



MTG 15th Foundation Day Conference

Chief Guest Address

Directorate General of Maritime Administration

01st August 2026

Maritime Security Incidents Across Key High-Risk Regions-2026

Security Incidents in Black Sea Region

18 Total Incidents

05 Fatalities

02 Injuries

02 Missing (SAR Operations ongoing)

Security Incidents in Red Sea Region

02 Total Incidents

00 Fatalities

00 Injuries

Piracy Incidents in Gulf of Aden Region

05 Total Incidents

00 Fatalities

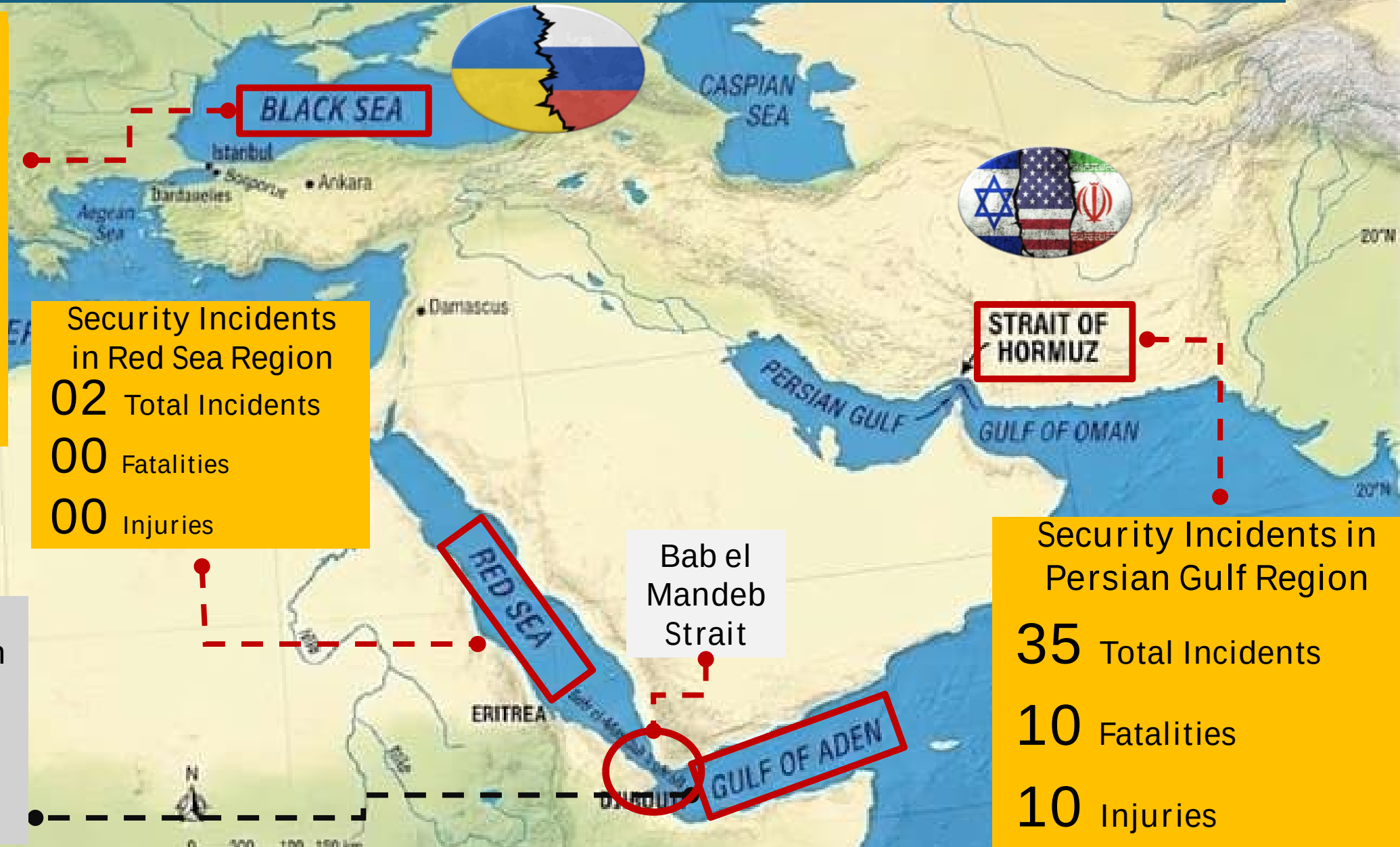
00 Injuries

Security Incidents in Persian Gulf Region

35 Total Incidents

10 Fatalities

10 Injuries





Inception of the Bharat Maritime Insurance Pool (BMIP)



Launched 12 May 2026 by Dept. of Financial Services, Ministry of Finance. Cabinet approved on 18 April 2026

USD 1.5B

Total Pool Capacity

₹12,980 Cr

Sovereign Guarantee (≈
USD 1.4B)

USD 100M

Claims Threshold
Pool's Own Resources

First policies issued under BMIP

- **H&M War Policy:**
M/s Hoger Offshore & Marine Pvt Ltd
- **Marine Cargo War Policy:** M/s Vedanta Sterlite Copper Ltd (cable wire imports) and M/s Balrampur Chini Mills Ltd

Coverage Scope for Indian flagged or controlled vessels or vessels destined to or starting from India:



01

**Hull &
Machinery**



02

Cargo



03

P&I Liability



04

War Risk

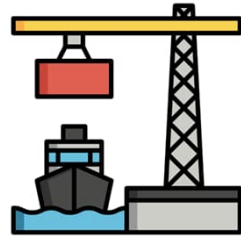


India's Maritime Sector

INDIA'S MARITIME ECOSYSTEM



60+
SHIPYARDS
Small and Large



200+
PORTS
Major and Non-major

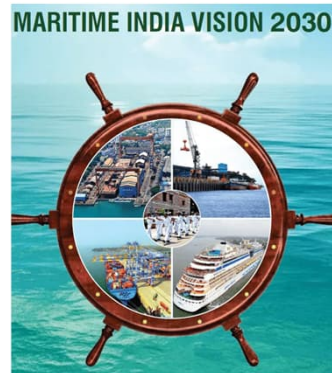
11,098
KM COASTLINE



1500+
VESSEL FLEET



3.2Lakh+
SEAFARERS



**A UNIFIED NATIONAL
MARITIME VISION**





The India Opportunity: Maritime Sector



2

Indian Ports in Global top 30 as
per 'Container Port Performance
Index'

Mundra & Visakhapatnam , 2023

Top 3

In trained manpower,
with >320,000 Active Indian
Seafarers

0.9 days

TAT ahead of many
leading maritime
nations (JNPA),2022

16th

Largest ship building
sector globally with rapid
capability expansion,2024



2nd

Rank in global ship
recycling, 2024



Blue Economy



The Blue Economy constitutes 95% of India's trade volume and 65% of India's trade value

~4%

Contribution to
National GDP

Potential: 10% by 2047

95%

India's Trade
by Volume via Sea

70% by value

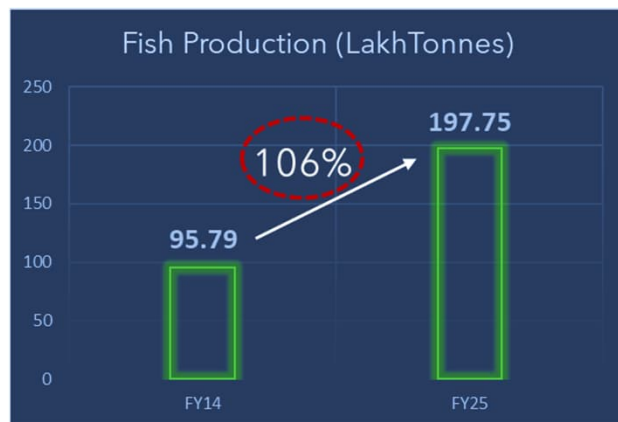
₹80L Cr

MIV 2030 + Amrit
Kaal Vision Roadmap

Combined policy investment

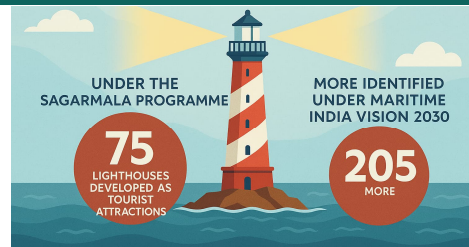
Strategic investments in the Blue Economy could raise this contribution from 4% to 10% of GDP by 2047

Fisheries & Aquaculture

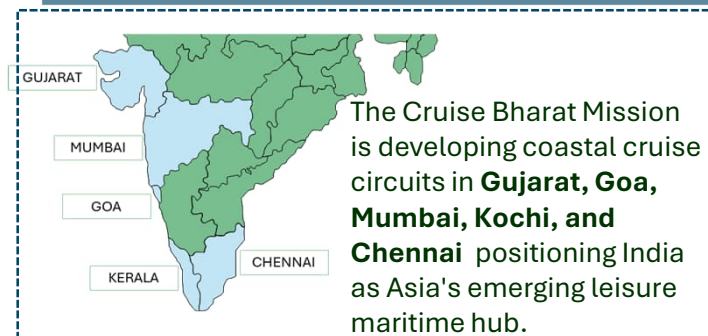


- India is the world's **2nd** largest fish producer, contributing **8%** to global fish output
- Seafood exports have more than doubled in a decade from **₹30,213 crore** in 2013-14 to **₹62,408 crore** in FY 2024-25
- The Fisheries sector has created **58 lakh** employment opportunities, supporting approximately **3 crore** fishers and fish farmers at the primary level.

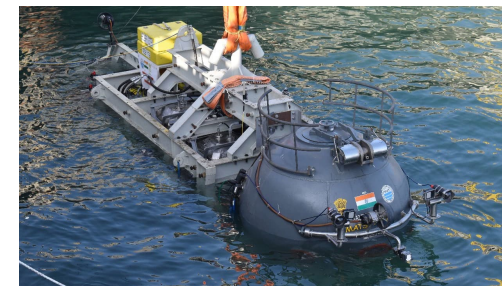
Coastal & Cruise Tourism



India's coastal tourism sector is projected to grow to **₹1.2 lakh crore**, with the government identifying **13** coastal districts for priority development.



