



In Current Complex Geopolitical Situation, The Role Of Directorate General Maritime Administration Charting The Way Forward

Presentation by

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DRONE ATTACKS Black Sea & Mediterranean — Vessel Incident Overview



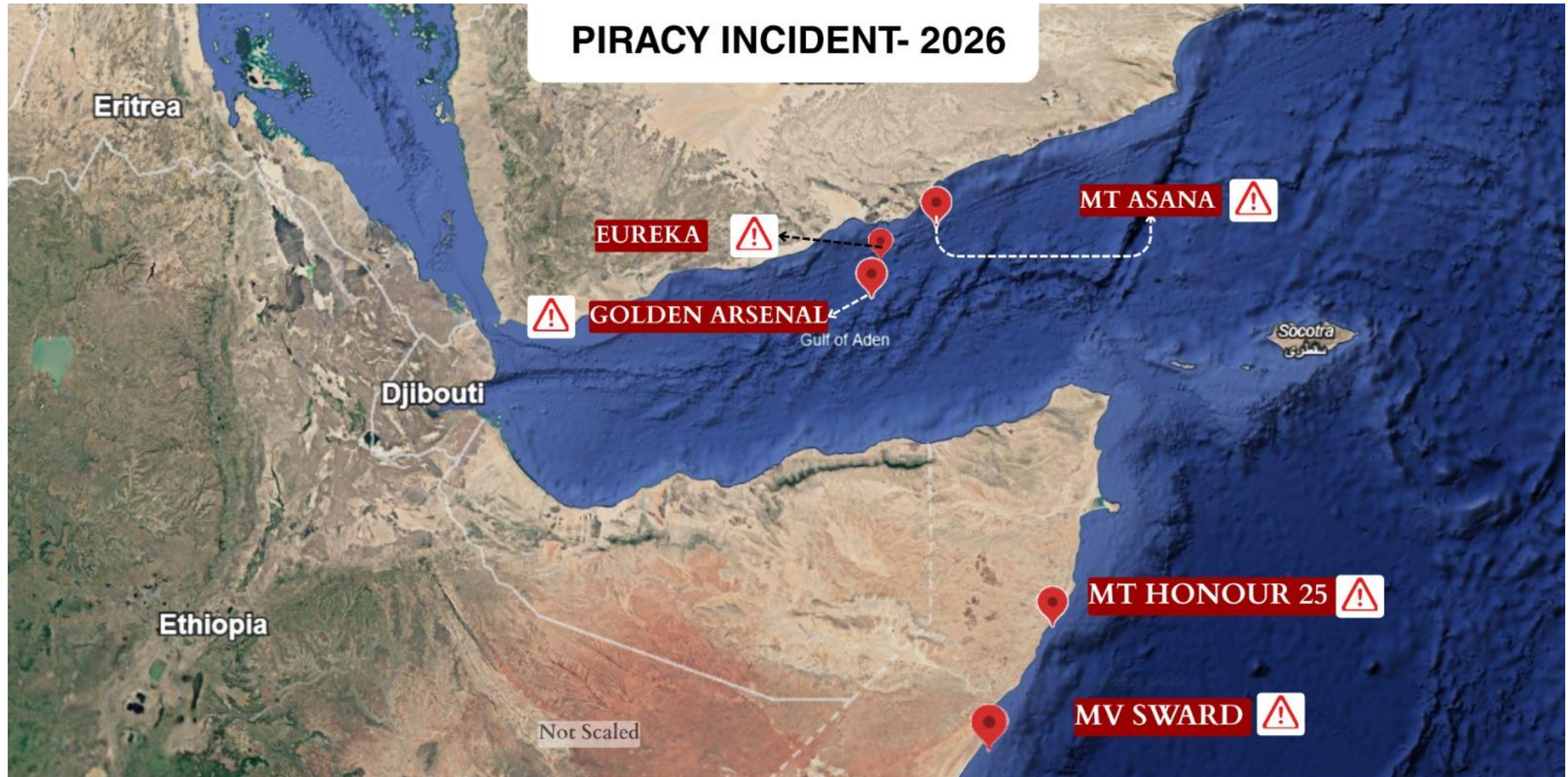
Chronological record of vessels affected

25 Nov 2025 – 21 Jul 2026

#	Vessel	Date	Location	Type	Fatal.	Inj.
1	Manta	25 Nov 2025	Port of Tuapse, Russia	Drone attack	0	2
2	Marquise	29 Apr 2026	Black Sea	Drone attack	0	0
3	James II	30 May 2026	Turkish waters	Sea drone attack	0	0
4	West Horizon	10 Jun 2026	Black Sea	Drone attack	0	0
5	Louise I	12 Jul 2026	Approach to Novorossiysk	Alleged drone attack	0	0
6	Atlas Bey	14 Jul 2026	Off Odessa coast	Drone attack	1	0
7	Banda	14 Jul 2026	Black Sea (42°53'N, 037°11'E)	Projectile / drone	0	0
8	Golden Leo	19 Jul 2026	Departing Port of Odessa	Multiple missile strike	10	0
9	Asia	19 Jul 2026	CPC Terminal, Novorossiysk	Drone attack	0	0
10	Nelsa	20 Jul 2026	CPC Terminal, Novorossiysk	Drone attack	0	0
11	LPG Gas Lisbon	21 Jul 2026	Black Sea, Romania	Drone attack	0	0
Total					11	

Six of the eleven recorded incidents occurred in July 2026 alone, marking a sharp escalation.

