forums, engagement with foreign shipowners, and studying the systems/approach followed by countries like Philippines who is one of the leading seafarers supplying nations.

Use Indian missions, ministerial visits, trade fairs to promote Indian seafarers abroad with focus on untapped market.

Recruitment and Placement Services Licensed (RPSL) companies play a critical role in facilitating employment opportunities for Indian seafarers. However, there is limited recognition or incentive mechanism for RPSL companies that demonstrate consistent performance in terms of quality recruitment, compliance, and placement of Indian seafarers on reputable international vessels. A suitable incentive and recognition framework may be developed to encourage RPSL companies to enhance their performance, maintain high standards, and actively contribute towards expanding global employment opportunities for Indian seafarers.

2.4 Address gender parity in seafaring profession:

2.4.1 The Background:

The seafaring historically has been a male dominated profession. Despite some significant progress made by European nations over the years, the share of girls in seafaring profession stands at meagre 1% (on non-passenger vessels) of the overall global figure. Besides, the increase in supply of female seafarers is concentrated among officer positions. Growth of cruise shipping has given much needed impetus to correct the huge gender disparity in this sector. A number of Indian MTIs are now catering to girl trainees but there are just a handful of Indian girls are engaged as seafarer on Indian and foreign ships.

2.4.2 Identified problems and suggested measures:

i) Social reasons and lack of awareness:

The families of girls often perceive the profession as unsafe due to captive, confined, and male dominated work environment, far away from the home, with longer service stints. Though connectivity has bridged this gap quite a bit but apprehension remains.

Besides, the seafaring is not seen as profession at par with military or paramilitary services or even airlines in terms of work place discipline, redressal of grievance and associated pride.

An aware campaign at national level is required to be launched reaching out to schools and colleges in tier 2 and 3 cities with the help of “role models”

Shipping (merchant navy) as a profession needs to be included in the text books at standard VI to VIII with the help of organizations such as NCERT etc.

ii) Lack of adequate accommodation/sanitation facilities on board:

Indian coastal ships would be an ideal career starting point for women but are handicapped by the restricted accommodation on such ships.

Future constructions of ships will have to factor these at the design stage. For exiting ships operating within ports/harbours, the government should explore possibility of providing facilities ashore.

2.5 Sector specific focus (Cruise sector)

2.5.1 The Background:

Cruise ships are the largest employer of seafarers as well as hospitality crew per ship basis. A cruise ship with 5000 passenger capacity will need a crew complement of around 1600. Across the global, 72 new ships are on order for delivery through 2036, representing an investment of more than 70 billion dollars and nearly 200,000 additional employments opportunity. The cruise industry currently accounts for approximately 14% of the world's maritime officers and 22.5% of ratings employed across all shipping sectors.

For a country like India, with its large pool of English-speaking, well-trained, and service-oriented maritime professionals, this presents a significant opportunity that should be actively leveraged. The cruise sector also offers excellent prospects for promoting gender diversity, as it provides a wide range of technical, hospitality, and customer service roles that are well suited to increasing the participation of women in the maritime workforce.

2.5.2 Identified problems and suggested measures:

India despite having a very large pool of support personnel with skill set required to work on board cruise ships (catering staff, tailors, carpenters, plumbers, etc.) has poor representation in the sector.

i) Regional preferences:

Due to the nature of the business and clientele, the cruise employers have certain regional preferences when it comes to employment of crew on board. The choice predominantly goes in favor of east European and South East Asian countries (mostly Philippines). Indians are often low in the pecking order.

It is suggested that a special training program be launched for those interested to serve in cruise sector whether as seafarers or as hotel staff. The program shall be available to future ratings and officers and shall focus on social and interpersonal skills, hygiene, etiquettes, and demands of hospitality industry.

Further, in the hospitality training institutions across India, introduction of a curriculum subjects on cruise sector will give insight to the students on an alternate career option.

It is also suggested that the cruise employment as career should also focus on the north eastern part of the country, an experiment successfully conducted by some of the national airlines.

ii) Underdeveloped cruise tourism in India:

A well-developed cruise echo system requires good terminals with connectivity, support of government agencies, automated clearances and a very good connect with local tourism sector.

The cruise tourism has flourished in countries who have managed to convert their terminals in to “home port”. A home port leads to advantage of large turn-around of passengers (embark and disembark) making the terminals economically viable.

Further, home port becomes an attractive and economically viable option for recruitment of locals as seafarers and hospitality staff. The government should provide incentives to cruise operators who declare Indian ports as “home port” for their vessels.

A proposal of reduction of GST to 5 % on all purchases of cruise tickets is lying with CBIC.

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PART VI
Subcommittee Report No.5

Sub-Committee No. 5

Title:

**To prepare a roadmap for Development of inland waterways,
including Improving regional connectivity to achieve MAKV-
2047 Goals**

Chairperson: Shri Rakesh Singh

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PREFACE BY THE CHAIRPERSON OF THE SUB COMMITTEE



Rakesh Singh President ICCSA

Inland (or internal) waters are all waters on the landward side of the baseline (the official low-water line along the coast) from which a country's territorial sea is measured. These waters include rivers, lakes, canals, bays, harbours and ports.

In India, the baseline has been designated by the Ministry of External Affairs. It runs almost parallel to the coastline and is drawn to enclose the entire Gulf of Kutch, the Gulf of Khambat (Cambay), and the bay between the northern coast of Odisha and the coast of West Bengal.

India once had a well-developed network of inland waterways (IWT) used for transportation. Small cargo boats carried goods from Kolkata to Assam in the east and as far west as Agra. However, the decline of inland water transport began around the 1860s with the expansion of the railway network, which provided faster and higher-capacity transport to the hinterland.

Two important milestone policy initiative in recent times to promote and develop IWT were:

- a. Constitution of IWAI in 1986 with the mandate to regulate and develop Inland waterways for the purpose of inland shipping and navigation
- b. Enactment of National waterways Act 2016 adding 106 new NW to the existing 5 NW taking the total number of NW to 111.

The administration of Inland waterways falls under the “Concurrent list” of the seventh schedule of the constitution.

The inland waterways carried around 145 MMT of cargo and around 7.6 million passengers in the year 2024-25. Around 70% of the cargo traffic comprises of bulk cargo such as fly ash, coal, iron ore, sand, etc. A closer examination of the cargo statistics will reveal that a significant (majority) portion of this cargo volume comprises of lighterage operations involving deep-draft vessels. The smaller barges are used either to lighten the bigger ships or load them. A well-established practice on the coasts of Gujarat, Maharashtra, Goa, and West Bengal.

This practice is primarily driven by inadequate port infrastructure, particularly the lack of sufficient navigational water depths and suitable berths that can accommodate direct loading and unloading of deep-draft vessels. The “lighterage” operation bridge this infra gap.