Marine Biotechnology & Deep Ocean



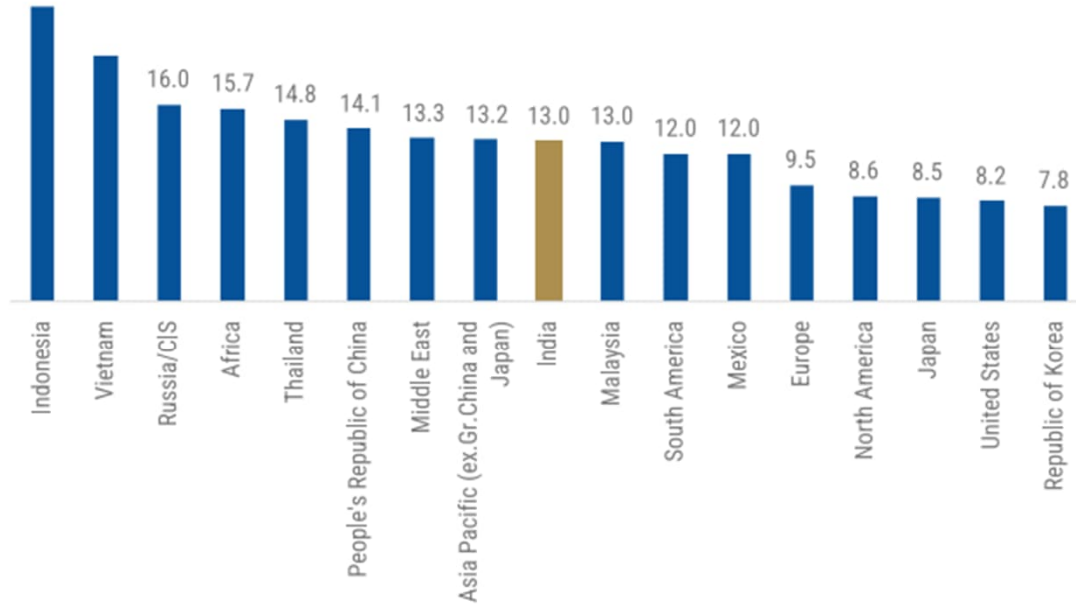
- Samudrayaan:** India is developing crewed submersibles to reach **6,000 m**, enabling a first-of-its-kind manned deep-sea research station.
- India's 6,000 m **deep-sea station** aims to set a global benchmark, envisioned as a permanent international research hub by 2047, akin to the International Space Station
- India's **333** cultivable seaweed species position it strongly for expansion, with current ~1% global production highlighting a significant opportunity to scale up in marine biotech, pharmaceuticals, and biofuels.



India's Logistics and Maritime Performance



Logistics Costs for Key Regions and Countries (as per cent to GDP, 2016)



Source: Armstrong and Associates report (2017)

Logistics Costs for India has **now reduced to 7.97 %** as per the current assessment prepared by NCAER for DPIIT

Source: Rankings - Agility-Emerging-Markets-Logistics-Index-2025.pdf

Source: Rankings - emergingmarketsindex.agility.com/wp-content/uploads/2026/02/Agility-Emerging-Markets-Index-2026-Final.pdf

Agility Emerging Markets Logistics Index 2025

Rank 2: India

Rank	Rank Change	Country	Overall Score	Last Year's Score	Domestic Opportunities	International Opportunities	Business Fundamentals	Digital Readiness
1	0	China	8.58	8.61	8.58	9.65	6.37	8.47
2	0	India	6.94	7.21	7.59	7.49	6.03	5.76
3	0	UAE	6.31	6.49	5.53	5.90	8.53	6.55
4	2	Saudi Arabia	6.08	6.05	5.61	6.07	7.45	5.82
5	-1	Malaysia	6.04	6.17	5.26	5.78	7.72	6.41
6	-1	Indonesia	5.94	6.16	6.16	6.12	5.85	5.41
7	2	Mexico	5.77	5.60	5.49	6.45	5.61	5.25
8	-1	Qatar	5.64	5.85	5.36	4.92	6.97	6.25
9	1	Thailand	5.61	5.59	5.05	5.86	5.94	5.82
10	-2	Vietnam	5.52	5.73	5.09	5.81	6.01	5.37

Agility Emerging Markets Logistics Index 2026

Rank 2: India

Rank	Rank Change	Country	Overall Score	Last Year's Score
1	0	China	8.44	8.58
2	0	India	6.99	6.94
3	0	UAE	6.40	6.31
4	0	Saudi Arabia	6.25	6.08
5	0	Malaysia	6.03	6.04



DGS to DGMA Transition



The proposed redesignation & restructuring aligns with the objectives of **Maritime India Vision 2030** and **Amrit Kaal Vision 2047**, while supporting India's expanding role in global maritime forums such as **IMO, ILO, and UNFCCC**. It aims to enhance functional clarity, strengthen inter-Wing collaboration, and improve stakeholder engagement to effectively address emerging priorities including sustainability, climate change, automation, and maritime digitization.





Maritime Transformation – 2 Foundational Pillars



Technology & Sustainability

Technology Integration - Digital Platforms

1. Flagship platforms: e-Samudra, SAGAR SETU, Maritime Single Window (MSW).
2. e-Samudra integrates 60+ maritime services (MTO registration, shipbuilding aid).
3. AI-powered exams & simulations for seafarer training.
4. Real-time vessel/cargo monitoring via Command & Control Centre.
5. Digital Centre of Excellence (DCoE) promotes AI, IoT, blockchain.
6. Reduced cargo dwell time; enhanced port efficiency.
7. Swachh Sagar Portal

Sustainability Initiatives - Green Shipping Agenda

1. Targets: 500 GW non-fossil energy (2030), 1 billion-ton carbon cut, net-zero by 2070.
2. Policies encourage LNG, green hydrogen, biofuel vessels.
3. Mandates shore power, waste, and renewable port integration.

Sustainability Initiatives - Key Programmes

1. Harit Sagar Guidelines support 100% renewable energy, AI/IoT logistics in ports.
2. Green Tug Transition: 50% hybrid/electric tugs by 2030.
3. Green hydrogen plant at Deendayal Port scaling to 10 MW; 5 million tonnes by 2030 goal.

INDIA'S MARITIME TECHNOLOGY TRANSFORMATION IN 2025



CLOUD – NATIVE PLATFORMS



ARTIFICIAL INTELLIGENCE



BLOCKCHAINS



MARITIME SINGLE WINDOW



SIGNIFICANT REDUCTION IN CARGO DWELL TIMES
REAL TIME VESSEL TRACKING



DIGITAL CENTER OF EXCELLENCE

INDIA'S MARITIME SUSTAINABILITY INITIATIVES



500-GW Non-Fossil-Energy by 2030



1 Billion Tonne Carbon Reduction



LNG & Green Hydrogen Vessels



100% Renewable Energy Ports



Green Tug Transition Programme



Shore-to-Ship Power Supply



Green Ship Recycling



Green Hydrogen Plants



Green Shipping Corridors



₹25,000 crore
Maritime Development Fund

Imperative for Maritime Energy Transition



CURRENT REALITY



Maritime transport contributes ~3% of global GHG emissions



IMO Net-Zero Framework is driving global maritime decarbonization



Increasing regulatory, commercial and financial pressures



Continued dependence on fossil fuels exposes the sector to energy security and price volatility risks



Growing demand for sustainable and future-ready maritime transport solutions



WHY TRANSITION?



Reduce greenhouse gas emissions



Enhance energy security



Improve long-term competitiveness of shipping



Support sustainable economic growth



Enable transition towards Zero and Near-Zero (ZNZ) emission fuels



KEY MESSAGE



Alternative fuels are not merely an environmental requirement but a **strategic pathway** towards a **resilient, competitive and sustainable** maritime sector.



DECARBONIZE OUR OCEANS



SECURE OUR ENERGY FUTURE



STRENGTHEN MARITIME COMPETITIVENESS



BUILD SUSTAINABLE ECONOMIC GROWTH

National Maritime Decarbonization Policy Framework

PILLAR 8: POLLUTION PREVENTION



- Strengthening waste management and port reception facilities
- Promoting circular economy and resource efficiency
- Ensuring MARPOL compliance and environmental standards
- Cleaner operations to protect marine ecosystems
- Preventing marine pollution and building a sustainable blue economy

PILLAR 7: GREEN TECHNOLOGY



- Accelerating adoption and indigenisation of advanced maritime technologies
- Digitalisation, automation, AI/IoT and data-driven decision making
- Innovation sandboxes, pilot projects and collaborative R&D
- Enhancing efficiency, safety and competitiveness

PILLAR 6: GREEN FUELS



- Promoting a safe and phased transition to alternative marine fuels
- LNG, biofuels, methanol, ammonia, hydrogen and other future fuels
- Developing bunkering infrastructure and reliable supply chains

PILLAR 5: GREEN SKILL DEVELOPMENT



- Preparing future-ready maritime workforce and institutions
- Training for new technologies, alternative fuels and digitalisation
- Strengthening capacity for safety, sustainability and compliance
- Supporting seafarer transition and career progression

NATIONAL MARITIME DECARBONIZATION POLICY FRAMEWORK

8 PILLARS FOR A DECARBONIZED, COMPETITIVE AND SUSTAINABLE MARITIME SECTOR

PILLAR 1: GREEN SHIPPING



- Lifecycle-based decarbonization of India's fleet
- Energy-efficient, fuel-flexible and low- to zero-emission vessels
- Green ship certification and incentives
- Lifecycle emissions accounting and transparency

PILLAR 2: GREEN PORTS



- Port-led decarbonization through clean energy integration
- Electrification, shore power and energy efficiency in operations
- Sustainable infrastructure and green logistics
- Positioning Indian ports as competitive, low-carbon gateways

PILLAR 3: GREEN SHIP RECYCLING



- Safe, environmentally sound and circular ship recycling
- Alignment with Hong Kong Convention
- Strengthening worker safety
- Enhancing material recovery and resource efficiency

PILLAR 4: GREEN FINANCE



- Mobilising affordable and long-term capital for green maritime projects
- Blended finance and risk-sharing mechanisms
- ESG-aligned investments
- Incentivising clean technologies and innovation



Alternative Fuels in Maritime



 LNG	 BIOFUEL	 METHANOL	 AMMONIA	 HYDROGEN
				
 Mature technology and in use today	 Renewable and derived from sustainable feedstocks	 Liquid at ambient conditions – easy to handle	 Zero carbon at point of combustion	 Zero carbon fuel – only water as by-product
 Lower CO ₂ emissions than conventional fuels	 Lower lifecycle GHG emissions	 Lower emissions potential (when green methanol used)	 High energy density than hydrogen	 Highest gravimetric energy density
 Transitional fuel towards lower carbon future	 Can be used in existing engines with blends	 Engine technology maturing rapidly	 Toxic and requires stringent safety measures	 Low volumetric energy density; storage challenge
21.2	~ 30–37*	15.7	12.7	8.5
Cryogenic –162 °C	Ambient (varies by fuel)	Ambient (up to 65 °C)	Refrigerated –33 °C	Cryogenic / Compressed –253 °C / >250 bar
1.8 times	~ 1.2 – 1.5 times*	2.5 times	3 times	5–7 times
5–15 (Methane)	Varies (low–moderate)	6–36.5	15–28	4–75