Piracy Incidents since April 2026





Piracy Incidents in the Gulf of Aden, Southern Red Sea and Waters off the Horn of Africa since April 2026



S. No.	Name of the Vessels	Position of the vessel	Type of incident
1	MT HONOUR 25 / IMO No: 1099735 (Incident date: 24.04.2026)	Waters off Somalia	Hijacking by armed pirates. There were 17 crew members on board, including 1 Indian seafarer. As per the latest information, negotiations for the safe release of the vessel and crew are ongoing.
2.	MT SWARD / IMO No: 9174244 (Incident date: 26.04.2026)	Waters off Somalia	Hijacking by armed pirates. No Indian nationals were on board the vessel at the time of the incident.
3.	MT EUREKA / IMO No: 1022823 (Incident date: 02.05.2026)	Waters off Somalia	Hijacking by armed pirates. There were 12 crew members on board, including 4 Indian seafarers. As per the latest information, the owners are in negotiations for the safe release of the vessel and crew.
4.	MT GOLDEN ARSENAL / IMO No: 9493212 (Incident date: 01.07.2026)	Gulf of Aden, approximately 100 NM off the Somalian coast.	Piracy attack / Boarding by armed pirates. There were 21 crew members on board, including 1 Indian seafarer. The vigilant crew maintained a proper lookout, activated the citadel and established communication with the Indian Navy. Indian Naval forces subsequently boarded and sanitised the vessel, following which the vessel safely resumed her voyage.
5.	MT ASANA / IMO No: 9035838 (Incident date: 17.07.2026)	Approximately 65 NM south of Al Mukalla, Yemen, in the Gulf of Aden.	Hijacking by armed pirates. There were 22 crew members on board, including 11 Indian seafarers. The vessel is reported to have proceeded towards Somalia with the crew believed to be held hostage. Further information is awaited.



European Sanctions on Russia



The European Union has imposed extensive and progressively expanding sanctions on Russia, recently extending them for 12 months and introducing a 21st package targeting energy, finance, trade, and military sectors.

The 21st sanctions package, announced by the European Commission, introduces new measures across key sectors:

**Energy and
Transport**

**Financial
Sector**

**Trade and Military-
Industrial Complex**

**Individuals
and Entities**

Entry Ban



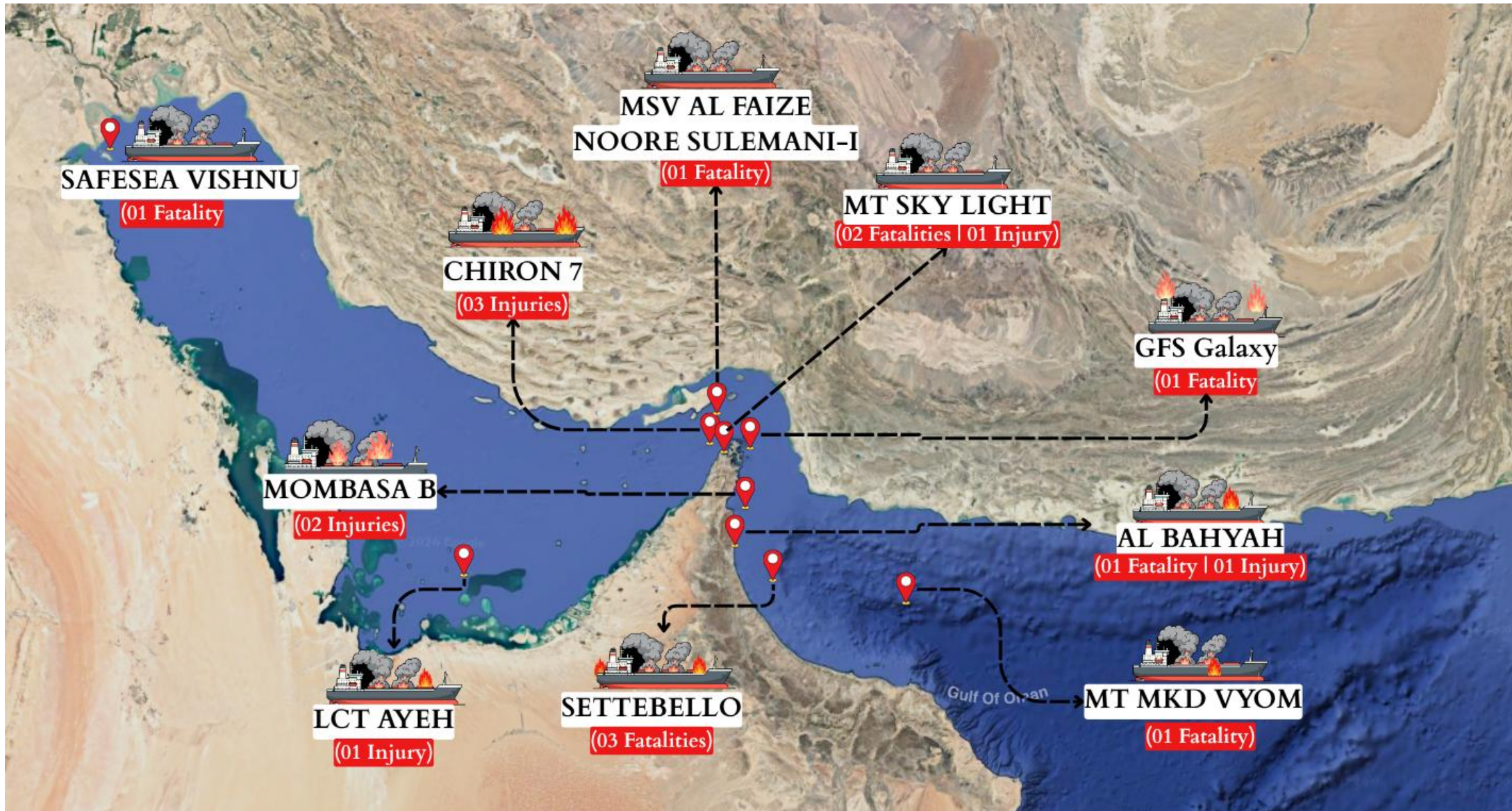
Total Casualties as on Date – Persian Gulf

Chronological record of vessels affected (28 Feb 2026 – 14 Jul 2026)



#	Vessel	Flag	Date	Fatality	Injured
1	AL BAHYAH	Liberia	14.07.2026	01 Fatality	01 Injury
2	MOMBASA B	Liberia	14.07.2026	—	02 Injured
3	GFS GALAXY	Cyprus	12.07.2026	01 Fatality	—
4	SETTEBELLO	Palau	10.06.2026	03 Fatalities	—
5	MSV AL FAIZE NOORE SULEMANI-I	India	07.05.2026	01 Fatality	—
6	CHIRON 7	Togo	25.04.2026	—	02 Injured
7	SAFESEA VISHNU	Marshall Islands	12.03.2026	01 Fatality	—
8	MT SKY LIGHT	Palau	01.03.2026	01 Fatality + 01 Presumed Deceased	01 Injury
9	MT MKD VYOM	Marshall Islands	01.03.2026	01 Fatality	—
10	LCT AYEY	UAE	28.02.2026	—	01 Injury

Incidents leading to Fatality or Injury in the Persian Gulf region Between the Period of 28th February 2026- Present





Challenges in Alternate Crude Sourcing & Sea Routes



Sea Route Diversification



Hormuz share halved

Fell from ~59% to 28% of India crude — traffic shifted onto longer, costlier corridors.