The government's policy objectives are to develop and promote the use of Inland waterways (rivers and creeks) as an efficient & alternative mode of transportation, strengthen hinterland connectivity, and develop industrial corridors along the waterways.

The following are notable examples of inland riverine waterways facilitating efficient connectivity to industrial units located in the hinterland:

- i. Amba River (National Waterway-10), Maharashtra: The waterway handled 26.7 million metric tonnes (MMT) of cargo during 2024–25, serving as a vital transport corridor for industries located along its banks.
- ii. Tapti River (National Waterway-100), Gujarat: The river handled 33.1 MMT of cargo during 2024–25, providing a navigable route for small vessels from the open sea to industrial establishments situated along the river within and around the city of Surat.
- iii. Mondovi River (National Waterway-68), Zuari River (National Waterway-111), and Cumbarjua Canal (National Waterway-27), Goa: Collectively, these waterways handled 3.43 MMT of cargo during 2024–25. Post lifting of the ban on the export of iron ore, the cargo traffic is expected to increase substantially.

The Government's policy objective is to replicate the success of such inland waterway systems by developing other major National Waterways across the country. These include National Waterway-1 (Haldia–Prayagraj stretch of the

Ganga–Bhagirathi–Hooghly River system), National Waterway-2 (Dhubri–Sdiya stretch on the Brahmaputra River) with connectivity to the Indo-Bangladesh Protocol Route, National Waterway-3 (West Coast Canal, Kerala), and National Waterway-5 (East Coast Canal, Brahmani River, and Mahanadi Delta system), among others.

During the course of preparing this report, Sub-Committee 5 undertook a comprehensive review of the various studies conducted on the subject, examined the recommendations contained in earlier reports, assessed projects currently under implementation or in the pipeline, and held consultations with key stakeholders and regulatory authorities. The recommendations presented in this report are based on these deliberations and the collective assessment of the Sub-Committee.

I wish to place on record my sincere appreciation to the Chairman, National Shipping Board, for his leadership, guidance, and confidence in constituting this Sub-Committee and entrusting it with this important assignment. I also express my gratitude to the members of the Sub-Committee, representatives of stakeholder organizations, and regulatory bodies for their valuable insights, and constructive participation throughout the course of this exercise.

The observations, findings, and recommendations contained in this report represent the collective work of the Sub-Committee. While every effort has been made to ensure the accuracy and completeness of the report, any errors or omissions that may nevertheless remain are entirely my own.

Rakesh Singh
Chairperson Sub- Committee for Development of Inland Waterways
National Shipping Board

ACKNOWLEDGMENTS

The Sub-Committee thanks and acknowledges the support of members of the NSB who are parts of this sub-committee, the representatives from IWAI, INSA, CCTA, Shri Shantanu Kalita (advisor, IPA), Smt. Archana Bharti (SCI), Shri Mukul Singhi (Eastern Navigation), Shri Sohel Kazmi (Bharat freight), Capt Swanand Patankar (Ambuja cement), and government agencies. The Sub-Committee also acknowledges the guidance provided by the Ministry of Ports, Shipping and Waterways, National Shipping Board secretariat, IWAI, DGMA in compiling this report. Further, the subcommittee has reviewed various reports published by IWAI and MoPSW on the Inland waterways and the data provided in the above reports have been used extensively in this report.

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This report draws heavily on the contribution of the members of the sub-committee and thanks them for their evidence-based contribution and support.

LIST OF ABBREVIATIONS

CCTA	Coastal container transporters association
DGMA	Directorate General of Maritime Administration
FCI	Food Corporation of India
FY	Financial year
GT	Gross Tonnage
IBP	Indo-Bangladesh Protocol
IBPR	Indo-Bangladesh Protocol Route
ICCSA	ICC Shipping association
INSA	Indian national ship owners’ association
IPA	Indian Port Association
IWAI	Inland waterways Authority of India
IWT	Inland water transportation
KRIBHCO	Krishak Bharati Cooperative Limited
KW	Kilowatt
LAD	Least assured depth
MAKV	Maritime Amrit Kaal Vision
MEA	Ministry of external affairs
MMT	Million Metric Tonne
MoHA	Ministry of Home Affairs
MoPSW	Ministry of Ports, Shipping and Waterways
NSB	National Shipping Board
NT	Net Tonnage
NW	National waterways

PSU	Public Sector Unit
RIS	River Information System
TOR	Terms of reference

EXECUTIVE SUMMARY

The report presents following key takeaways:

1	Development of inland waterways are integral to achieving a more balanced modal mix and reducing overall logistics cost.
2	A feasibility-based approach should be adopted in identifying and developing the waterways.
3	Priority should be accorded to the development of essential waterway infrastructure, with the maintenance of the required Least Available Depth (LAD) being of paramount. (<i>Jalmarg needs Jal</i>)
4	The size and type of vessels should be appropriately aligned with the available Least Available Depth (LAD), navigational facilities, and projected cargo volumes to ensure viable and sustainable operations.
5	Inland waterways have the potential to facilitate the development of industrial and economic corridors by enhancing hinterland connectivity and improving multimodal transport.
6	Development of inland waterways is of strategic and economic importance for north east and regional connectivity.

The priority order for the use of river water is drinking, agriculture, industry, and transportation. Therefore, maintaining the least assured depth (LAD) required for safe and reliable navigation is both a necessity and a challenge, particularly in rivers where water availability must first meet higher-priority demands.

Siltation is one of the major challenges affecting the sustainability and navigability of Indian rivers. National Waterway 1 river system alone carries an annual silt load of approximately 1,600 MMT. According to rough estimates to ensure a LAD of around 2 meters an average annual dredging of roughly 2.0 MMT is required. However, river dredging is a costly operation and poses significant environmental and ecological challenges.

Large seasonal variations in river discharge present another major challenge in maintaining the LAD along inland waterways. During the monsoon season, high flows increase sediment transport and alter channel morphology, while in the lean season, reduced discharges result in lower water depths, restricting vessel movement. These dynamic hydrological conditions necessitate continuous

monitoring, channel management, and adaptive dredging strategies to ensure safe and reliable year-round navigation.

Cargo traffic across different National Waterways indicates that some waterways perform significantly better than others. Waterways supporting lighterage operations along the coast account for the highest cargo movement, primarily due to the availability of adequate water depth that facilitates year-round navigation. In contrast, waterways that face challenges in maintaining the prescribed Least Assured Depth (LAD) are unable to support reliable and sustainable navigation, resulting in reduced cargo movement, lower operational efficiency, and limited commercial viability.