* Varies depending on feedstock and fuel type



Multiple fuel pathways for a net-zero future



Safety, infrastructure and regulation are critical



Collaboration across the entire maritime ecosystem is essential



Enabling a resilient, competitive and sustainable maritime sector



Choice of fuel depends on route, vessel type, infrastructure & availability



SHIPS AND PROPULSION SYSTEMS

- New fuels, new engines
- Retrofit and newbuild solutions



PORTS AND BUNKERING INFRASTRUCTURE

- Dedicated storage & handling
- Safe bunkering operations



FUEL PRODUCTION AND SUPPLY CHAINS

- Scalable production
- Reliable & resilient supply chains



REGULATORY AND SAFETY FRAMEWORKS

- Standards, guidelines & certification
- Risk-based safety management

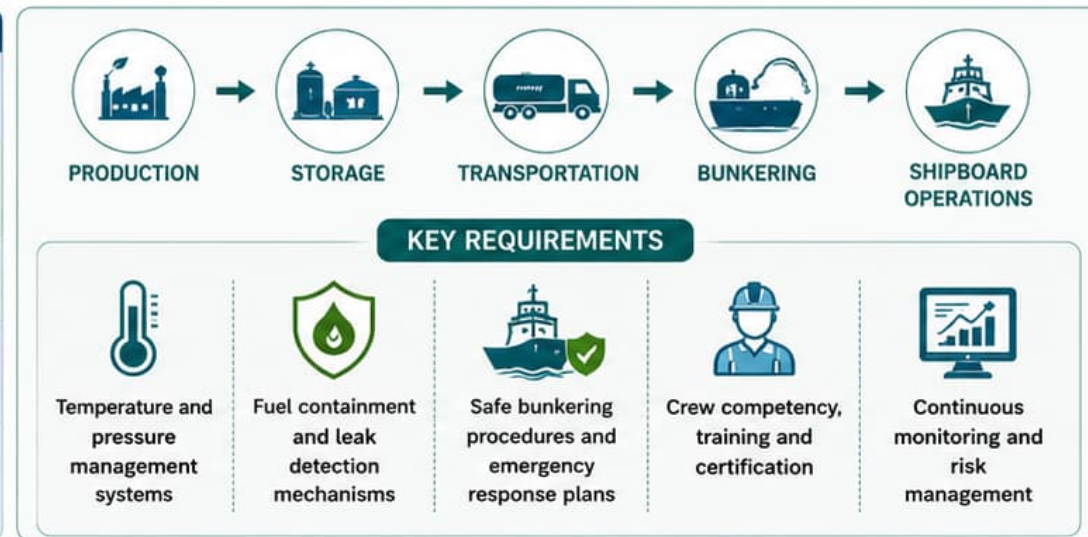


MARITIME TRAINING AND COMPETENCY DEVELOPMENT

- Skilled & competent workforce
- Training, drills & certification



FUEL	KEY CHALLENGES	KEY SAFETY CONSIDERATIONS
LNG	• Cryogenic storage requirements; methane slip; higher storage volume than conventional fuels	• Extreme low-temperature handling; • Gas leakage; fire and explosion risks
BIOFUELS	• Feedstock availability; fuel quality consistency; compatibility with existing engines and fuel systems	• Oxidation, microbial growth, fuel degradation and storage management
METHANOL	• Lower energy density requiring larger fuel tanks; higher fuel cost; limited bunkering infrastructure	• Highly flammable; toxic if ingested or inhaled; nearly invisible flame during combustion
AMMONIA	• Limited commercial availability; storage and distribution challenges; engine technology still evolving	• Highly toxic vapours; personnel exposure risks; leak detection and emergency response requirements
HYDROGEN	• Low volumetric energy density; large storage requirements; immature bunkering ecosystem; high production cost	• Highly flammable; leakage due to small molecular size; cryogenic storage and material embrittlement concerns



KEY MESSAGE

The transition to alternative fuels is not merely a fuel replacement exercise. It requires coordinated development of **infrastructure, regulations, safety systems** and **human competencies** to enable a safe, secure and sustainable maritime energy transition.





Green Ports : Driving Sustainable Maritime Growth



Cleaner Ports, Greener Operations, Sustainable Future



WHAT IS A GREEN PORT?



Ports designed and operated with minimal environmental impact.



Integration of clean energy, efficiency and circular economy practices.



Focus on reducing emissions, conserving resources and enhancing community well-being.



SUSTAINABLE INDICATORS FOR GREEN PORTS



Green Port Index (GPI)

Measures overall environmental performance of ports.



Port Readiness Level (PRL)

Assesses preparedness for green and sustainable port operations.



Shore Power Readiness Indicator (SPRI)

Measures readiness for Onshore Power Supply (OPS) infrastructure



Environmental Ship Index (ESI)

Evaluates environmental performance of visiting ships.



PORT EMISSION SCOPES



SCOPE 1 Direct Emissions

- Port equipment & vehicles
- On-site fuel combustion
- Port owned vessels



SCOPE 2 Indirect Emissions (Energy)

- Purchased electricity
- Steam / heating / cooling consumed at port



SCOPE 3 Other Indirect Emissions

- Ships at berth & in port
- Cargo handling activities
- Waste & water treatment
- Employee & visitor travel
- Upstream & downstream logistics



Measuring, Monitoring & Mitigating Across All Three Scopes is Key to a Low-Carbon Port Ecosystem



SHORE TO SHIP POWER (ONSHORE POWER SUPPLY)

Electricity supplied from the shore to berthed ships, allowing engines to be switched off and eliminating fuel combustion while docked.



WHY IT MATTERS

- ✓ Cuts CO₂, NO_x, SO_x and Particulate Matter emissions in port zones
- ✓ Improves air quality and ESG scores for Indian ports
- ✓ Supports compliance with IMO CII, GHG & Green Port Index



POSSIBLE FINANCING OPTIONS

- Blended finance → govt + MDBs + private capital
- Green/blue bonds → earmarked for OPS infrastructure
- PPP models → private players co-invest in OPS roll-out



IMPLEMENTATION STATUS IN INDIAN PORTS



Kamarajar Port
500 kW, 400V, 50-60 Hz in Coal Berth 1 & 2



VO Chidambaram Port
305 kW, 400V 60Hz in VOC Berth 2 & 3



Jawaharlal Nehru Port Authority
SPS used for Tugs. SPS for all terminals planned (45MVA; INR 600 crore expected)



Paradip Port
Newly commissioned. Delivered full load power to MV APJ Indrani at CB1 Berth.



GREEN TUG TRANSITION PROGRAM (GTTP)



Initiative of MoPSW for transition of harbour tugs to green propulsion.



Targets progressive replacement of diesel-powered tugs.



Applicable to ~400 harbour tugs operating across Indian ports.



Implemented through **Approved Standard Tug Designs & Specifications (ASTDS-GTTP)**.



Initial focus on **battery-electric tugs**, with provision for **hybrid, methanol and hydrogen**.

PHASE 1 (2024-27)



- Induction of battery-electric green tugs at Major Ports.
- Deployment based on ASTDS-GTTP.

PHASED IMPLEMENTATION FRAMEWORK

PHASE 2-3 (2028-33)



- 30%-60% of operational tug fleet to be ASTDS-GTTP compliant.
- Introduction of alternate fuels and hybrid technologies.

PHASE 4-5 (2034-40)



- 100% transition of harbour tugs at Major Ports.
- Nationwide adoption aligned with vessel life / charter cycles.



Towards a **Low-Carbon, Efficient and Resilient Ecosystem**



Clean Energy



Energy Efficiency



Circular Economy



Climate Action



Sustainable Growth



Building Green Ports Today for a Sustainable Tomorrow



IMO – DNV Study on Potential Demand and Pricing of Alternative Fuels



Strong Alternative Fuel Demand Potential

- Alternative marine fuel demand projected to reach **42–65 PJ by 2035**
- Demand could increase to **113–293 PJ by 2047**
- Growth expected to be driven by increasing adoption of low and zero-carbon fuels in shipping

India's Strategic Bunkering Opportunity

- India's location along major East-West trade routes provides strong potential as a regional bunkering hub
- Opportunity is driven by vessels already calling at Indian ports rather than passing traffic alone
- Container vessels identified as the most promising early adopters of alternative fuels

Fuel Transition Pathway

- Biofuels and methanol expected to lead early adoption
- Ammonia expected to play a larger role in the long term as infrastructure, supply chains and safety frameworks mature
- Methanol identified as the most suitable starting fuel for initial bunkering deployment

Potential Bunkering Hubs

- Mundra, JNPA, Chennai and Tuticorin identified as key demand centres
- Supported by nearby production and hydrogen hub locations including Deendayal (Kandla) and Tuticorin
- Hub-and-spoke bunkering model recommended for efficient fuel supply

Phased Development Roadmap

- **2026–2030:** Establish pilot bunkering ecosystem
- **2030–2035:** Scale proven bunkering clusters
- **2035–2047:** Position India as a regional alternative fuel bunkering hub integrated with international Green Shipping Corridors



India Green Corridors Pre-Feasibility Study



By Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping

Key Outcomes

- Assessed 14 Indian ports across inland, coastal and international shipping segments
- Screened **230+ potential routes** and identified a **first suite of 40 Green Shipping Corridors**
- Corridor portfolio includes:
 - 8 Inland Waterway Corridors
 - 8 Coastal & Domestic Corridors
 - 8 Deep-Sea International Corridors
 - 8 Strategic Opportunity Corridors
 - 8 Emerging Corridors
- E-ammonia identified as the most credible scalable fuel pathway for early corridor deployment
- VOC, Kandla, Paradip and Mundra identified as leading corridor anchor ports
- Gujarat and Odisha emerged as key green fuel production hubs supporting future corridor development

Consortium Incubation Workshop conducted on May 28, 2026 at New Delhi



National Green Hydrogen Mission – Green Hydrogen Hubs



The **National Green Hydrogen Mission (NGHM)** aims to position India as a **global hub for green hydrogen production, utilisation and export**, with a target of **5 MMT annual production by 2030**, supporting decarbonisation and energy transition.

Deendayal Port Authority (Kandla) – Western Hub

- **1 MW** green hydrogen plant commissioned (electrolyser-based) 
- **3,400 acres** land allocated for Green Hydrogen / Ammonia projects
- **3.5 MMTPA** jetty compatible for Green Ammonia handling
- **Port Readiness Level 6 (7)** for green fuel / methanol bunkering 
- Advancing methanol bunkering ecosystem and alternative fuel transition 
- Western gateway for green fuel production + bunkering + export corridors

Paradip Port Authority – Eastern Hub

- **₹797 crore** Green Hydrogen / Ammonia jetty approved 
- **4.0 MTPA** handling capacity for green energy cargo
- Development includes jetty, storage, pipelines and handling systems
- Implemented under PPP / BOT 
- Designed to connect eastern hydrogen clusters to global markets
- Anchor hub for bulk handling, storage and export logistics 

V.O. Chidambaranar Port (Tuticorin) – Southern Hub

- **10 Nm³/hr** Green Hydrogen pilot plant commissioned (Apr 2025) at cost of **INR 3.87 Crore** 
- Pilot supports port operations (lighting, EV charging)
- **205.72 acres** land allocated for GH2 / Ammonia projects 
- Developing Green Methanol Bunkering Facility (2 × 750 m³)
- Emerging as green fuel + digital + renewable integrated port 
- Southern hub for pilot deployment, innovation and green bunkering



India as a Net Green Energy Exporter & Bunkering Destination



STRATEGIC ADVANTAGE



Long coastline with major ports on **East-West shipping lanes**



Abundant renewable energy for **green hydrogen, ammonia, methanol**



Cost advantage in solar + wind production, **lowering fuel export price**



ECONOMIC & DIPLOMATIC IMPACT



Reduces **dependency on oil imports**



Positions India as **fuel supplier** to global shipping lines



Enhances maritime influence under **Global South leadership**



FUEL EXPORT READINESS



Green Ammonia : Kandla supply to Singapore (L&T-Itochu JV)



Green Methanol : VOC Port bunkering hub under development



Hydrogen Derivatives : Mission to export through maritime corridors



PORT INFRASTRUCTURE TRANSFORMATION



Dedicated **Green Bunkering Terminals** (VOC Port, Kandla, JNPA)



Upcoming **Green Shipping Corridors**: Tuticorin – Kandla – Singapore – Rotterdam



Integration of **renewable power, storage & safety systems**



POLICY BACKING



Supported by **National Green Hydrogen Mission & National Maritime Decarbonization Framework**



Incentivized by **Harit Sagar & MIV 2030**



Aligned with **Make in India & Energy Security Vision 2047**



RENEWABLE ENERGY
ABUNDANT & LOW COST



GREEN FUEL PRODUCTION
HYDROGEN • AMMONIA
METHANOL • BIOFUELS



STORAGE & INFRASTRUCTURE
SAFE • RELIABLE • SCALABLE



BUNKERING & PORTS
WORLD-CLASS FACILITIES



MARITIME FUEL EXPORTS
FUELLING GLOBAL SHIPPING



India is not just preparing for Green Fuels —
it is preparing to Fuel The World.