Red Sea is the shock absorber, but exposed

Nearly tripled to ~6 MMT/mo carrying Russian barrels, itself now under sanctions & tanker-attack risk.



Cape of Good Hope — durable but long

Steady ~4-6 MMT/mo hedge (Brazil, Venezuela, US, W. Africa) — adds transit time, bunker & war-risk cost.



Freight & insurance spike

Key MEG-linked lanes up 500%-1700%, Maersk SoH emergency rates \$1,800-\$3,800/ container from 1 Aug.

Alternate Source Risks



Russia — narrowing discount edge

Drone strikes on shadow-fleet tankers/terminals, EU widened sanctions net (81 new listings), MV Smyrtos boarding turned 6 tankers back, share easing from 44% peak to 34%.



Venezuela — policy is reversible

US easing is recent and tilts to US/Chevron JV, excludes China-linked buyers, India offtake still small (~10% of exports).



Canada — infrastructure not ready

96% of output remains pipeline-locked to the US, only 1 of 21 India cargoes sailed direct via the new Pacific (TMX) route in 2026.



Brazil — competition for barrels

Reliable & unsanctioned, but China already takes 44% of exports — India competes for the same growth barrel.

28%

Hormuz share of India crude (was ~59%)

+1,700%

Peak freight rate rise, key MEG lanes

34%

Russia share of crude, easing off 44% peak

96%

Canadian output still pipeline-locked to US



Challenges in LPG, Fertilizer Markets & Shipping Logistics



LPG — Thin & Concentrated Alternatives



Volumes still deeply suppressed

Imports remain ~50% below pre-war levels (0.8-1.2 MMT/mo vs 2.2 MMT in Jan'26).



Gulf supply collapsed

UAE & Qatar volumes down ~90% — the traditional backbone of India's LPG imports.



US is the only real alternate

US imports rose to 0.4-0.7 MMT/mo, but the new 1-yr, 2.2 MMT term deal covers only ~10% of India's LPG needs — leaving the rest exposed to spot markets.



Fertilizers — cost, not supply, is the risk

Sourcing well diversified (Russia, China, N. Africa, ME) and volumes back above 3 MMT/mo for Kharif, but re-routing via Red Sea/Cape has raised logistics cost and war-risk premium.

Fleet, Insurance & Port-Policy Exposure



Heavy reliance on foreign-flagged tonnage

India-flagged vessels carry only 8-10% of crude imports and ~20% of LPG imports — 85-90% of crude capacity sits with foreign-flagged ships.



Zero Indian-flagged LNG capacity

100% of LNG imports move on foreign-flagged vessels — a structural gap with no near-term fix.



Mandatory P&I compliance adds friction

Every vessel entering Indian waters needs a valid P&I certificate, only 4 Russian insurers approved, with short (1-month) renewal windows raising uncertainty for Russian-linked cargo.



Rising war-risk & compliance cost

Longer routes plus insurance verification and surcharge layers (heavy-load, peak-season, contingency) compound landed cost across every commodity.

~50%

LPG imports still below pre-war levels

~10%

Share of India's LPG needs covered by US term deal

90%

Crude import capacity that is foreign-flagged

0

Indian-flagged LNG carriers in service



Compensation status of Seafarers across Persian Gulf & Black Sea



Sr. No.	Date of Incidence	Incident Type	Name of Seafarers	Vessel	Compensation under DGMA Welfare Scheme (SWFS)	Compensation amount anticipated under P&I Cover	Compensation by NUSI as matching payment	Compensation by MUI as matching payment	Repatriation
Death due to projectile/ missile attacks in the Ukraine Russia (Black Sea) War Zone									
1	19.07.2026	Deceased	Lt. Abhishek Nishad	Golden Leo	Under process	Recent Case, P&I amount to be decided	Pending Application	Not Applicable	Not Repatriated
2	19.07.2026	Deceased	Lt. Akhil Joyan	Golden Leo	Under process	Recent Case, P&I amount to be decided	Not Applicable	Pending Application	Not Repatriated
3	19.07.2026	Deceased	Lt. Gurpreet Singh Bhatt	Golden Leo	Under process	Recent Case, P&I amount to be decided	Pending Application	Not Applicable	Not Repatriated
4	19.07.2026	Deceased	Lt. Jagan Singh	Golden Leo	Under process	Recent Case, P&I amount to be decided	Pending Application	Not Applicable	Not Repatriated
Death due to projectile/ missile attacks in the Strait of Hormuz War Zone									
1	01.03.2026	Deceased	Lt. Capt. Ashish Kumar	MT Sky Light	10,00,000	In process; Amt payable 67000 USD	Not Applicable	Pending Application	Repatriated
2	01.03.2026	Deceased	Lt. Solanki Dixit Amratlal	MT MKD Vyom	10,00,000	In Process-240738 USD	10,00,000	Not Applicable	Repatriated
3	12.03.2026	Deceased	Lt. Deo Nandan P. Singh	MT Safesea Vishnu	10,00,000	In Process-114018 USD	Not Applicable	12,00,000	Repatriated
4	10.06.2026	Deceased	Lt. Aditya Sharma (Cadet)	MT SETTEBELLO	10,00,000	Will be cleared in 2-3 weeks. ~ INR 1 Cr	Not Applicable	Pending Application	Repatriated
5	10.06.2026	Deceased	Lt. Shivanand Chorasaya (Fitter)	MT SETTEBELLO	10,00,000	Will be cleared in 2-3 weeks. ~ INR 1 Cr	Pending Application	Not Applicable	Repatriated