The modal shift to coastal shipping and inland waterways faces several common challenges, with the lack of assured cargo availability and visibility being one of the most significant. In addition, the inability of many National Waterways to consistently maintain the declared Least Assured Depth (LAD) has constrained reliable year-round navigation. *Consequently, the potential of inland waterways as a viable, efficient, and sustainable mode of transportation has not yet been fully put to adequate test due to lack of consistent operating conditions.*

The concerned government agencies and other stakeholders are adapting to the prevailing ground realities, and the focus has shifted towards prioritizing the development of National Waterways based on their technical feasibility, economic viability, and sustainability. This approach aims to optimize investments by concentrating resources on waterways with the greatest potential to support efficient and sustainable inland water transport.

Therefore, the focus of this report is on holistic and pragmatic suggestions to create necessary infrastructure to create conditions conducive to the development of IWT sector in achieving substantial traffic volumes, and in turn render it viable and competitive.

The suggestions, inter alia, include the following:

- i) Waterways with adequate Least Available Depth (LAD) and width to facilitate the movement of reasonably sized inland vessels;
- ii) Provision of navigation aids and River Information Services (RIS) to enable safe navigation during both day and night;

- iii) Adoption of a sectoral approach for the selection of viable routes, along with suitable matching of vessels to the characteristics and requirements of such routes;
- iv) Development of terminals equipped with basic facilities for berthing of vessels, with adequate road and rail connectivity; and
- v) Development of industrial corridors and warehouses along the waterways to facilitate efficient movement, storage, and distribution of cargo.

In addition to infrastructure development, the report emphasizes the need to improve the ease of doing business and enhance regional connectivity, with a view to strengthening connectivity with the North Eastern Region of India and promoting cross-border trade through inland water transport.

CHAPTER I: FOCUS ON DEVELOPMENT OF INLAND WATERWAYS BASED ON VIABILITY AND SUSTAINABILITY

1.1 Purpose and Scope:

Waterways are natural transport corridors and generally require minimal land acquisition for their development, unlike roads, railways, and many other infrastructure projects where land acquisition is often a major challenge. However, the sustainable use of waterways for transportation depends on the availability of adequate water depth throughout the year. At the same time, road and rail networks continue to expand and improve in terms of reach, reliability, and efficiency.

Market forces ultimately determine the choice of transport mode based on cost, reliability, and service quality. Consequently, not all waterways are capable of providing an efficient, competitive, and economically viable alternative to road and rail transport. The planning and development of inland waterways should therefore be guided by a pragmatic, business-oriented approach, with investments and resource allocation prioritized based on feasibility, viability, and sustainability.

1.2 Identify waterways that offer transport efficiency comparable to adjoining modes of transport while requiring the least resource allocation.

1.2.1 Background:

While addressing the issues of viability and sustainability, it is important to recognize that a “one-size-fits-all” approach is not applicable to inland waterways development. Each waterway has its own unique hydrological, geographical, operational, and commercial characteristics, and therefore requires a context-specific approach. A solution that is effective for National Waterway-1 (NW-1) may not necessarily be suitable for National Waterway-2 (NW-2). The identification and development of viable waterways must, therefore, be based on a detailed assessment of route-specific conditions, cargo potential, vessel requirements, and long-term operational sustainability.

1.2.2 Identified problems and suggested measure:

i) The longer chainage (route length) of waterways compared with roads and railways can be a disadvantage:

This is particularly true in case of NW 1. The chainage from Haldia to Varanasi is 1390 KM whereas distance by road is about 800 KM. This difference in distance offsets any other advantage that waterways have over roads/railways.

A longer waterway does not have to function as a single end-to-end transport corridor. It can be divided into economically viable stretches based on cargo demand, infrastructure, and connectivity.

For example, on National Waterway 1:

- *Varanasi–Patna can serve as one operational stretch.*
- *Sahibganj–Haldia can function as another viable stretch*

A combination of National Waterway-1 (NW-1), the Indo-Bangladesh Protocol Route (IBPR), and National Waterway-2 (NW-2) is a good example of a waterway corridor that is competitive with road and rail transport in terms of navigable distance.

ii) Identify waterways with low to moderate siltation:

Waterways or stretches of waterways with low to moderate siltation should be prioritized for development. Excessive siltation necessitates frequent dredging to maintain the Least Available Depth (LAD), significantly increasing capital and maintenance costs and potentially rendering a waterway economically unviable.

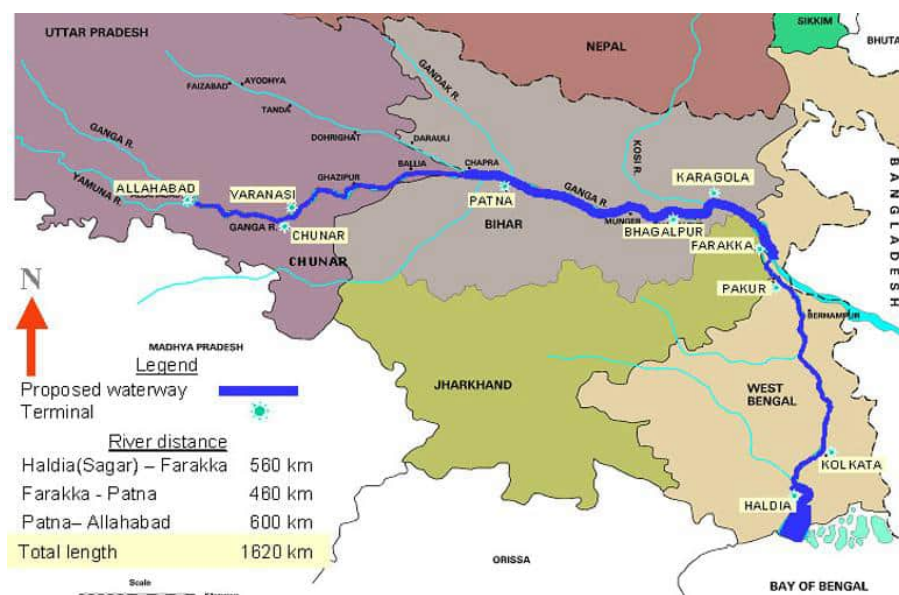
Accordingly, priority should be given to waterways and river/creek sections that require minimal dredging while being capable of maintaining a practical LAD throughout the year.

To reduce dependence on conventional dredging, alternative technologies for maintaining LAD should be adopted. These include hydrodynamic interventions and flow-training structures that modify the river's local hydraulics to increase flow velocity in targeted areas, enabling the river to naturally transport and flush accumulated sediment. Such approaches can enhance the sustainability and cost-effectiveness of waterway maintenance while minimizing environmental impacts.

iii) Identify and promote Ro-Ro/Ro-Pax routes to decongest road traffic in densely populated areas:

Big cities and industrial centres situated along the river and creeks can decongest roads by effective use of Ro-Ro and Ro-Pax services with reasonable low capital and maintenance investment.