Energy
Security



Economic
Growth



Environmental
Leadership



Global
Partnerships





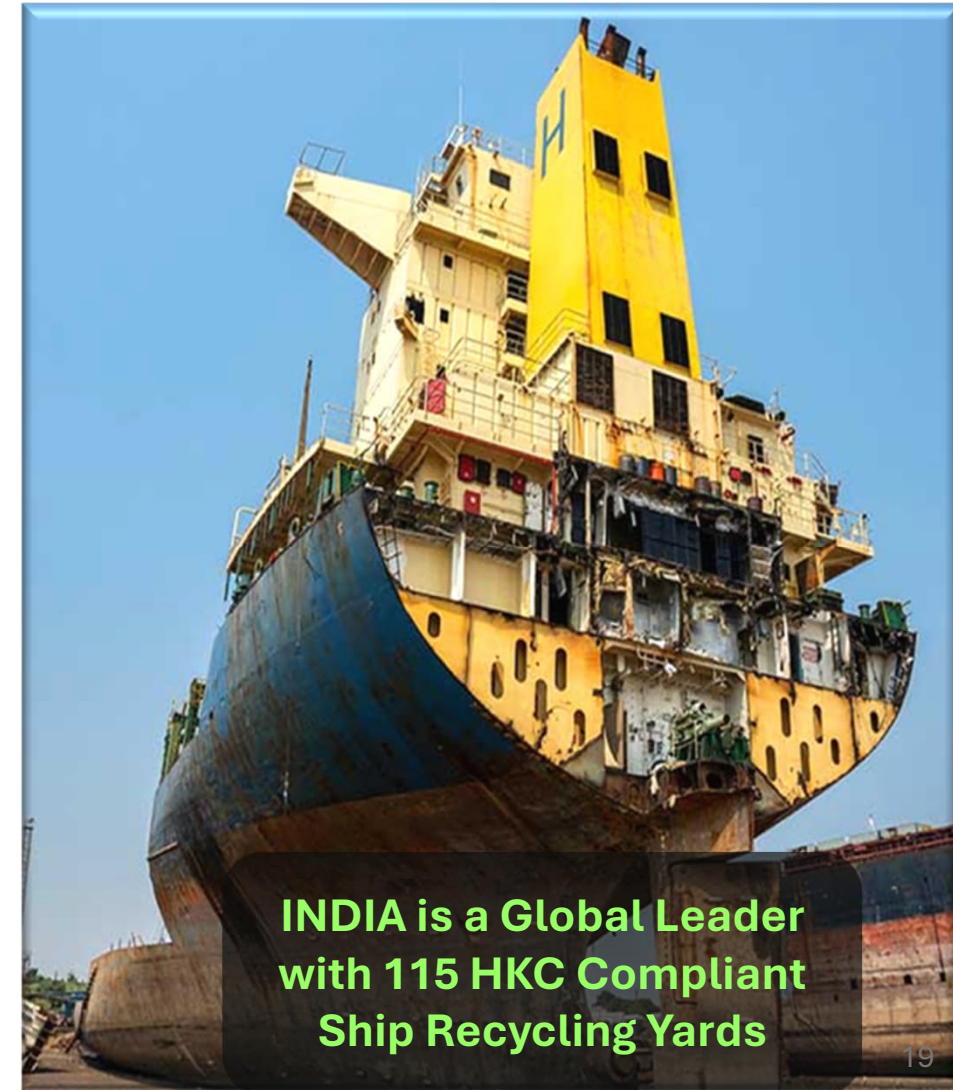
Ship Recycling



- Process of dismantling end-of-life ships to recover **steel and other valuable materials**.
- India is a **global leader**, with Alang–Sosiya in Gujarat being the **world's largest ship recycling cluster**.
- Governed internationally by the **Hong Kong Convention (HKC)**, which entered into force on **26 June 2025**.
- Integral to the **circular economy**, reducing the demand for virgin raw materials. 97-98% Materials recoverable

India's Role & Importance

- Handles **30% - 35% of global ship recycling tonnage** annually. (~500 vessels annually)
- Provides **20 - 25% of India's ferrous scrap requirement**, reducing dependence on imports.
- India is the **only country with 100+ HKC Compliant Recycling Yards**. Supplies input material for the **Green Steel ecosystem**, boosting India's low-carbon transition.
- Generates **direct employment for 15000+ workers** and **indirect livelihood opportunities** for thousands more in logistics, scrap processing, and allied services.
- Strengthens India's position in **global maritime sustainability**.





Ship Recycling Credit Note



- Introduced under **Ship Building Financial Assistance Scheme**
- Incentivizes ship owners to **recycle in India** and **build new ships in Indian shipyards**

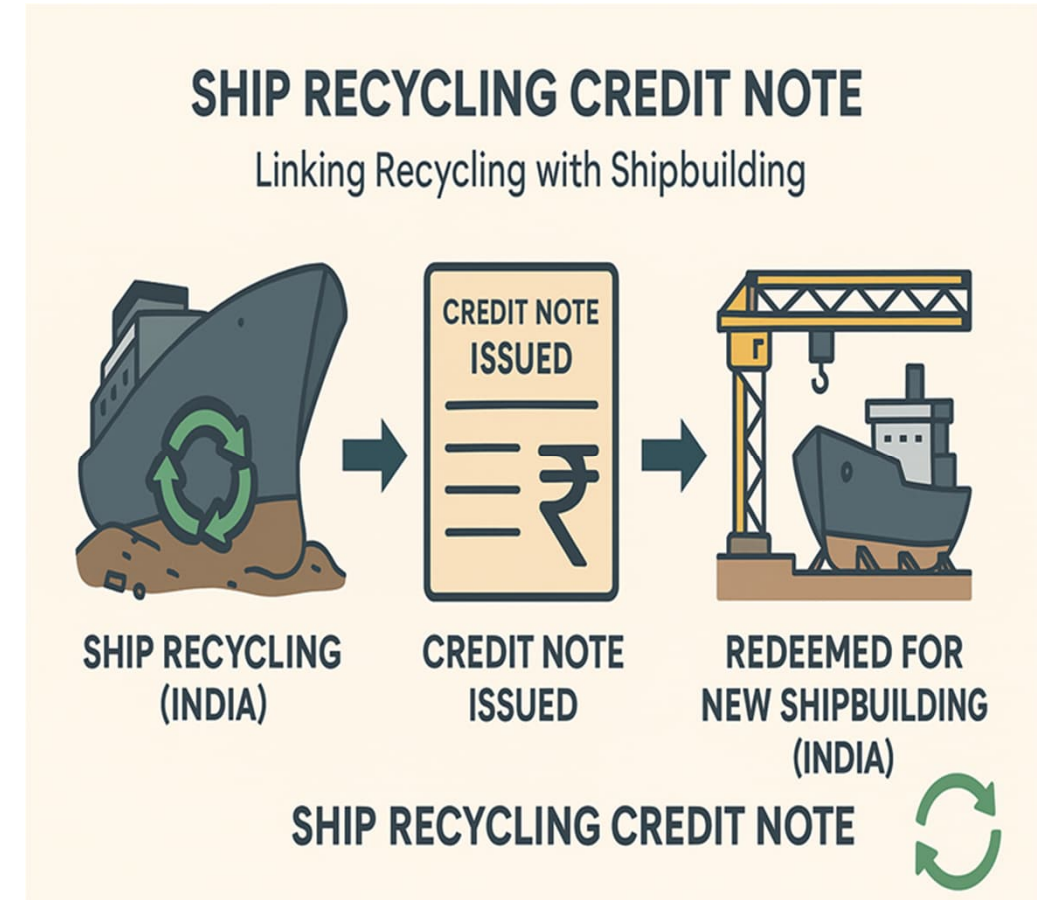
Allocation of : ₹ 4,001 crore
(under SBFA)

How It Works

- When a vessel is recycled in a certified Indian yard, the ship owner receives a **Credit Note for 40% of scrap value.**
- The Credit Note remains valid for 3 years.
- The credit note can be redeemed up to 5% of the fair price of the new vessel being built in an Indian shipyard

Benefits

- Encourages **safe and HKC compliant ship recycling** in India
- Provides direct **business boost for Indian shipyards**
- Attracts **new players** to India's ship recycling and shipbuilding ecosystem
- Strengthens India's **circular economy** : recycling feeds into new shipbuilding
- Positions India as a leader in **Green and Sustainable Maritime**





Four Pillar Approach

Cabinet approves ₹ 69,725 crore Package to Revitalize India's Shipbuilding and Maritime Sector



Shipbuilding Financial Assistance scheme

Allocation: ₹24,736 crore

- Overcome cost differential vis-a-vis foreign shipyards.
- Credit note for new builds against ship scrapping in India ₹ 4001 crore allocated
- Establish National Shipbuilding Mission



Maritime Development Fund

Allocation: ₹25,000 crore

- Enable long-term financing to maritime sector through equity & debt-based funding:
- Maritime Investment Fund
 - Interest Incentivization Fund
 - Credit Guarantee Fund



Shipbuilding Development Scheme (SbDS)

Allocation: ₹19,989 crore

- Greenfield cluster creation
- Brownfield capacity expansion to **4.5 million GT**
- Risk outlay for shipyards
- Setting up of India Ship Technology Centre (ISTC) as Apex body under IMU



Legal, Policy and Process Reforms

- Demand aggregation
- Large Ships as infrastructure
- Taxation issues
- Flagging reforms



Just Transition in Maritime



Human element is of paramount importance in the maritime industry as human skills, judgement and welfare drive maritime safety.

Just Transition: Putting People at the Core of Decarbonisation

A people-centred pathway for a safe, inclusive and resilient maritime transition

Decarbonisation is not only a fuel shift. It is a workforce shift.



~3.23 lakh Indian seafarers (as of 2025)



~12% of global maritime workforce



Alternative fuels introduce new safety risks



New technologies demand new competencies



Transition must **protect jobs, safety and dignity**



1. Skills & Training

- Large-scale upskilling for green fuels and technologies
- Modernised STCW-aligned training standards
- Investment in maritime training infrastructure



2. Safety & Standards

- Health-and-safety-first approach
- Safe handling of ammonia, hydrogen and low-flashpoint fuels
- Alignment with MLC 2006 and global labour norms



3. Equity & Inclusion

- Avoid widening global skills gaps
- Support developing maritime nations
- Promote diversity and gender inclusion



4. Well-being & Social Protection

- Seafarer welfare and mental well-being
- Fair transition with social protection
- No one left behind



Cleaner Oceans



Safer Workplaces



Stronger Economies



Resilient Communities



Sustainable Future

A green transition must also be a fair transition.