Compensation Status Of Seafarers Across Persian Gulf & Black Sea



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6	10.06.2026	Deceased	Lt. Suresh Patnala (Chief Engineer)	MT SETTEBELLO	10,00,000	Will be cleared in 2-3 weeks. ~ INR 1 Cr	Not Applicable	Pending Application	Repatriated
7	12.07.2026	Deceased	Lt Heramb Neelkanth Karmarkar	MV GFS GALAXY	In Process	In Process - USD 150,000	Not Applicable	Pending Application	Not Repatriated
8	14.07.2026	Deceased	Lt Rohan Kumar	MT AL BAHYAH	In Process	In Process - 200,000 USD	Not Applicable	Pending Application	Not Repatriated
9	07.05.2026	Deceased	Lt. Altaf Talab Ker*	MSV Al Faiz Noore Sulemani	10,00,000	Not covered by P&I	Died on Sailing Vessel. Not covered by P&I		The funeral took place in Dubai and the death certificate was issued by UAE authorities and Indian Embassy
Presumed Dead Indian Seafarers in war zone									
1	01.03.2026	Presumed Dead	Lt. Dalip	MT Sky Light	10,00,000	In process; Amt payable 54900 USD	Pending Application	Not Applicable	Missing
Indian Seafarers Died due to natural causes in war zone									
1	11.06.2026	Deceased	Lt. Nishanth Uirthanathan	CELESTIAL SEA	10,00,000	In Process - USD 46000	Not Applicable	600000 (Died due to natural cause)	Repatriated
2	18.03.2026	Deceased	Lt. Capt. Rakesh Ranjan	ASP Avana	10,00,000	Settled- 240738 USD ; 48152 USD- Dependent son	Not Applicable	12,00,000	Repatriated
3	06.03.2026	Deceased	Lt. Sujeet Kumar	Monaco Loyalty	10,00,000	In Process-232598 USD	Pending Application	Not Applicable	Repatriated



Future Fuel Strategy for Maritime India by IRS



- **A strategic roadmap for the transition towards cleaner and sustainable maritime fuels**
- Developed to guide India's maritime sector towards **low- and zero-carbon fuel adoption**
- Adopts a **multi-fuel approach**, covering green hydrogen, green ammonia, green methanol, advanced biofuels, LNG/bio-LNG and electrification
- Assesses the projected maritime fuel demand and fuel-mix scenarios for **2030 and 2050**
- Identifies requirements for **bunkering infrastructure, renewable energy integration, port-grid strengthening and shore power**
- Examines the financial, policy, regulatory, technological and safety enablers required for the transition
- Provides a phased roadmap aligned with **Maritime India Vision 2030, Maritime Amrit Kaal Vision 2047, Harit Sagar and Harit Nauka**
- Seeks to enhance India's energy security and position the country as a leading hub for green maritime fuels



Nuclear Propulsion for Merchant Shipping





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: ALTERNATE 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 SKILLS



- 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 SHIPBUILDING AND RETROFITS



- 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



Nuclear Propulsion for Merchant Shipping



Maritime decarbonization requires propulsion solutions that can reduce emissions without compromising the range, speed, cargo capacity and reliability required for global trade.

Strategic Rationale

Near-zero operational emissions

No combustion of conventional marine fuels, resulting in near-zero tank-to-wake greenhouse gas emissions.

Exceptional energy density

A small quantity of nuclear fuel can provide very large amounts of energy, reducing onboard fuel-storage requirements.

Long endurance and limited refuelling

Extended reactor fuel cycles can support prolonged deep-sea operations with fewer refuelling interruptions.

Reliable high-power output

Continuous power for propulsion and energy-intensive onboard systems, particularly for large vessels.

Reduced dependence on bunkering networks

Less reliance on frequent bunkering and uncertain global supply chains for low- and zero-carbon fuels.

Emergence of compact reactor technologies

SMRs and advanced reactor concepts offer compact designs, modular construction and enhanced passive safety features.



India's Strength for Nuclear Marine Propulsion



Mature Nuclear Ecosystem

- **24 operating reactors** across 7 locations
- **8.78 GW installed nuclear capacity**
- Indigenous capability across reactor design, fuel fabrication, operation, reprocessing, recycling, waste management and radiation safety
- **500 MWe Prototype Fast Breeder Reactor at Kalpakkam attained first criticality in April 2026**
- National ambition of 100 GW nuclear capacity by 2047

Advanced Reactor Capability

- **₹20,000 crore Nuclear Energy Mission** for SMR design, development and deployment
- At least **five indigenous SMRs targeted by 2033**
- Key initiatives:
 - **200 MWe Bharat Small Modular Reactor**
 - **55 MWe SMR**
 - High-temperature gas-cooled reactor for hydrogen production

Strategic Thorium Advantage

- **11.93 million tonnes of monazite resources**, containing about **1.07 million tonnes of thorium**
- Thorium forms the third stage of India's long-term nuclear programme through conversion to uranium-233
- Capabilities developed across extraction, fuel fabrication, irradiation, reprocessing and recycling
- Advanced thorium-based concepts include **AHWR and AHWR-LEU** (developed by BARC)

Defence Marine Nuclear Experience

- Indigenous experience in integrating and operating compact nuclear propulsion systems on **Naval vessels**
- Technical knowledge in shielding, thermal management, reactor integration, trained manpower and operation under dynamic sea conditions
- Provides an important base for future civilian assessment, subject to separate safety, liability and regulatory frameworks



Small Modular Reactors (SMRs): Emerging Pathway for Maritime Applications



SMRs are advanced nuclear reactors of up to 300 MWe per module, designed for compact, modular and factory-based deployment.

Key Features

- **Compact and modular design**

Suitable for space-constrained marine and offshore applications.

- **Factory fabrication and standardization**

Modules can be manufactured under controlled conditions and transported for installation.

- **Enhanced safety characteristics**

Many designs incorporate inherent and passive safety systems.

- **Flexible power applications**

Can support propulsion, onboard electricity, process heat, desalination and fuel production.