National Waterway-1



CHAPTER II: FOCUS ON INFRASTRUCTURE DEVELOPMENT

2.1 Purpose and Scope:

Any mode of transport requires focused investment in infrastructure that is commensurate with the challenges inherent to that mode. While road and rail transport primarily face challenges related to land acquisition and the development of linear infrastructure, inland waterways are constrained by the need to maintain adequate Least Available Depth (LAD) to ensure year-round navigability.

The Government shall also identify infrastructure components and services where Public-Private Partnerships (PPPs) or full private sector participation can deliver the greatest efficiency and value for money. Such participation should be encouraged in areas where private investment and expertise can enhance service quality, improve operational efficiency, accelerate project implementation, and reduce the fiscal burden on the government, while ensuring appropriate regulatory oversight and public interest safeguards.

2.2 Focus on ensuring LAD and its predictability:

2.2.1 Background:

India possessed a well-developed network of inland waterways during the first half of the nineteenth century. However, this network declined not only due to the rapid expansion of road and rail transport but also because of the inability to consistently maintain adequate LAD, which reduced the reliability and utility of waterways for navigation.

In contrast, countries such as Bangladesh continue to rely extensively on inland water transport as an integral part of their national logistics network. A key factor underpinning this success is the relatively predictable and naturally existing LAD across much of their waterway system, which enables reliable year-round navigation that can support the economic viability of inland water transport.

2.2.2 Identified problems and suggested measures:

i) A realistic determination and maintenance of LAD:

There is no single solution to maintaining LAD. The LAD can vary from water way to waterway or different LAD for sections of a waterways depending on the potential for cargo traffic and optimum parcel size.

A realistic assessment of the LAD is essential to ensure that the proposed depth is both maintainable and economically viable. For example, on the Varanasi–Patna stretch, maintaining an LAD of 2.0 meters may be more practical, while deeper navigation depths could be maintained in the waterways east of Patna, where hydrographic conditions are more favourable.

Similarly, for the IBPR stretch that lies within the territory of Bangladesh, an LAD of 2.0–2.5 meters may be adequate to support sustainable and commercially viable inland water transport, while remaining more realistic from a maintenance perspective.

National Waterway -2



2.3 Optimization of size and type of vessels

2.3.1 Background:

The majority of inland vessels built and operated in India have a carrying capacity of approximately 2,000–2,500 MTs or more and require a Least Available Depth (LAD) of 3.0 meters or more. However, these vessels were primarily designed for lighterage operations rather than for riverine navigation over long stretches. At the other end of the spectrum, smaller inland vessels with a carrying capacity of around 300 MTs are generally uneconomical for meaningful cargo movement due to their limited economies of scale. Their use is largely justified only in specialized applications such as Roll-on/Roll-off (Ro-Ro) ferry services, where they can transport 15–20 loaded trucks across rivers. In contrast, the barges employed for iron ore transportation in Goa typically have a carrying capacity of 700–800 MTs, demonstrating that medium-sized vessels can provide a more practical and economically viable solution for inland waterways with moderate LAD.

2.3.2 Identified problems and suggested measures:

i) Need for appropriately sized vessels for stretches with lesser LAD:

To ensure the commercial viability of inland water transport on stretches with an LAD of around 2.0 meters, it is necessary to promote vessels designed specifically for such LAD. A vessel with a carrying capacity of approximately 600 to 800 MTs may be more appropriate to operate over shallow stretches of waterways in a sustainable manner.

Of the nearly 700 vessels currently operating on the IBPR, around 650 are Bangladeshi vessels, with the majority having a carrying capacity of 1,000 MTs or less.

ii) Shortage of Shallow-Draft Barges and Tug Combinations:

A tug is capable of pushing or pulling multiple shallow-draft barges in tandem, thereby creating a larger cargo-carrying capacity while requiring only a relatively shallow navigational depth. However, the limited availability of shallow-draft barges and suitable tug–barge combinations leave this option largely unexplored.

iii) Lack of decent size shallow draft container vessels:

There is almost no inventory of shallow draft inland container vessels with carrying capacity around 40 to 50 TEUs while maintaining draft around 2.5 meters. The present vessels have too low a capacity (16 TEU) for any viable business. Some operators have tried to convert existing inland barges to container carriers with little success because of size mismatch with LAD, overhead clearances, etc.

2.4 Need for a reliable river information and navigation system:

2.4.1 Background:

National highways and the railway network enjoy the advantage of the shortest and most direct routes while also permitting uninterrupted 24/7 operations, thereby significantly reducing transit time. To provide a comparable level of efficiency, inland waterways require well-developed and well-maintained navigation infrastructure, including reliable navigational channels, adequate night navigation facilities, and an efficient River Information System (RIS). These measures are essential to ensure safe, continuous, and efficient vessel movement, ultimately improving the competitiveness of inland water transport.

2.4.2 Identified problems and suggested measures:

i) Limited Availability of 24/7 Navigation on Inland Waterways:

In most inland waterways, round-the-clock (24/7) or night navigation is not feasible due to the absence of efficient and reliable navigation systems. Consequently, the majority of vessels operate only between sunrise and sunset, resulting in longer transit times and reduced operational efficiency.

To enable continuous navigation, rivers, creeks, and other inland waterways should be equipped with adequate navigation aids, including channel markers, buoys, and navigational lights. These facilities would allow safe vessel movement during night hours thereby reducing transit time and improving the overall efficiency of inland water transport.

In addition, the implementation of a real-time River Information System (RIS) and Vessel Traffic Management System (VTMS) is essential. These systems can provide vessels with up-to-date information on the Least Available Depth (LAD),

channel conditions, navigation hazards, water levels, traffic movements, and other operational constraints.

2.5 Development of berths and terminals:

2.5.1 The background:

The availability of adequate berthing and terminal facilities is as critical to the efficiency of inland water transport as maintaining the required LAD. Terminals must provide safe and reliable berthing conditions and enable efficient cargo handling under varying river and weather conditions. Although several terminals have been constructed along inland waterways at significant capital cost, many remain underutilized due to sufficient depth in the berth pockets.

For example, the terminals at Varanasi and Haldia continue to face challenges related to insufficient water depth alongside the berths. In addition, efficient road and rail connectivity to and from these terminals is an equally important component of the logistics chain.

2.5.2 Identified problems and solutions:

i) Design and construction of berths:

The design and construction of inland waterway berths should be aligned with the operational requirements of the vessels they are intended to serve. At present, many terminals have been constructed to accommodate large tidal variations, resulting in substantial capital investment. In several cases, these facilities are structurally oversized and more elaborate than necessary for the relatively small vessels operating on inland waterways.