Digitalization in Maritime



DIGITAL MARITIME SERVICES & GOVERNANCE



e-SAMUDRA

- Integrated digital platform
- 15 modules | 60+ maritime services
- Paperless governance & seamless service delivery



MARITIME SINGLE WINDOW (MSW)

- Single window for all maritime clearances
- Integration with ports, customs, PHO & immigration
- Reduced documentation & clearance time



LICENSE & CHARTERING PORTAL

- End-to-end digital chartering approvals
- Foreign flag charter permissions
- Faster approvals & transparency



24x7 GRIEVANCE REDRESSAL SYSTEM

- Real-time grievance lodging & tracking
- Automated workflow & resolution monitoring



CRISIS RESPONSE MANAGEMENT MODULE

- Digital platform for maritime emergencies
- Integrated coordination with DGS, Navy, Coast Guard, MEA & stakeholders



RPSL DIGITAL MODULE

- Automated licensing, inspections & compliance
- Integration with MTIs & stakeholders
- Transparent monitoring & reporting



SWACHH SAGAR PORTAL

- ✓ Port Reception Facilities (PRF)
- ✓ Electronic BDN & Ballast Water Reporting
- ✓ Single Use Plastic Reporting
- ✓ MARPOL Compliance Monitoring
- ✓ Cleaner Ports, Cleaner Oceans



HUMAN CAPITAL & KNOWLEDGE ECOSYSTEM



DIGITALISATION IN MARITIME TRAINING

- LMS, simulators & immersive learning
- Centralised attendance system
- AI-enabled adaptive learning
- Digital Training & Assessment Records (TAR)



EXAMINATION REFORMS

- End-to-end digital exam lifecycle
- Online registration & eligibility check
- CBT / hybrid exams with online proctoring
- Digital certificate validation



TRAINING ECOSYSTEM PLATFORM

- Integrated cloud-based training ecosystem
- Faculty development & LMS integration
- Simulator integration
- Skill development & competency enhancement



MARITIME KNOWLEDGE CLUSTER (MKC)

- National knowledge-sharing platform
- Research, innovation & collaboration
- Industry-academia-government partnership



SHIP RECYCLING PORTAL

- ✓ HKC implementation platform
- ✓ Yard licensing & IHM management
- ✓ Inspection & compliance monitoring
- ✓ IMO reporting integration
- ✓ Sustainable ship recycling ecosystem



SMART MARITIME INFRASTRUCTURE & FUTURE TECHNOLOGIES



INTEGRATED VESSEL TRAFFIC MANAGEMENT SYSTEM (iVTMS)

- Implemented across all major ports
- AIS, Radar, VHF, CCTV & weather integration
- Real-time vessel traffic monitoring & safety enhancement



JUST-IN-TIME ARRIVAL

- Synchronises vessel arrival with berth availability
- Reduces fuel consumption & emissions
- Improves berth utilisation & efficiency



DIGITAL TWIN TECHNOLOGY

- Real-time virtual model of port operations
- Pilot implemented at VOC Port, Tuticorin
- Supports predictive decision-making & optimisation



LRIT

- Long Range Identification & Tracking
- Enhanced maritime domain awareness
- Vessel monitoring & casualty reporting support



GEOSPATIAL PLATFORM

- GIS-enabled monitoring for port security & sustainability
- Supports ISPS compliance & safety initiatives



INDIA GLOBAL MARITIME SAFETY PORTAL (IGMSP)

- AI-enabled maritime safety platform
- Safety analytics, incident reporting & knowledge repository
- 200+ safety learning videos



COMPREHENSIVE SHIPBUILDING PORTAL

- ✓ Industry directory
- ✓ Innovation centre
- ✓ Technical library
- ✓ Training & certification
- ✓ Shipbuilding ecosystem support
- ✓ Strengthening Make in India



DIGITAL GOVERNANCE



SMART INFRASTRUCTURE



HUMAN CAPITAL



SUSTAINABLE FUTURE



The Maritime Single Window

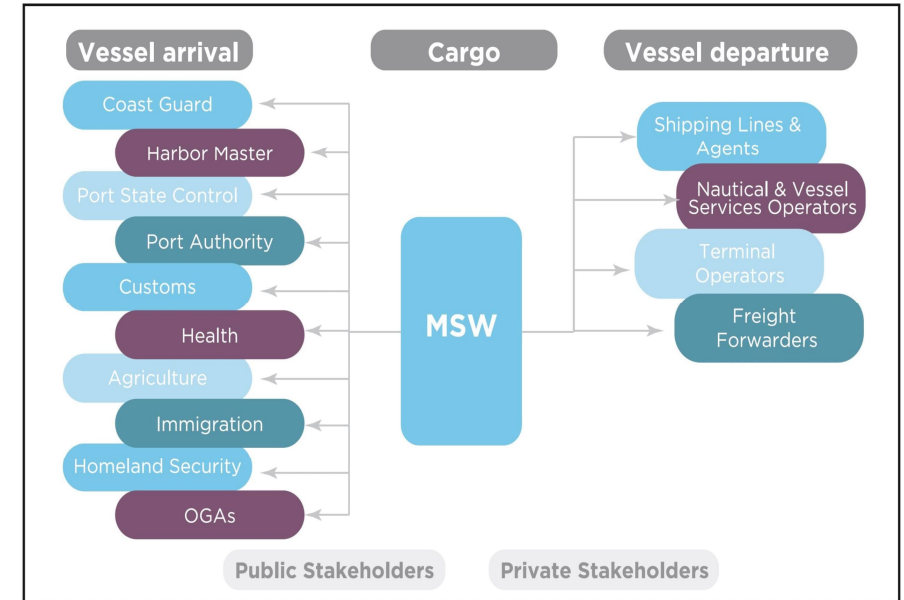


The maritime single window (MSW) is a digital platform designed to streamline and simplify the submission of maritime-related documentation for ships arriving at or departing from ports, as per IMO's mandate.

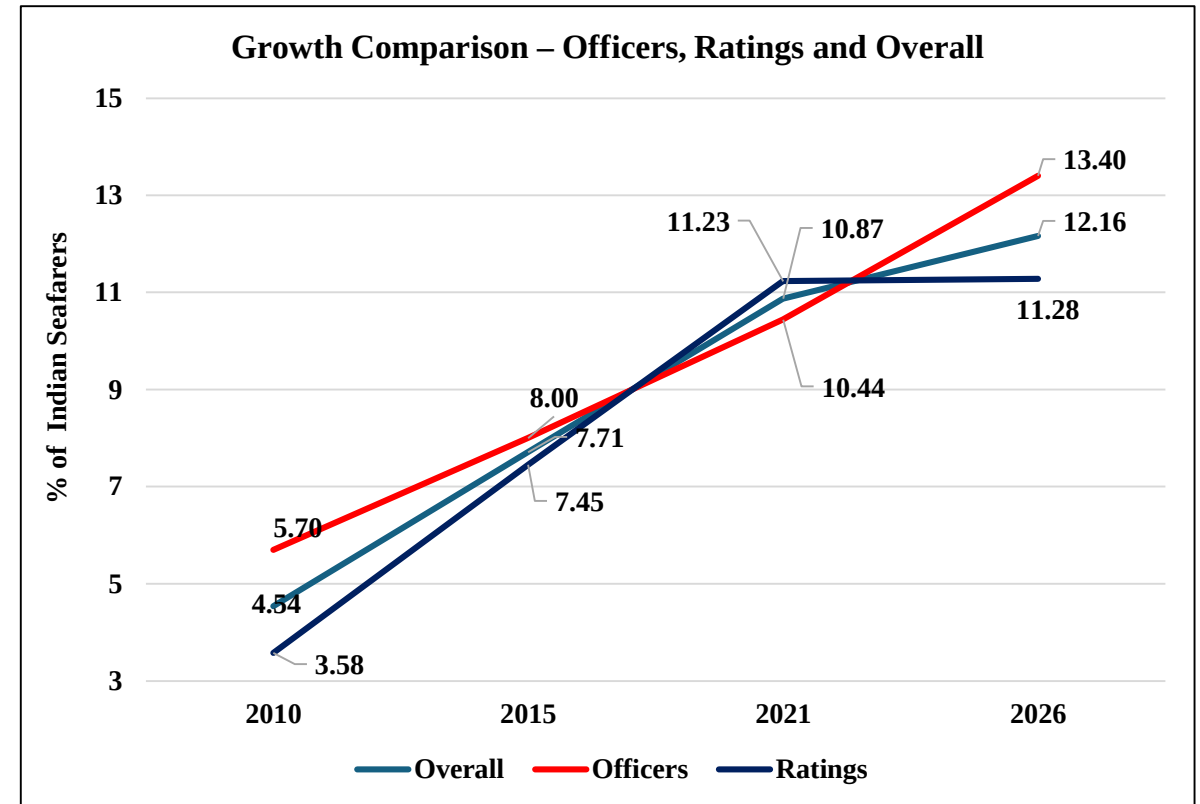
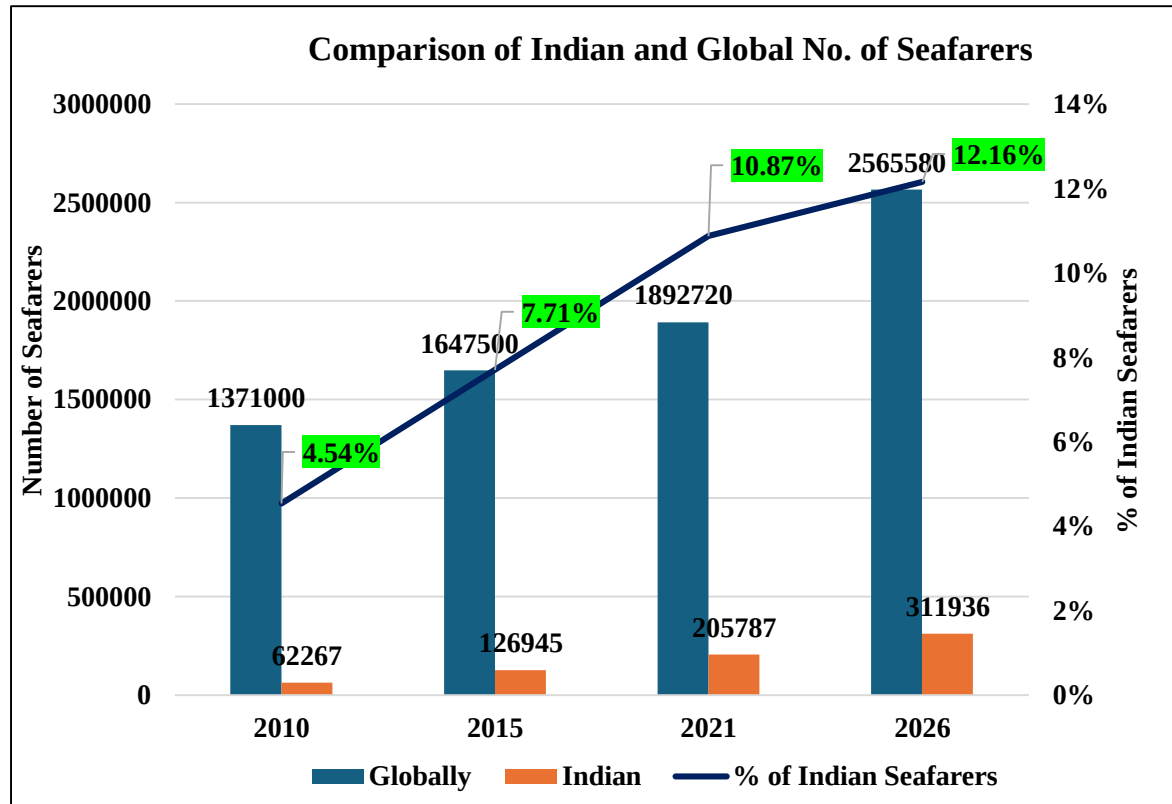
IT SERVES AS A SINGLE-ENTRY POINT WHERE SHIP-OWNERS, OPERATORS, AND AGENTS CAN ELECTRONICALLY SUBMIT ALL THE REQUIRED INFORMATION (FAL FORMS) TO VARIOUS AUTHORITIES INVOLVED IN MARITIME OPERATIONS.