- **Long fuel cycles**

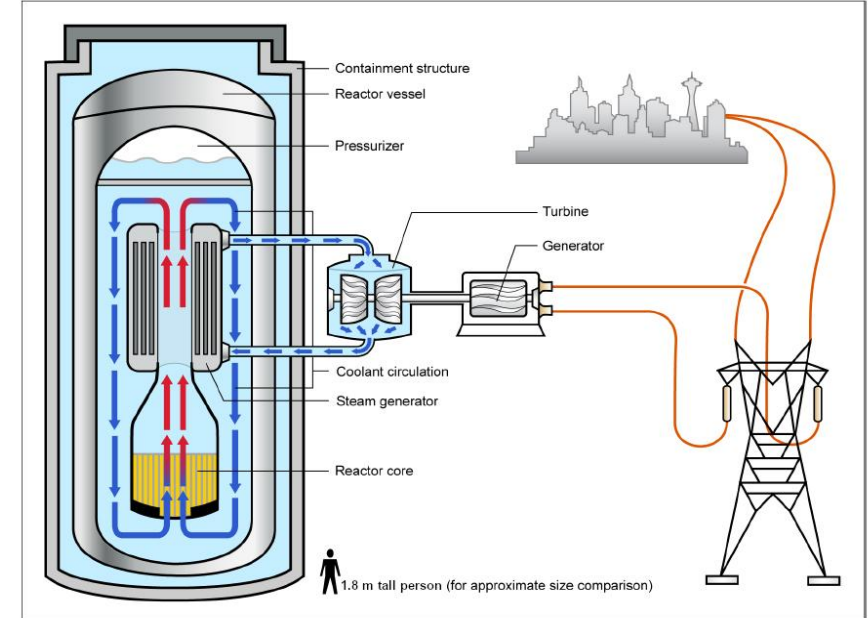
Extended operation between refuelling may support deep-sea and long-endurance applications.

- **Multiple technology pathways**

Water-cooled SMRs are considered more suitable for near-term deployment, while MSRs and HTGRs are longer-term options.

India Context

- **₹20,000 crore Nuclear Energy Mission** for SMR research, development and deployment
- Indigenous programmes:
 - **220 MWe BSMR-200**
 - **55 MWe SMR-55**
 - **Up to 5 MWth HTGCR** for hydrogen production
 - **In-principle approval** received
- Lead units proposed at **Tarapur** and **BARC Vizag**
- Key reactor materials and control systems developed indigenously
- Majority of equipment can be manufactured by Indian industry with BARC support
- Supports India's target of **100 GW nuclear capacity by 2047**



Source: GAO, based on Department of Energy documentation. | GAO-15-652

Potential Maritime Applications

- Merchant vessel propulsion
- Floating nuclear power plants
- Port and offshore power supply
- Remote coastal energy systems
- Desalination
- Hydrogen, ammonia and synthetic fuel production

*Molten-metal-based reactors (liquid metal cooled) use liquid metals such as **sodium, lead or lead-bismuth** as coolants. Most are fast-spectrum reactors and are being explored for compact, high-power and long-endurance applications.*

Key Features

- **High heat-transfer capability**
Enables efficient cooling and compact reactor design.
- **High-temperature, low-pressure operation**
Improves thermal efficiency and avoids very high-pressure coolant systems.
- **High power density**
Suitable for space- and weight-constrained marine applications.
- **Extended fuel cycles**
Potential for extended operation between refuelling.
- **Efficient fuel utilization**
Fast reactors can use uranium resources more efficiently and support breeder configurations.

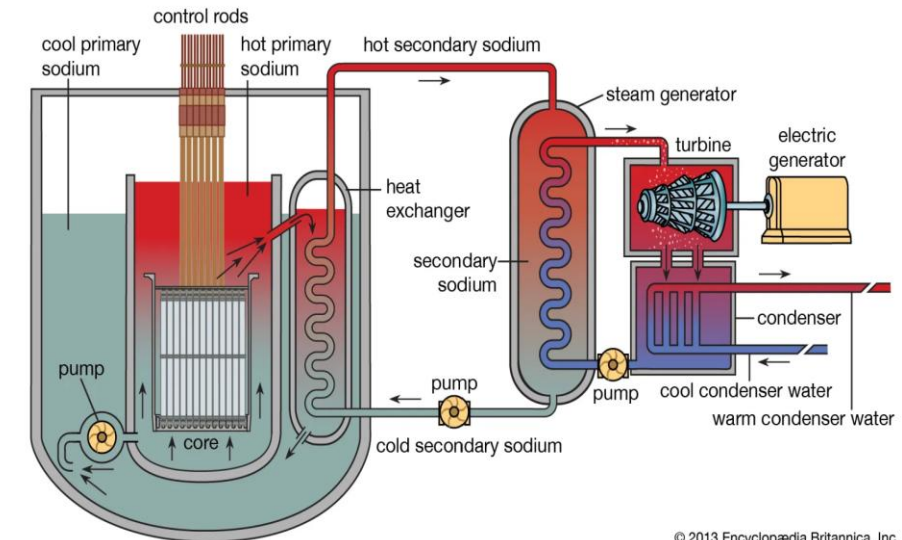
Principal Types

- Sodium-Cooled Fast Reactor (SFR)
- Lead-Cooled Fast Reactor (LFR)
- Lead-Bismuth Eutectic-Cooled Reactor

India Context

- India has strong experience in **sodium-cooled fast reactor technology**
- Key assets include the **Fast Breeder Test Reactor (FBTR)** and **500 MWe Prototype Fast Breeder Reactor (PFBR)** at Kalpakkam
- **PFBR attained first criticality in April 2026**, marking entry into Stage 2 of India's three-stage nuclear programme
- Provides a strong base in **fast-reactor design, coolant management, materials and closed fuel-cycle technology**
- Any maritime use would still require separate work on **miniaturisation, shielding, vessel integration, safety and licensing**

Sodium-cooled liquid-metal reactor



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Potential Maritime Applications

- Nuclear propulsion for specialised long-endurance merchant vessels
- Power for floating nuclear platforms
- Offshore and remote marine energy systems
- Port and coastal low-carbon power applications

Floating Nuclear Power Plants (FNPPs) are nuclear power units installed on barges, ships or offshore platforms to generate electricity, heat and other energy products for coastal and offshore users. Unlike nuclear-propelled vessels, their primary purpose is power generation rather than propulsion.