Where appropriate, preference should be given to cost-effective and flexible infrastructure such as floating jetties connected to the shore through cantilever access bridges, rather than constructing large permanent concrete berths.

Private sector participation should also be encouraged by allowing operators to establish and maintain jetties at locations that best serve the needs of trade and industry.

In addition, the development of small Roll-on/Roll-off (Ro-Ro) terminals and finger jetties by private operators should be facilitated to promote captive Ro-Ro services.

2.6 Structural hurdles along the waterways

2.6.1 The Background:

Apart from the challenges associated with maintaining adequate navigational depth, developing terminals and jetties, and ensuring reliable navigation systems, inland water transport is also constrained by several structural obstacles along the waterways. These physical obstructions impede the safe and efficient movement of vessels, increase transit times, and, in the worst-case scenario, may result in the premature termination of voyages.

2.6.2 Identified problems and suggested measures:

i) Overhead clearances, temporary (pipe) bridges, and high-tension cables:

Most bridges constructed across rivers in India do not provide sufficient vertical clearance at the center span to permit the passage of adequately sized inland vessels. There is also an interrelationship between navigational depth and bridge clearance. During the dry season, water levels may be low enough to provide adequate bridge clearance, but insufficient depth may restrict vessel movement. Conversely, during the monsoon or high-water periods, adequate channel depth may be available, but the increased water level reduces the vertical clearance beneath bridges, preventing the passage of vessels.

Future bridge projects across navigable waterways should therefore be designed with adequate horizontal and vertical navigational clearances. Existing bridges identified as critical bottlenecks should also be assessed for suitable engineering interventions wherever technically and economically feasible.

Similarly, temporary or seasonal bridges constructed across rivers to facilitate road transport should be designed with efficient and innovative operational mechanisms that enable their rapid opening and closing to allow the uninterrupted passage of vessels. The operation of such movable bridges should be integrated with the River Information System (RIS) to provide real-time information to both bridge operators and vessel masters.

High-tension transmission lines crossing navigable rivers present another significant obstacle to the smooth movement of inland vessels. National Waterway-3 (NW-3) is one example where overhead high-tension power lines have constrained development of IWT.

CHAPTER III: CREATING CARGO HUBS AND ECONOMIC CORRIDORS ALONG THE WATERWAYS

3.1 Purpose and Scope:

Prior to the 1980s, a large number of industries were located along the banks of major European rivers, including the Rhine and the Danube. However, growing environmental concerns led to the closure or relocation of polluting industries. The vacated industrial sites were subsequently repurposed as warehouses and logistics centers, thereby ensuring the continued utilization of these waterways as viable modes of transportation.

Similarly, the identification and development of strategically located terminals along inland waterways can create effective cargo hubs that serve as centers for the distribution of goods to and from the hinterland. Such terminals can facilitate the consolidation, storage, handling, and onward movement of cargo, while strengthening the linkage between waterways and inland production and consumption centers. The development of these hubs can, therefore, contribute to the creation of economic corridors along waterways and enhance the overall efficiency and competitiveness of inland water transport.

3.2 Create logistics centers, cargo hubs along the waterways and promote industrial corridors connecting smaller towns to waterways

3.2.1 The background:

Agricultural production, storage facilities, and micro, small and medium enterprises (MSMEs) are often dispersed across the hinterland and located away from the waterways, particularly along National Waterways 1 (NW-1) and 2 (NW-2). This spatial dispersion creates significant logistical challenges in connecting agricultural produce and manufactured goods to the inland water transport (IWT) system.

The absence of adequately located logistics centers, cargo aggregation points, and efficient first- and last-mile connectivity further increases the cost and time involved in transporting goods from production and storage centers to inland waterways. Consequently, the potential of IWT to serve as an efficient and cost-effective mode of freight transportation remains underutilized.

3.2.2 Identified problems and suggested measures;

i) Poor connect between the hinterland production centers and IWT systems:

There is inadequate connectivity between production centers in the hinterland and the inland water transport (IWT) system, particularly for agricultural produce and other bulk commodities. This weak first- and last-mile connectivity limits the ability of producers and industries to efficiently access inland waterways and increases the overall cost and time of transportation.

Where feasible, agree products procurement centers and associated storage facilities could be strategically planned along the waterways, preferably in the vicinity of pre-identified terminals, to facilitate seamless transfer of cargo to inland vessels. Such logistics centers could provide farmers in major grain-producing regions of Uttar Pradesh, Bihar, and Jharkhand with convenient access to organized storage, aggregation, and onward transportation facilities, enabling their produce to be efficiently moved through the inland waterways.

The same logistics centers could also facilitate the movement of essential agricultural and industrial inputs, including fertilizers and other materials, from the waterways to hinterland consumption and production centers. This would enable more efficient two-way cargo flows and improve the commercial viability of inland water transport.

Public sector undertakings (PSUs) such as the Food Corporation of India (FCI), KRIBHCO, and Coal India Limited, could take the lead in identifying potential locations and exploring the feasibility of developing such integrated logistics facilities. Their participation could help establish anchor cargo flows, encourage private-sector investment, and strengthen the integration of inland waterways with regional agricultural and industrial supply chains.

ii) Failure to convert key terminals in to Cargo Hubs:

Several strategically located inland waterway terminals have the potential to develop into major cargo hubs but have yet to achieve their intended role due to operational and infrastructure-related constraints. The IWAI terminal at Haldia was conceived as a game changer, given its strategic location and potential to serve as a major cargo hub for the entire Northeast region, as well as for neighboring countries such as Bangladesh, Bhutan, and Nepal.

Similarly, the Ramnagar terminal at Varanasi was planned and developed along with a cargo cluster, with the objective of creating an integrated logistics hub serving the surrounding hinterland. The potential of the terminal remains untapped.

Both terminals face a critical operational constraint arising from inadequate water depth in their respective berth pockets. Insufficient navigational depth restricts the size and carrying capacity of vessels that can effectively utilize these facilities, thereby limiting cargo throughput and undermining their potential to function as full-fledged cargo hubs.

Addressing such physical and operational constraints, alongside the development of cargo aggregation, storage, road and rail connectivity, and reliable hinterland linkages, will be essential for realizing the full potential of these terminals and transforming them into viable cargo hubs.

CHAPTER IV: INCENTIVES AND REGULATORY REFORMS THROUGH POLICY INTERVENTIONS AND BUSINESS PROCESS REENGINEERING

4.1 **Purpose and Scope:**

The inland water transport (IWT) sector, much like coastal shipping, requires sustained government support and facilitation until the industry reaches a stage of commercial maturity and becomes self-sustaining. Such support may take the form of targeted incentives, appropriate policy interventions, regulatory reforms, and the creation of an enabling ecosystem that promotes ease of doing business and encourages greater private-sector participation.