MARITIME SINGLE WINDOW CAME INTO FORCE FROM 01.01.2024. THE IMPLEMENTATION OF THE MSW ALIGNS WITH THE INTERNATIONAL MARITIME ORGANIZATION (IMO) AND ITS FACILITATION (FAL) CONVENTION, WHICH MANDATES THE ELECTRONIC EXCHANGE OF INFORMATION RELATED TO SHIP ARRIVALS, DEPARTURES, AND CARGO MOVEMENTS.

BY DIGITALIZING THE SUBMISSION AND PROCESSING OF REGULATORY DOCUMENTS, MSW SIGNIFICANTLY REDUCES MANUAL INTERVENTION, THEREBY INCREASING THE SPEED AND ACCURACY OF PORT CLEARANCES AND PROMOTES EASE OF DOING BUSINESS. UPGRADEATION IS BEING PURSUED AND HAS BEEN MENTIONED IN THE UPCOMING SLIDES.



India's share of the global **seafarer** workforce has risen consistently over time by **4.54 %** in 2010 to **12.16 %** of global workforce.



India's share of the global **ratings** exhibits the fastest and most pronounced growth, increasing sharply from **3.58 %** in 2010 to **12.16 % of the ratings** in 2026.

India's share of the global **officers** share has grown more gradually, rising from 5.70% in 2010 to **11.28% of the officers** in 2026



Gender Inclusivity for Seafarers



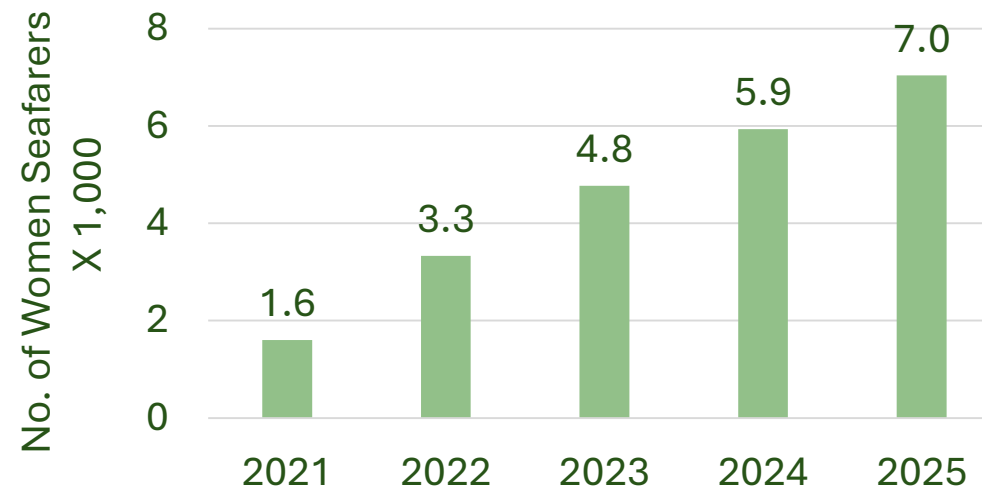
Sagar Mein Samman

- Introduced under DGS Order 18 of 2024 to promote gender-inclusive maritime workforce.
- Establishes policy-backed norms for women's safety, equal opportunity, and career advancement.
- Strengthens governance through industry-wide compliance standards and workplace reforms aligned with IMO and UN SDG-5.
- Implemented in collaboration with MUI, supporting a joint framework to empower and protect women seafarers.

Initiatives of DG Shipping to promote women seafarers :
₹1,00,000 are offered via the Maritime Training Trust

Sagar Mein Samman enhance India's maritime regulatory framework by setting structured standards for inclusivity, and safety across the crewing ecosystem

Year on Year growth of Women Seafarers



Registered women seafarers increased by **739% from 1,699 in 2015 to 14,255 in 2024** reflecting significant progress in gender inclusion and transformation within the Indian maritime sector.

Holistic Wellness For Seafarers

"**Sagar Mein Yog**" is an initiative by the DGS, Govt. of India, aimed at promoting physical and mental well-being among seafarers through yoga and mindfulness practices.

Sagar Mein Yog

- Introduced under DGS Order 19 of 2024, focusing on mental, physical, and emotional well-being of seafarers.
- Standardizes wellness practices across training institutes via MoU with NUSI.
- Helps reduce stress, fatigue, and medical emergencies enhancing safety compliance.
- Integrates structured wellness modules into Pre-Sea, At-Sea, and Post-Sea stages



[LMS Link](#)

Sagar Mein Yog enhance India's maritime regulatory framework by setting structured standards for wellness across the crewing ecosystem.

Ensuring Zero Tolerance to Fraud in Training

Raising issue over the
Call/SMS/WhatsApp

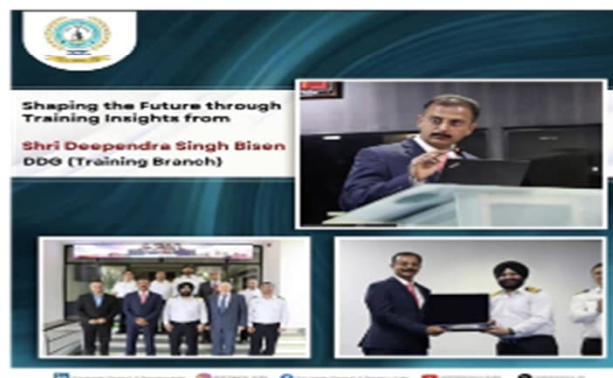
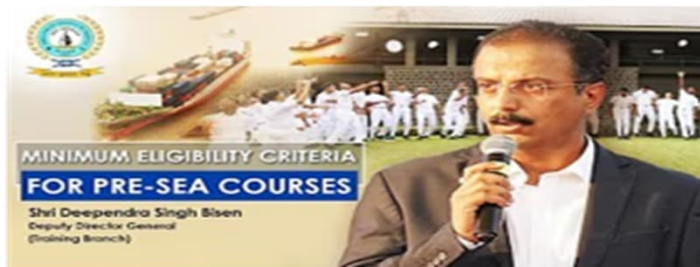
Helpline 24x7

Escalation mechanism
for resolving query

Follow-up
Support and right
guidance

Analysis
& Correction
and recurrence

Efforts to provide awareness through Social Media



- DG Shipping upholds a strict Zero Tolerance policy against corruption, fraud, and unethical practices in all operations.
- Robust systems are implemented to ensure transparency, accountability, and integrity in recruitment and welfare processes:
 - Strict monitoring of RPSL agencies
 - Digital verification mechanisms
 - Clear compliance guidelines
- Awareness initiatives conducted to educate stakeholders on:
 - Identifying corrupt and fraudulent practices
 - Avoiding illegal payments and middlemen
 - Rights and protections of seafarers
 - Reporting mechanisms and grievance redressal
- Strong grievance redressal framework:
 - 24x7 support channels
 - Time-bound resolution of complaints
 - Whistleblower protection measures
- Continuous audits and inspections to:
 - Detect irregularities
 - Enforce compliance standards
 - Strengthen systemic quality assurance
- DG Shipping ensures that quality and integrity go hand-in-hand, creating a corruption-free ecosystem for seafarers' welfare.



Beware of Fake Indian Seafarers Jobs | 5 Red Flags Explained by DG Shippi...



DG Shipping Reaffirms Zero Tolerance Towards Fraud and Exploitation of Indian Seafarers #dgshipping



Seafarers' Rights—Know and Protect Yourself | Capt. Nitin...



24 x 7 Grievance Redressal System



DGS System to provide a single digital platform for 24x7 effective lodging, tracking, and resolution of seafarer grievances.

Aim

- Streamlined and transparent grievance management
- Enhanced accountability and efficiency
- Timely redressal of issues
- Centralized database for analytics and improvement

Current Status

- eNavik Portal has went live for beta release on 15.05.2026. (<https://beta-enavik.dgma.gov.in/>)
- Extensive Social Media Campaign is currently ongoing since 15.05.2026 and will be live till 23.06.2026
- Go-live is expected for August 2026

REGISTER YOUR GRIEVANCES THROUGH

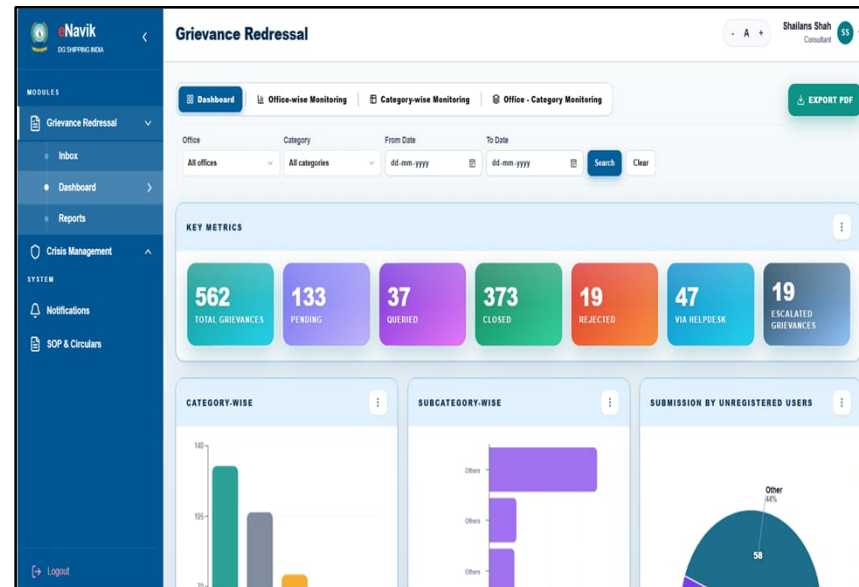
24x7 GRIEVANCE REDRESSAL

24x7 Grievance Redressal Toll Free No. 1800 - 889 - 7768

E-NAVIK PORTAL

TOLL FREE NO: 1800-889-7768

Swipe to know more >>>



24x7 Grievance Redressal Module

ALWAYS ON. ALWAYS RESPONSIVE.