Key Features and Advantages

- Floating and relocatable configuration
- Compact reactor systems
- Reduced land and site-preparation requirements
- Reliable, continuous low-carbon power
- Multi-purpose energy supply
- Access to marine cooling
- Centralised servicing and lifecycle management

Demonstrated Example: Akademik Lomonosov

- Russian non-self-propelled floating nuclear power platform at **Pevek**;
- Entered commercial operation in **2020**
- Equipped with **two modified KLT-40S pressurised water reactors**
- Generates approximately **70 MW electrical power** or **300 MW thermal power**
- Supplies electricity to the regional grid and heat to the town of Pevek



Potential Applications

- Reliable power for islands and remote coastal communities
- Low-carbon electricity for ports, shipyards and maritime industrial clusters
- Energy supply for offshore installations and mining operations
- Seawater desalination and freshwater production
- Hydrogen, ammonia and synthetic marine-fuel production
- Temporary or emergency power supply

Relevance for India

- Clean power for island territories and remote coastal regions
- Low-carbon energy for major ports and maritime industrial zones ; Energy supply for offshore infrastructure
- Power and heat for green hydrogen and green ammonia production
- Desalination for coastal communities and industries
- Potential integration with India's SMR, nuclear and shipbuilding programmes



Nuclear Power Application for Port Decarbonization



Floating nuclear power platforms or coastal SMRs could provide reliable, low-carbon electricity and process heat to ports, vessels and surrounding industrial ecosystems, thereby Supporting Scope 1, Scope 2 and Scope 3 Emission Reduction

Potential Nuclear Contribution

Scope 1 - Direct emissions from port-controlled operations

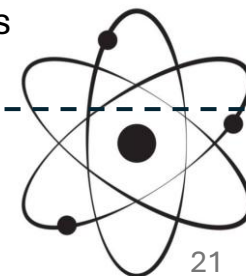
- Electrification of cranes and material-handling systems
- Replacement of diesel generators
- Electrification of port vehicles and support equipment
- Charging infrastructure for electric harbour craft
- Clean power and heat for port buildings and workshops

Scope 2 - Indirect emissions from purchased electricity

- Continuous low-carbon electricity for:
 - terminal operations
 - warehouses and cold storage
 - shipyards and repair facilities
 - lighting and digital infrastructure
 - onshore shore power systems
- Reduced dependence on carbon-intensive grid electricity.

Scope 3 - Wider value-chain emissions

- Production of low-carbon hydrogen, ammonia and synthetic fuels
- Electrification of privately operated terminals
- Clean power for rail and logistics systems
- Low-carbon energy for port-based industrial clusters
- Charging or power supply for electric coastal vessels





Potential Areas for DGMA–IRS Collaboration



IRS may support DGMA in developing a structured pathway for assessing nuclear applications in merchant shipping, ports and coastal infrastructure, with initial focus on feasibility, safety, regulation and technical standards.

Technical Feasibility & Use-Case Assessment

- Assess suitable vessel types and reactor options
- Evaluate merchant propulsion, floating power and port applications
- Examine integration with Indian shipyards and ports

Safety, Risk & Classification Framework

- Develop safety requirements for marine and nuclear hazards
- Undertake HAZID, HAZOP, FMEA and risk assessments
- Frame classification rules and Approval-in-Principle pathways

Regulatory Roadmap

- Map IMO, nuclear, liability and security requirements
- Identify regulatory gaps and required amendments
- Support in defining roles of flag, port, coastal and nuclear authorities

Port & Coastal Applications

- Assess port electrification, shore power and floating nuclear platforms
- Support hydrogen, ammonia, desalination and offshore power use cases
- Map contribution to Scope 1, 2 and 3 emission reduction

Operational & Lifecycle Preparedness

- Define crew, surveyor and port personnel competency requirements
- Develop emergency response, security and safeguards arrangements
- Address refuelling, waste management and decommissioning

Techno-Economic Assessment & Pilot Roadmap

- Compare costs with conventional and alternative-fuel vessels
- Identify suitable vessel, port or coastal pilot projects
- Develop a phased pathway from feasibility to demonstration and deployment

The image is a composite. The background is a photograph of a large shipyard at dusk or dawn. A massive dark blue ship is being constructed or repaired, with its hull partially visible. Several large blue gantry cranes are positioned around the ship. In the foreground, the shipyard's deck is visible with some workers and equipment. Overlaid on the left side is a glowing blue wireframe globe with a map of India highlighted. In the bottom right corner, there is a glowing blue wireframe model of a ship. The overall color scheme is dominated by blues and greys, with some warm light from the sky and the shipyard's interior lights.

Technical Partnership for National Shipbuilding

Why Shipbuilding is a Strategic Priority

- Maritime carries 95% of India's trade by volume and 70% by value, making fleet and yard capacity a strategic economic issue.
- India currently ranks 16th in shipbuilding with annual production of 0.06 Mn GT, against the MAKV 2047 ambition of 4.5 Mn GT.
- Only 7% of Indian-owned ships are built in India, while a large forex outgo continues for foreign shipping services.
- India already has 60+ shipyards, 8 major shipyards, extensive coastline, ports and waterways — the opportunity is scale, integration and competitiveness.
- The government response is a **structured four-pillar** push combining incentives, finance, capacity creation and reforms.