At present, several operational and regulatory hurdles arise from non-uniform practices followed by different regulatory and enforcement agencies, inadequate digitalization, procedural complexities, and limited transparency in business processes. These factors can increase transaction costs, create uncertainty, and discourage potential users and investors from adopting inland water transport.

4.2 **Incentives:**

4.2.1 **Incentives proposed with reason:s**

i) Tonnage Tax regime:

The Tonnage Tax regime should be implemented expeditiously for owners and operators of inland vessels.

The Income-tax Act has already been suitably amended to provide for the inclusion of inland vessels under the Tonnage Tax regime, subject to the formulation and implementation of the requisite regulatory framework. Early notification and operationalization of the framework would provide an important fiscal incentive for vessel owners and operators, encourage fleet expansion and modernization, and support the long-term development of the inland water transport sector.

ii) Infra status to all inland vessels:

Smaller inland vessels are currently excluded from the Harmonized Master List (HML), limiting their access to the benefits and financing advantages associated with infrastructure status.

Infrastructure status should be extended to all inland vessels, irrespective of their size, gross tonnage (GT), or engine power. Extending infrastructure status to all inland vessels would facilitate access to more favorable financing terms, encourage investment in fleet acquisition and modernization, and support the development of a diversified vessel fleet suited to different cargo types and waterway conditions. This would also strengthen private-sector participation and contribute to the overall growth and competitiveness of the IWT sector.

iii) Removal of GST on Acquisition of Inland Vessels:

The acquisition of inland vessels, whether through new construction or the purchase of second-hand tonnage, should be exempted from Goods and Services Tax (GST). Removal of the existing 5% GST burden on vessel acquisition would reduce the upfront capital cost of fleet development and encourage investment in new as well as second-hand inland vessels. This measure would also support fleet expansion, modernization, and replacement of ageing tonnage, thereby strengthening the capacity and competitiveness of the inland water transport sector.

iv) Incentives for Vessel owners and Cargo owners:

A budgetary provision has been made for a Coastal Cargo Promotion Scheme to encourage the movement of cargo through coastal shipping. A similar incentive scheme should be introduced for inland water transport to encourage both vessel owners and cargo owners to shift suitable freight to inland waterways

v) Introduction of CNG as a Fuel for Inland Vessels:

Appropriate incentives should be provided to inland vessel owners to encourage the adoption of Compressed Natural Gas (CNG) as a cleaner alternative fuel.

Given the relatively moderate fuel requirements of inland vessels, establishing a reliable CNG supply and distribution network at strategically located terminals should be feasible. The development of such a supply chain, supported by appropriate fiscal or capital incentives, would facilitate the transition towards cleaner vessel operations while reducing dependence on conventional marine fuel

4.3 Regulatory reforms

4.3.1 Problems and suggested measures:

i) Customs, Immigration and Border Security:

There is no suggestion in this report that government security, immigration, customs, or revenue authorities should overlook, dilute, or compromise any safeguards that are essential for national security, border management, or revenue protection. However, there is significant scope to improve the efficiency of these processes through greater standardization and digitalization.

Uniform procedures across relevant agencies and terminals, combined with end-to-end digital processing, electronic documentation, and greater use of risk-based verification, can substantially reduce transit and clearance times. Wherever feasible, physical verification should be minimized and undertaken selectively based on risk assessment, rather than as a routine requirement for every movement

Such measures would preserve the integrity of existing security and revenue controls while reducing avoidable delays, improving transparency, and facilitating the seamless movement of vessels and cargo across inland waterways, particularly for international and cross-border movements.

ii) Creation of a committee to review regulatory regime:

The rules and regulations framed under the Inland Vessels Act, 2021 need to be implemented consistently across all states and periodically reviewed to ensure that they remain relevant, practical, and responsive to the evolving requirements of the inland water transport sector.

It is therefore proposed that a dedicated committee be constituted under the aegis of the Inland Waterways Authority of India (IWAI), comprising representatives of relevant government agencies, State authorities, and industry stakeholders. The committee should undertake periodic reviews of the existing regulatory framework and assess its effectiveness and practical implementation across States.

The committee could also identify inconsistencies in State-level implementation, procedural bottlenecks, and emerging regulatory issues, and recommend appropriate amendments or harmonization measures.

iii) Use of 2nd hand equipment:

India is a global hub for ship recycling. In addition to generating large quantities of recyclable steel, ship recycling also yields a significant amount of machinery, equipment, and components that remain in reasonably good condition and could potentially be reused.

Agencies such as the Indian Register of Shipping (IRS) could consider developing a regulatory framework permitting the reuse of such second-hand machinery and equipment on inland vessels, subject to appropriate inspection, testing, certification, and verification that the equipment is “fit for use.” Such a policy could provide a win-win solution for both ship-recycling yards and inland vessel owners.

iv) Creation of Domestic multi-modal document:

The proposal for a “Single Document of Carriage” recommended by the Sub-Committee on Coastal Shipping is equally relevant and applicable to Inland Water Transport (IWT).

In most IWT contracts, the vessel owner or operator is required to provide an end-to-end transportation service, involving multiple modes of transport and handling arrangements. In such cases, a single document of carriage would significantly simplify documentation processes, facilitate ease of doing business, and provide greater clarity regarding the responsibilities and liabilities of each party throughout the transportation chain.

CHAPTER V: INLAND WATERWAYS FOR NORTH EAST AND REGIONAL CONNECTIVITY

5.1 Purpose and Scope:

The northeastern states of India, owing to their geographical location, could be better served by inland waterways as a preferred and complementary mode of transportation. The integration of National Waterway-1 (NW-1), the Indo-Bangladesh Protocol Route (IBPR), and National Waterway-2 (NW-2) provides an important water-based connectivity corridor linking Assam and other northeastern states with the Kolkata region in particular and the eastern coast of India in general.

The benefits of developing these inland water corridors extend beyond India's borders. Bhutan, Bangladesh, Nepal, and Myanmar can also benefit from improved access to regional markets through a combination of inland waterways, road, and rail networks. The development of these waterways is also a matter of strategic importance for India.

5.2 Tap the potential of inland waterways to enhance regional connectivity and expand trade opportunities for vessel owners and traders.

5.2.1 Identified problems and suggested measures:

i) Under developed stretch of IBPR (Brahmaputra/Jamuna):

The National Waterway-1 (NW-1) and Indo-Bangladesh Protocol Route (IBPR) currently maintain a navigable water depth of around 3 metres between Kolkata and Narayanganj (Dhaka), providing access to the industrial belt of Bangladesh and supporting India–Bangladesh trade.