24x7 GRIEVANCE REDRESSAL MECHANISM

Toll-Free Number (Domestic): 1800-889-7768

International (US Toll-Free): +1-888-988-0256

WhatsApp Number: +91 8655856830

Dgcomm Casualty No: 8657549760

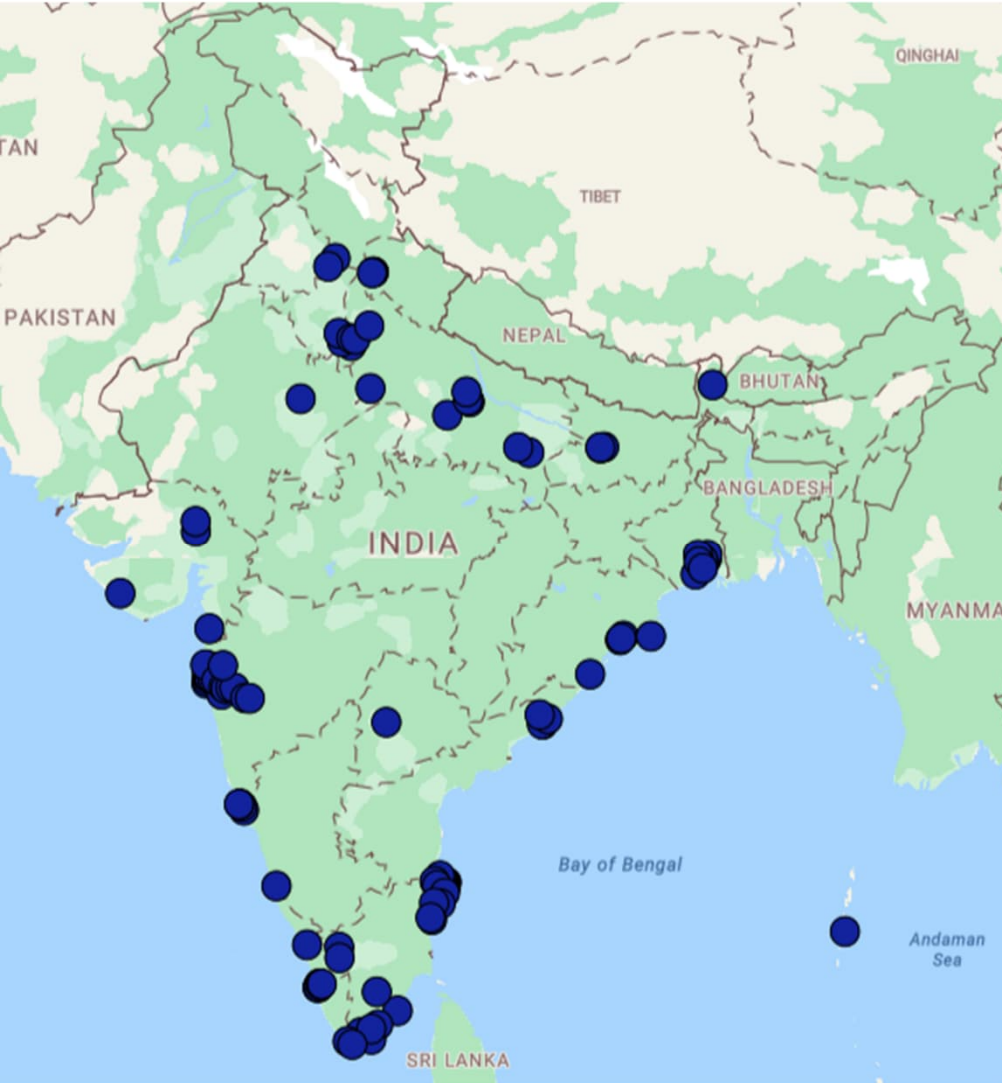
Website: beta-enavik.dgma.gov.in

Email: enavik.24x7@gov.in

Email: support.dgs@gov.in

@dgshipping_IN @dgshipping_india @dgshippingIndia @DGShipping-India @dgshippingIndia

Maritime Training Institutes in India



81

+

36

+

35

PRE - SEA INSTITUTES

POST - SEA INSTITUTES

PRE+POST INSTITUTES

=

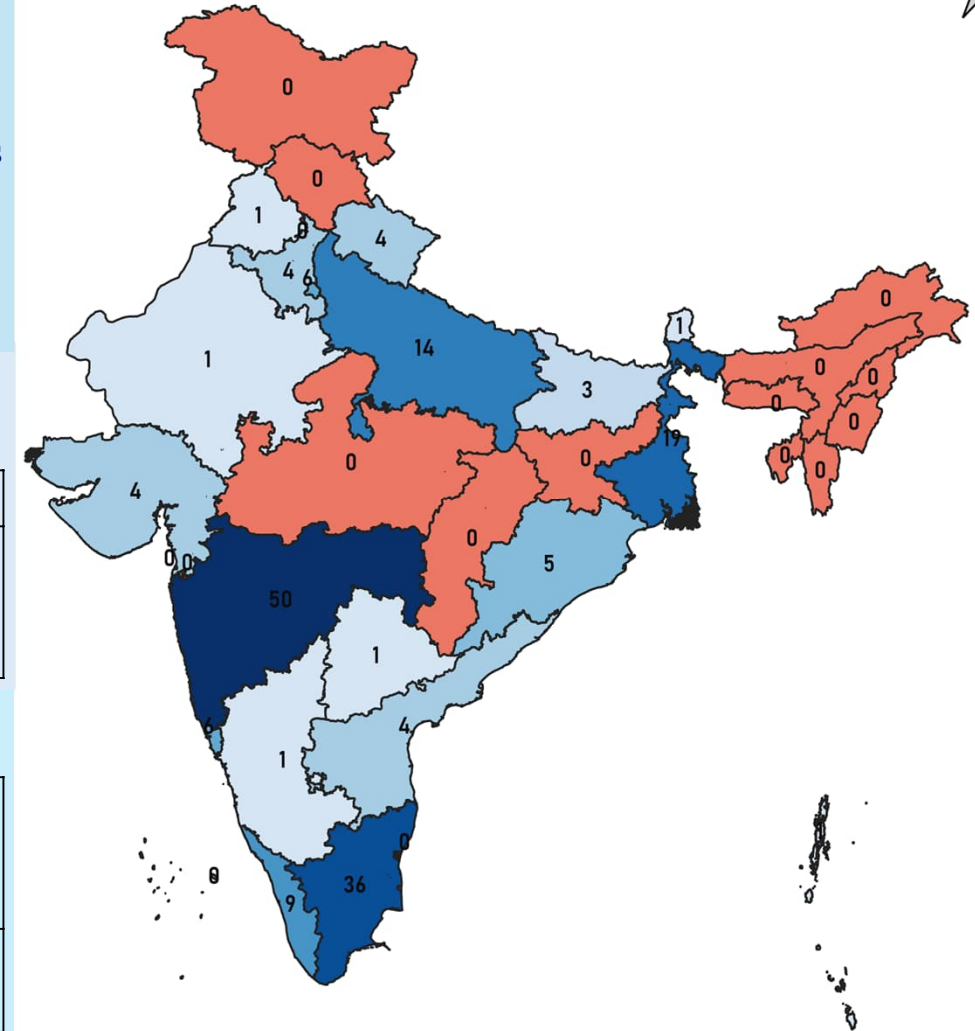
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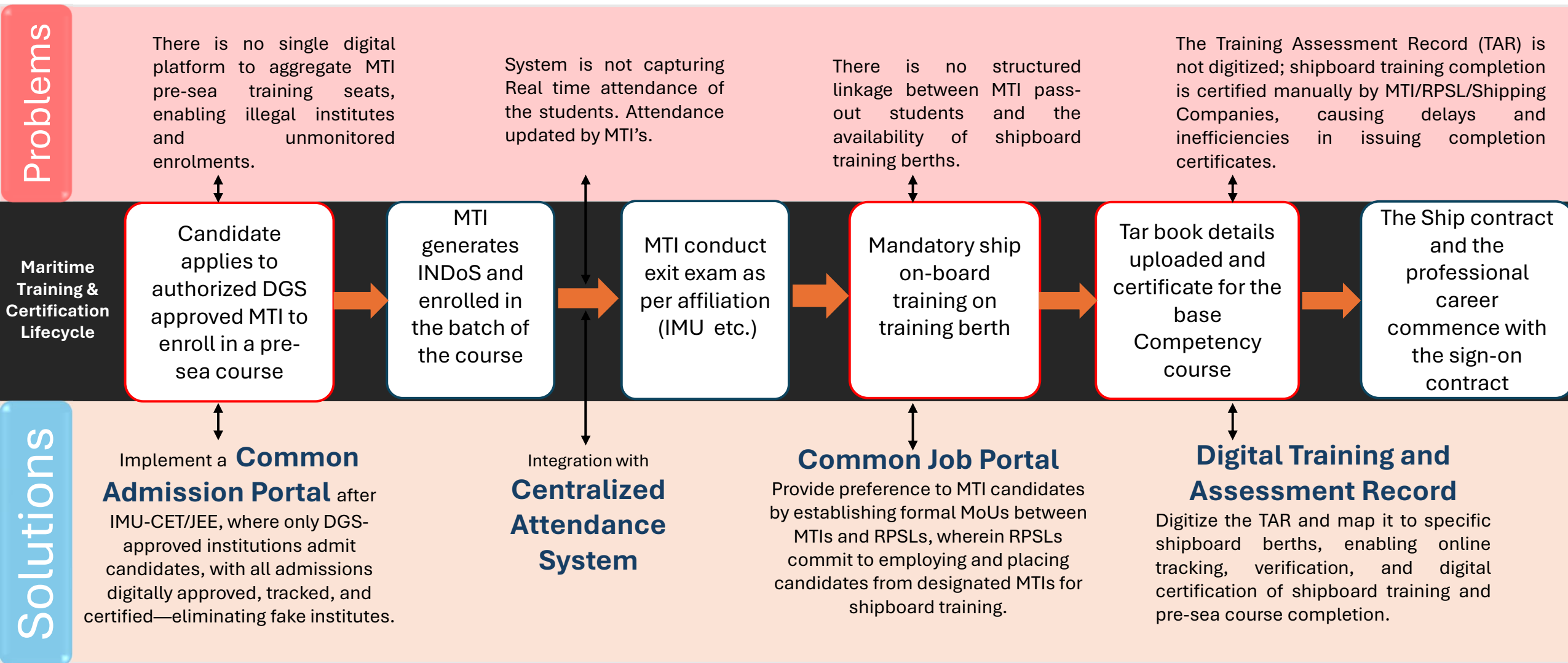
TOTAL

PRE - SEA	
Total Courses	8 Courses
Total Approved Intake (2025)	Officer - 9,636 Rating - 14,081 Total - 23,717

POST - SEA

Total Courses	Modular - 52 Simulator - 20 Competency - 17
Total Approved Intake (2025)	22,264







STCW Compliance Board



- The Merchant Shipping (STCW) Rules 2026 introduce updated national standards for training, certification, and watchkeeping of seafarers, fully aligned with the latest IMO and STCW Code amendments.
- These rules strengthen competency requirements, integrate new safety and anti-harassment training mandates effective from 2026, and ensure Indian seafarers meet globally harmonized qualification benchmarks.