The Four-Pillar Approach to Boost Shipbuilding



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



Shipbuilding Financial Assistance scheme

Allocation: ₹24,736 crore

Demand support through direct assistance, green vessel incentives and ship recycling credit note



Maritime Development Fund

Allocation: ₹25,000 crore

Enable Long-term capital through equity-style investment and interest incentivisation



Shipbuilding Development Scheme (SbDS)

Allocation: ₹19,989 crore

Cluster creation, yard expansion, capability centres and risk coverage



Legal, Policy and Process Reforms

Structural enablers
RoFR, financing reforms, infrastructure status, age norms and domestic demand visibility



Pillar 1: Shipbuilding Financial Assistance Scheme (SBFAS)



Cost competitiveness support linked to vessel type, domestic content and green transition

₹20,554
crore

**Extension of Shipbuilding
financial assistance scheme**

₹4,001
crore

**5% through Ship recycling
credit note**

₹181
crore

**Establishment of National
Shipbuilding Mission**



Assistance Rate Structure

Non-specialized – Small Vessel

- Up to ₹100 crore → 15% of actual value

Non-specialized – Large Vessel

- First ₹100 crore → 15%
- Value above ₹100 crore → 20%

Specialized Vessel

- First ₹100 crore → 15%
- Value above ₹100 crore → 25%



Domestic Content Requirement

< 30% Domestic Content

- No SBFAS support

30% to < 40% Domestic Content

- Pro-rata support

≥ 40% Domestic Content

- Full support

*Period of support : Up to March 2036, In principle approval up to 2047.
Committed liabilities to be carried over for 6 years upto 2042*

Expected to support ~ **USD 10.5 Bn** worth of shipbuilding



Provisions for Green Vessels



SBFAP (2016-26)

- 30% Financial Assistance for vessels where main propulsion is powered by green fuels, including: Methanol, Ammonia, Hydrogen fuel cells and Other approved alternative green fuels
- 20% Financial Assistance for vessels equipped with: Fully electric propulsion systems, or Hybrid propulsion systems (electric + conventional fuel)
- Incentives aimed at accelerating adoption of low-carbon and zero-emission technologies in shipbuilding
- Supports India's transition towards sustainable maritime operations and future-ready green fleets
- Encourages domestic shipyards and shipowners to invest in clean propulsion technologies

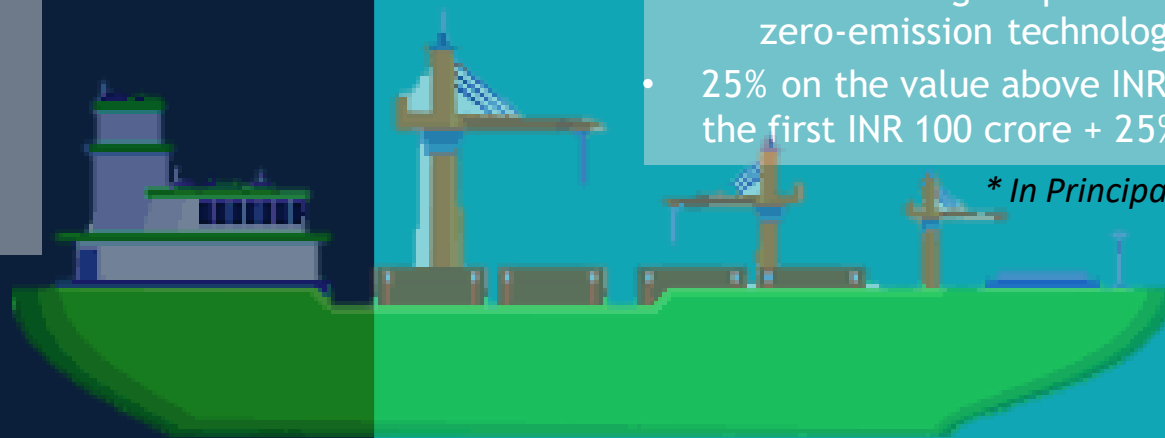


SBFAS (2026-36*)



- Green Vessel Categories
 - Green Vessels: Vessels operated through eco-friendly fuels like electric batteries, methanol, hydrogen fuel cells, or ammonia.
 - Hybrid Vessels: Vessels using conventional fuels (gas, LPG, oil) combined with rechargeable electric sources like batteries.
 - Vessels powered by dual-fuel main engine (methanol, ammonia, LNG, LPG etc.) accelerating adoption of low-carbon and zero-emission technologies in shipbuilding
- 25% on the value above INR 100 Crore (15% on the first INR 100 crore + 25% on remainder)

** In Principal approval till 2047*





Pillars 2: Maritime Development Fund



Overview

Maritime Investment Fund (MIF)

**₹20,000
crore**

(₹75,000Cr under
consideration)

- Long-term capital deployment for shipbuilding, port modernization & green shipping
- Blended finance equity fund structured as a closed-end Category I/II AIF
- Junior tranche (concessional) absorbed by GoI; senior tranche for commercial/institutional investors

49.0% (Public)

51.0% (Private)

Interest Incentivization Fund (IIF)

**₹5,000
crore**

- Supports debt financing by reducing the cost of financing
- Incentive Structure:
 - Interest incentive of up to 3%
 - Offered to banks and financial institutions
 - Applicable on loans extended to Indian shipyards

Priority sectors

- Min 50% of corpus with target 70% in following sectors
- Shipbuilding and shipbuilding clusters, ship repair
- Ship ownership and tonnage acquisition, port expansion, inland waterways terminals, and coastal and international shipping

Other sectors

- Upto 50% of corpus for MMLPs, Maritime connectivity, Ancillary manufacturing & services
- Overseas capped at 10% of corpus for technology & innovation only

Policy Instruments

- **Equity instruments only** to support growth, expansion
- Fund shall retain the flexibility of selecting investment instruments

GoI's contribution is held/managed by SMFCL in a fiduciary capacity in an Alternative Investment Fund (AIF) structure



Pillars 3: Shipbuilding Development Scheme



Capital support for
Greenfield capacity
expansion

₹ 9,930 Cr.



Capital assistance to
existing/ Brownfield
shipyards towards
the expansion of
production capacity

₹ 8,261 Cr.



Capability
development
initiatives: set up
the India Ship
Technology Centre
(ISTC)

₹ 305 Cr.



Shipbuilding Risk
coverage: Pre-
Shipment Insurance,
Post-Shipment
Insurance and Vendor
Default Insurance

₹ 1,443 Cr.