However, challenges relating to adequate water depth and navigational markings on IBPR emerge north of Narayanganj, limiting the effective and reliable use of this waterway corridor. The Indo-Bangladesh treaty on protocol specifically states the commercial interest of India in developing the northern stretches of the Brahmaputra (Jamuna), making the development of this section particularly important for strengthening connectivity to the north east.

India, in close coordination with Bangladesh, should therefore pursue measures to ensure adequate navigable depth, reliable channel markings, and round-the-

clock navigation throughout this stretch of the corridor. Regular dredging and maintenance, coupled with appropriate navigational aids and monitoring, would help create a dependable waterway for commercial traffic.

IBPR connecting to NW-1 and NW-2



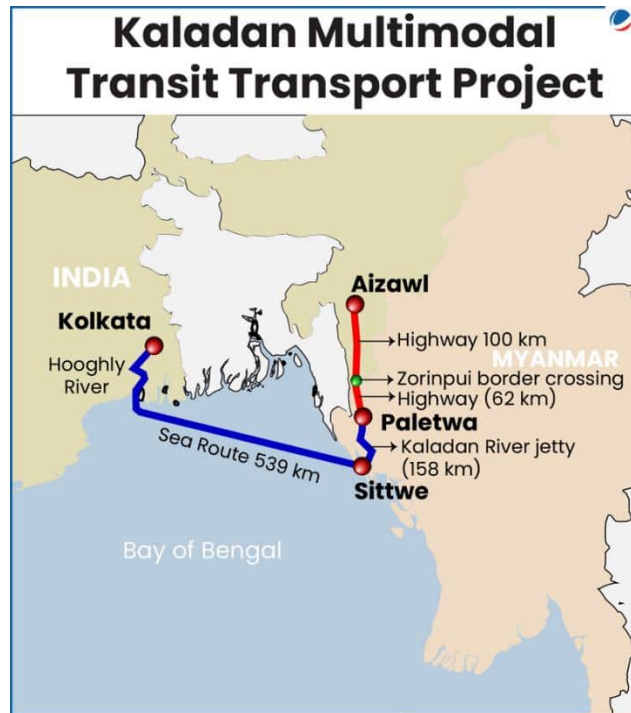
ii) Unrestricted transit of cargo from Bhutan to Bangladesh using NW-2 and IBPR:

Bhutan has substantial reserves of stone boulders and stone chips, while Bangladesh has an estimated annual requirement of over 20 MMT of hard rocks and stone chips for its infrastructure development. A portion of this demand is currently met through supplies from India using IWT.

The Jogighopa terminal on NW-2 is strategically located to facilitate the movement of cargo from Bhutan to Bangladesh through National Waterway-2 (NW-2) and the Indo-Bangladesh Protocol Route (IBPR). Developing this corridor could provide a cost-effective and efficient logistics solution while creating new opportunities for vessel operators, traders, and terminal operators.

All trade, regulatory, customs, documentation, transshipment, and technical hurdles along the route should be identified and resolved through close coordination among India, Bhutan, and Bangladesh.

iii) Fast track development of Indo-Myanmar Kaladan multimodal transit transport project:



The Kaladan Multimodal Transit Transport Project has been identified as an important alternative connectivity corridor to India's Northeast, providing access through Myanmar via the Kaladan River and Sittwe Port. The project envisages a multimodal transport corridor comprising road connectivity from Mizoram to Paletwa in Myanmar, followed by inland waterway connectivity from Paletwa to Sittwe, and thereafter coastal shipping connectivity between Sittwe and ports in India, in both directions. Once fully operational, this multimodal corridor can provide an alternative and potentially more efficient route for the movement of cargo to and from the Northeastern states.

For early operationalization of this trade route, various technical, economic, political, and security challenges needs to be overcome. Given the strategic importance of the corridor, India should pursue high-level and continuous engagement with all relevant stakeholders in Myanmar to ensure early completion of the project. Parallel efforts should focus on developing cargo flows and operating protocols so that the Sittwe–Paletwa waterway can generate commercial traffic even as the final civil construction work are being completed. The objective should be to treat the Kaladan corridor as a strategic national connectivity project, where technical, commercial and security interventions are pursued simultaneously rather than sequentially.

DISCLAIMER

The report is based on data and information voluntarily submitted by shipowners’ and cargo owners’ associations, trade bodies, shipping companies, and other relevant stakeholders during the course of interactions held with them by the Sub-Committee. Other sources of data used in the report are available in public domain including those published by various government agencies and trade bodies.