The new chapter includes the following key provisions:

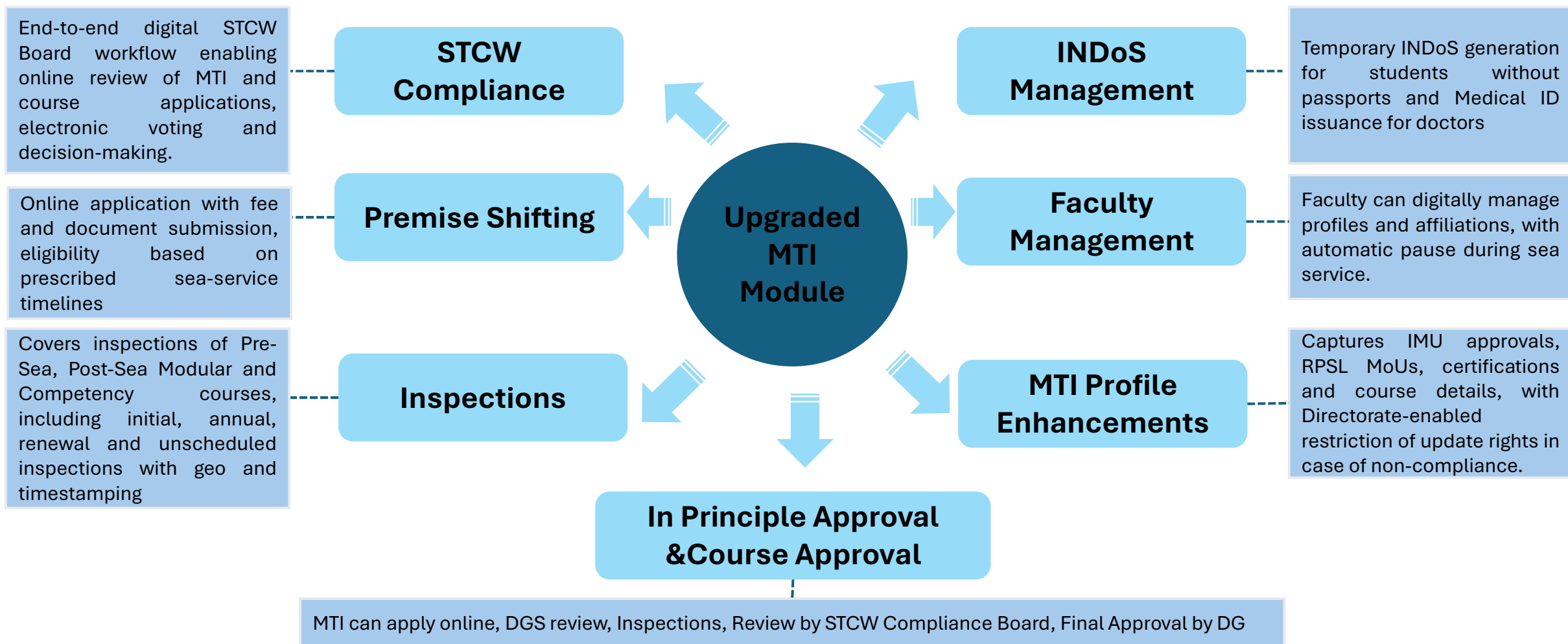
- **Authority to Approve and Administer MTIs & Training Programs:** Establishes formal powers for approving MTIs, regulating their operations, and overseeing all STCW-related training activities.
 - **Provisions for Suspension or Withdrawal of Approval:** Enables corrective action against MTIs that fail to meet prescribed standards, ensuring compliance and safeguarding training quality.
 - **Constitution of an STCW Compliance Board:** Introduces a structured body responsible for monitoring adherence to STCW requirements and recommending disciplinary or corrective measures.
 - **Action Against Unauthorized Institutions or Individuals:** Empowers authorities to take strict action against unapproved entities or persons conducting maritime training or examinations unlawfully.
 - **Support from Police or Law-Enforcement Agencies:** Provides legal backing to seek assistance from law-enforcement bodies for investigations, enforcement, and closure of unauthorized activities.
- India has the opportunity to host the STCW Comprehensive Review Diplomatic Conference in 2031-32 where the 22 identified areas for revision around technological advancements, seafarer well-being, and operational flexibility shall be amended.



Maritime Training Institute Module



Aims to enhance efficiency, compliance, and transparency in the **Maritime Training Institutes (MTI)** ecosystem through digital automation and seamless integration.





Common Admission Portal



What is a Common Admission Portal ?

- **A single, centralized digital platform for all students seeking admission to DG Shipping–approved Maritime Training Institutes (MTIs).**
- **Enables a uniform, transparent, and merit-based admission process for pre-sea maritime courses across India.**
- **Provides standardized eligibility checks, online applications, document verification, and merit ranking.**
- **Ensures admissions only to approved MTIs, courses, and sanctioned intake capacities, maintaining regulatory compliance.**
- **Offers real-time visibility to DG Shipping on admissions, seat allocation, and institute performance.**

Stakeholder	Key Responsibilities
Students	Apply for courses, upload documents, track admission status
Maritime Training Institutes (MTIs)	Verify applications, manage course intake & batches, approve admissions
DGMA	Monitor institute-wise admissions, ensure compliance with approved intake capacity
Portal Administrators	Manage system operations, control user access



Examination/Assessment and Certification Reforms: CoC (Written and Oral)



End-To-End Digitized

1.  **User Registration**
2.  **Eligibility Assessment**
3.  **Seat Booking**
4.  **Misconduct**
5.  **Conduct of Examination**
6.  **Evaluation & Re-evaluation**
7.  **Data Storage**
8.  **Question Bank & Question Paper**



Objective

- To create a secure, transparent, fully digital examination system for the competency assessment and certification of seafarers



Scope

- Covers the full examination lifecycle: from registration to certificate issuance
- Includes both written and oral examinations in hybrid or CBT mode



Core Features

- Biometric verification, CCTV surveillance, online proctoring
- Encrypted question papers & scanned answer scripts and grievance redressal & feedback mechanisms from candidates



Impact

- Uniform candidate experience across all MMDs
- Improved exam integrity, operational efficiency, and transparency

The Training Ecosystem Vision aims to establish a unified, cloud-based digital platform with its components supporting the objectives outlined in MIV-2030 and AKAM-2027, thereby strengthening maritime education and training.

Key Features

- Integration of 7 critical modules (e.g., Faculty Development, LMS, Web-Based Simulators) into one cohesive system.
- Real-time oversight and advanced technology for secure, transparent processes.

Current Status

- The RFP was published on 13th April. Multiple queries have been received from seven vendors in response to the RFP. Response for the queries received is being prepared.

Outcome of the Training Ecosystem RFP

- Selection of a Master System Integrator to deliver an integrated training ecosystem, improving maritime training, skilling, certification, and overall efficiency.





Indian Global Maritime Safety Platform



Purpose

To establish a unified digital platform that improves maritime safety, promotes risk-free professional practices, and aligns with international standards and India's maritime vision.

Objective

01

Deliver real-time safety dashboards and analytics across devices.

02

A multilingual repository for circulars, advisories, and IMO guidelines.

03

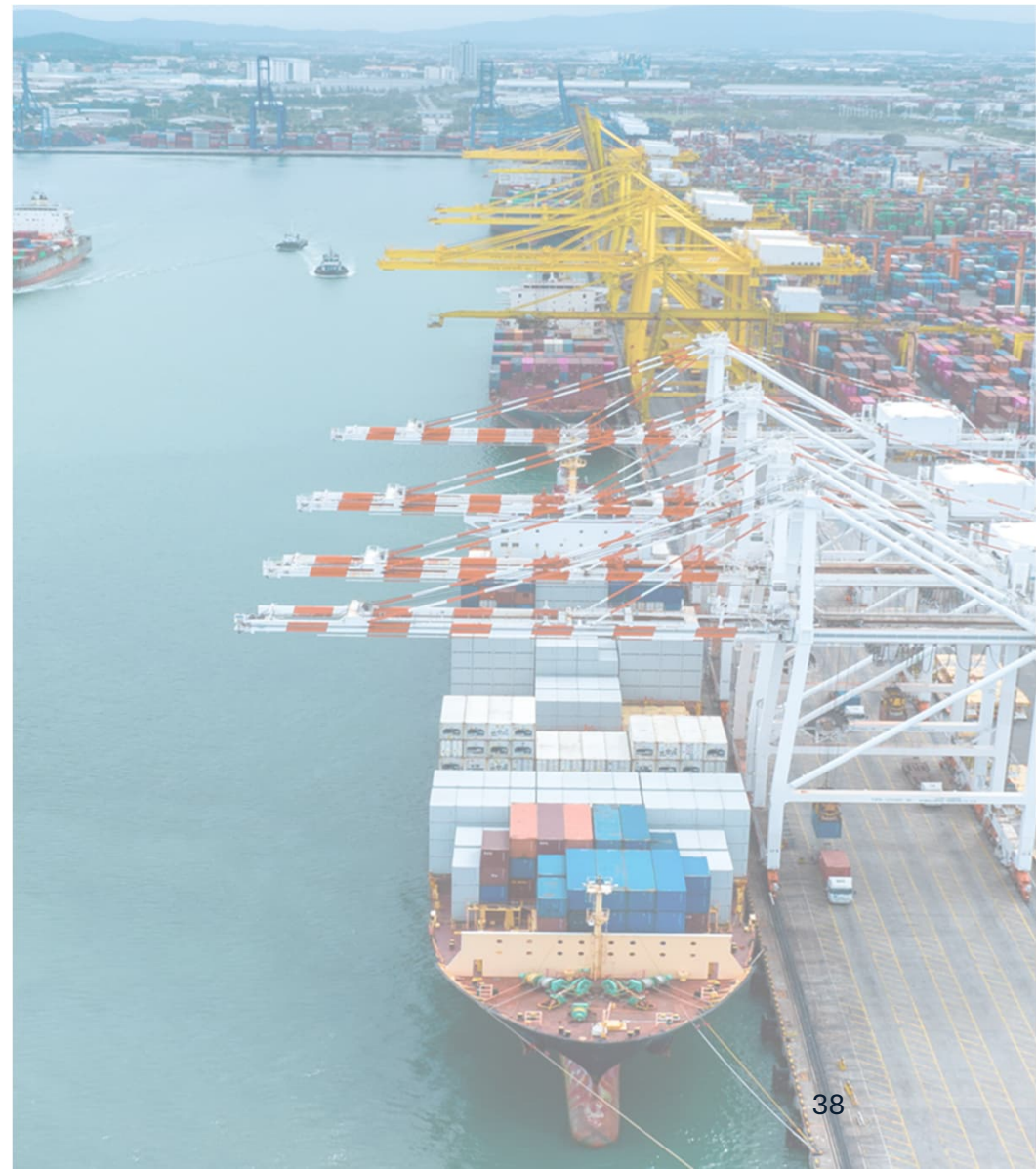
Host 30–40 animated safety videos over 3 years, integrated into a learning system.

04

An AI-driven maritime incident database using tools like Power BI/Tableau.

05

Support the “Zero Incident” vision through training, compliance, and real-time monitoring.





Suraksha Sarvapratham



Safety First



DGS is focused on promoting safety on vessels and is set to launch a campaign called the **Suraksha Sarvapratham**, ensuring that the seafarers are able to discharge their duties in a **risk-free manner**.



To reduce accidents and minimize risks aboard ships.



Detailed documentation of incidents that occur at sea and during port operations.



Systematic recording and analysis of incidents will help identify patterns, understand root causes, and implement preventative strategies.



Instill a culture of safety among seafarers.



Web-based learning management systems for training.



Free online courses will be developed.



To create a safer working environment for seafarers by reducing the frequency and severity of accidents at sea and in ports.



Comprehensive incident documentation, strict adherence to safety protocols, and innovative AI-based safety videos—to establish Safety Culture.



SAFER VESSELS



EMPOWERED SEAFARERS



SMARTER SYSTEMS



STRONGER SAFETY CULTURE



SAFETY FIRST, ALWAYS





संगच्छध्वं
संवदध्वं
सं वो मनांसि
जानताम्।

“Move together,
speak together,
may your minds
be in harmony.”
(Rigveda 10.191.2)



सत्यमेव जयते

Ministry of Ports,
Shipping & Waterways
Government of India