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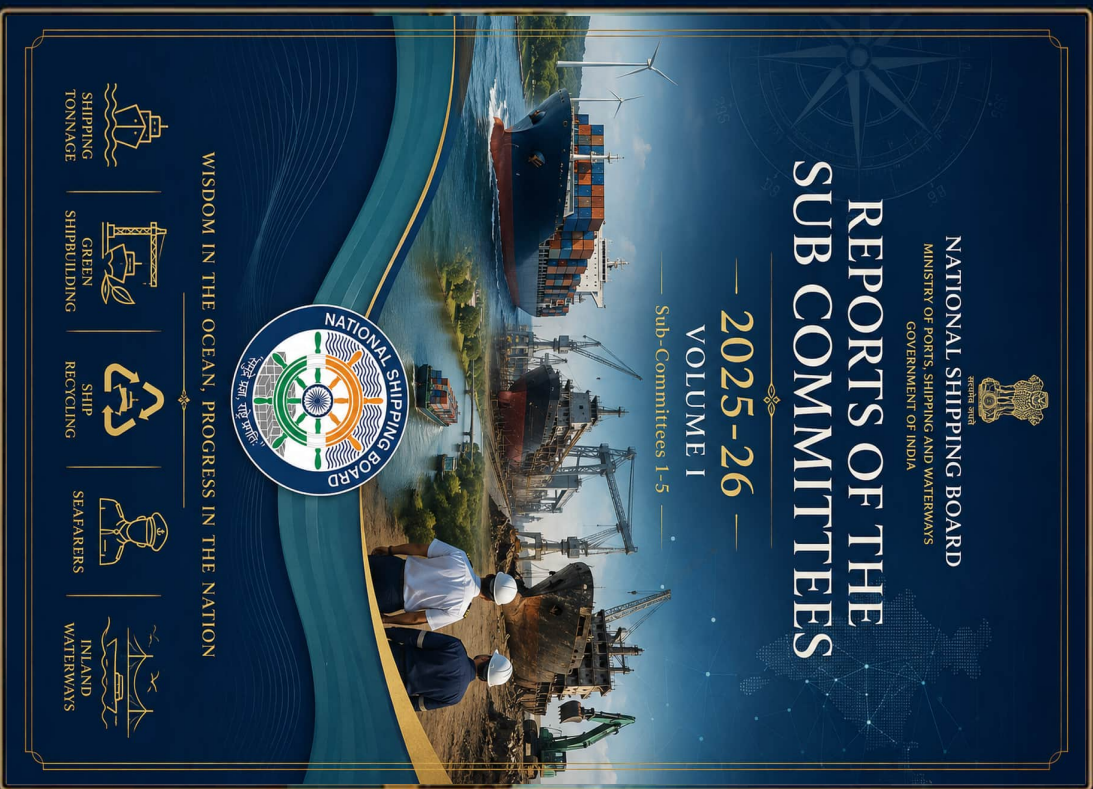
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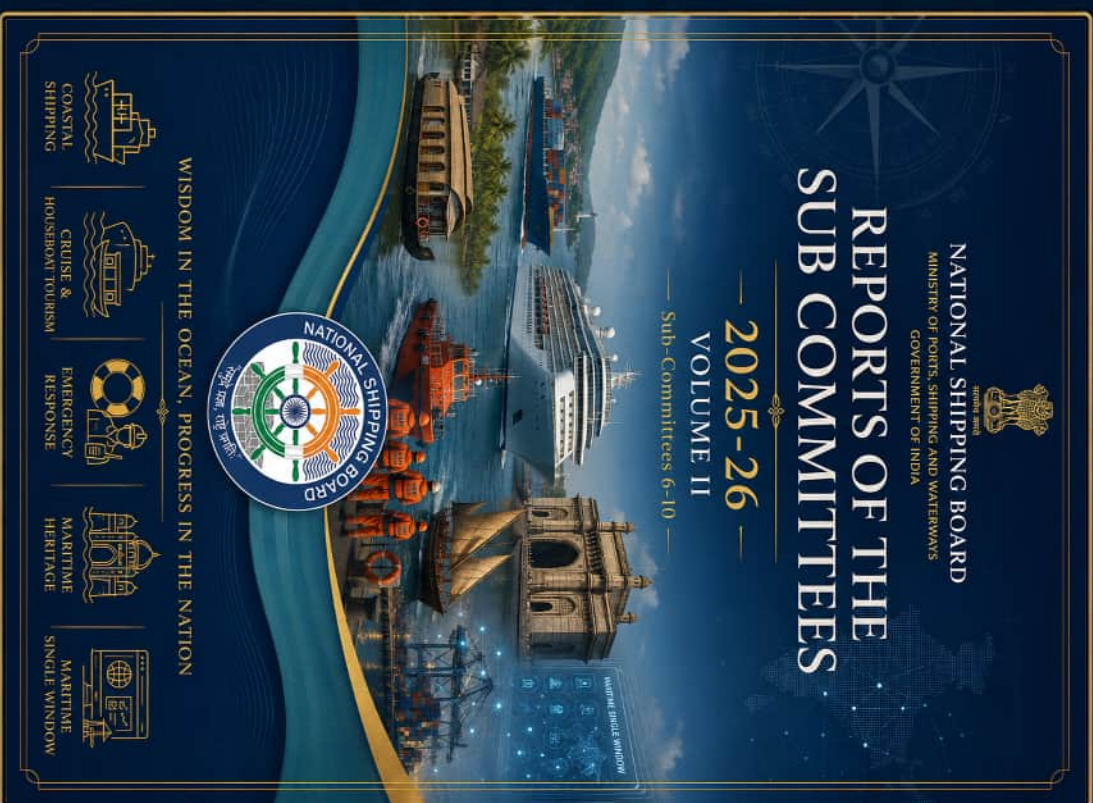
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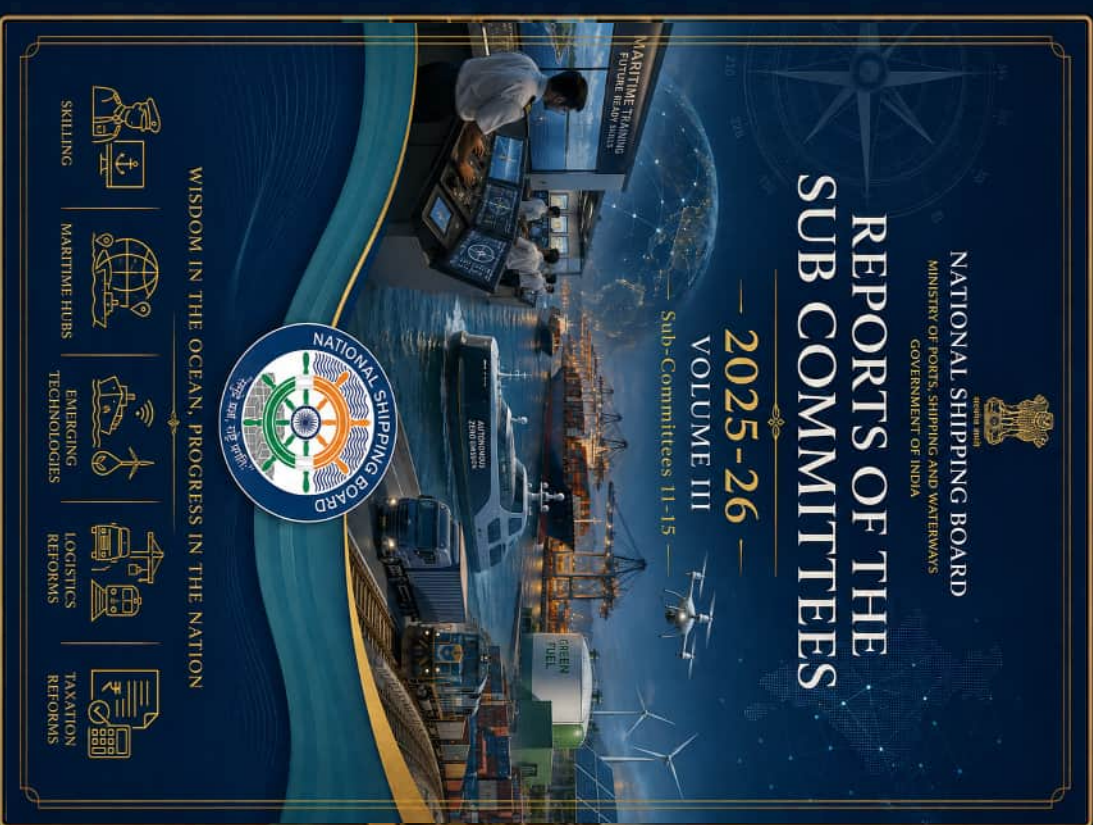
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