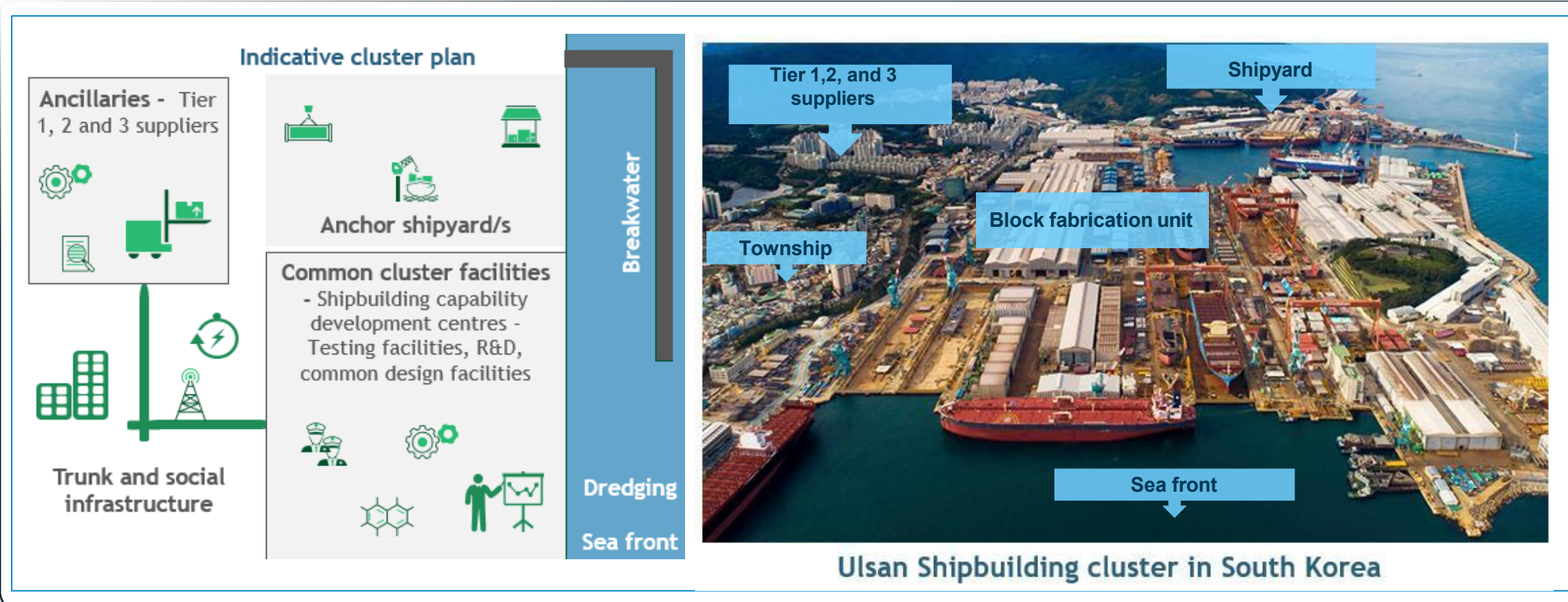
Administrative
Expenses

₹ 50 Cr.

Period of Validity of Scheme – 10 years (Till 31st March 2036)

Cluster Based Approach Critical To Unlock Scale Economies

A cluster-based approach makes an attractive proposition for both the shipyards as well as the ancillaries as it will allow for efficient utilization of common assets and connectivity infrastructure





Pillar 4: Legal, Policy And Process Reforms



Structural changes to improve ease of doing business and create sustained order visibility



Right of First Refusal (RoFR)

Local SB economy boost via preference given to Indian Shipyards for domestic vessel procurement



Restrictions on old imports

Restrictions on acquisition of >20 yr old and operations of >25 yr old



Maritime Financing

GIFT city institutionalized as center for ship leasing with fiscal benefits (10 year tax holidays, GST exemptions, capital gain tax waivers).



Legal & Policy Reforms

Five (05) Major Legislations were passed in 2025 by Parliament.



Local Demand Aggregation

Domestic fleet acquisition plan launched worth Rs. 2.2 Lakh Crore for 437 vessels, for long term order visibility to Indian Shipyards.



Infrastructure status

Large commercial ships (> 1500 GT if built, owned and flagged in India & >10,000 GT if India owned and flagged) : Easy access to long-term low-cost financing



Indigenization of Ancillary Equipment

Make I/II schemes for Shipbuilding OEMs (e.g., Propulsion engines)

Envisaged benefits of reforms:

- Improve EoDB in Indian maritime sector
- Creation of sustainable demand for Indian shipbuilding industry & easier access to maritime financing



Indigenization Of Shipbuilding Equipment And Components

From financial assistance to a deeper domestic manufacturing ecosystem



- DGS is actively supporting indigenization by providing technical inputs, prioritization frameworks and policy alignment to promote domestic manufacturing of shipbuilding equipment and components across the value chain..
- DGS is facilitating engagement with shipyards and industry stakeholders to identify critical equipment gaps and enable structured development of local supplier capabilities in line with national shipbuilding priorities.
- IRS can collaborate with DGS to establish standardized technical specifications and certification frameworks for indigenous manufacturers, ensuring quality, reliability and alignment with global class requirements.
- IRS can support evaluation, approval and classification of indigenized components, enabling faster acceptance and integration into shipbuilding projects while enhancing credibility of domestic products.
- DGS and IRS can jointly drive capacity-building initiatives for MSMEs and component manufacturers through technical guidance, certification readiness and ecosystem integration to accelerate self-reliance in shipbuilding.





The Comprehensive Shipbuilding Portal



Vision

Establish a state-of-the-art portal as a central hub for information, collaboration, and innovation in Indian shipbuilding and repair industry

Objectives

1. Increase global competitiveness of Indian shipbuilding industry
2. Enhanced collaboration between stakeholders (design agency, shipyards, ancillaries and equipment suppliers, regulators etc.).
3. Workforce development through training and certification.
4. To promote R&D and innovation.
5. To provide centralized access to technical information, standards, and guidelines.
6. To provide assistance on financial schemes.

Modules

Capability Insights

Display capabilities, projects & achievements, CAF

Training & Certifications

Information on Training courses and Institutes

Innovation Centre

Showcase innovative technologies and R&D projects.

Regulatory & Compliance

Updates on maritime regulations and safety standards.

Collaboration Hub

Interactive tools for industry professionals to network.- Q&A, Posts & Closed Groups

Finance & Insurance

Information on funding schemes and insurance solutions

Technical Library

Repository of technical documents, standards, and guidelines.

Industry Directory

Comprehensive listing of shipbuilding stakeholders.

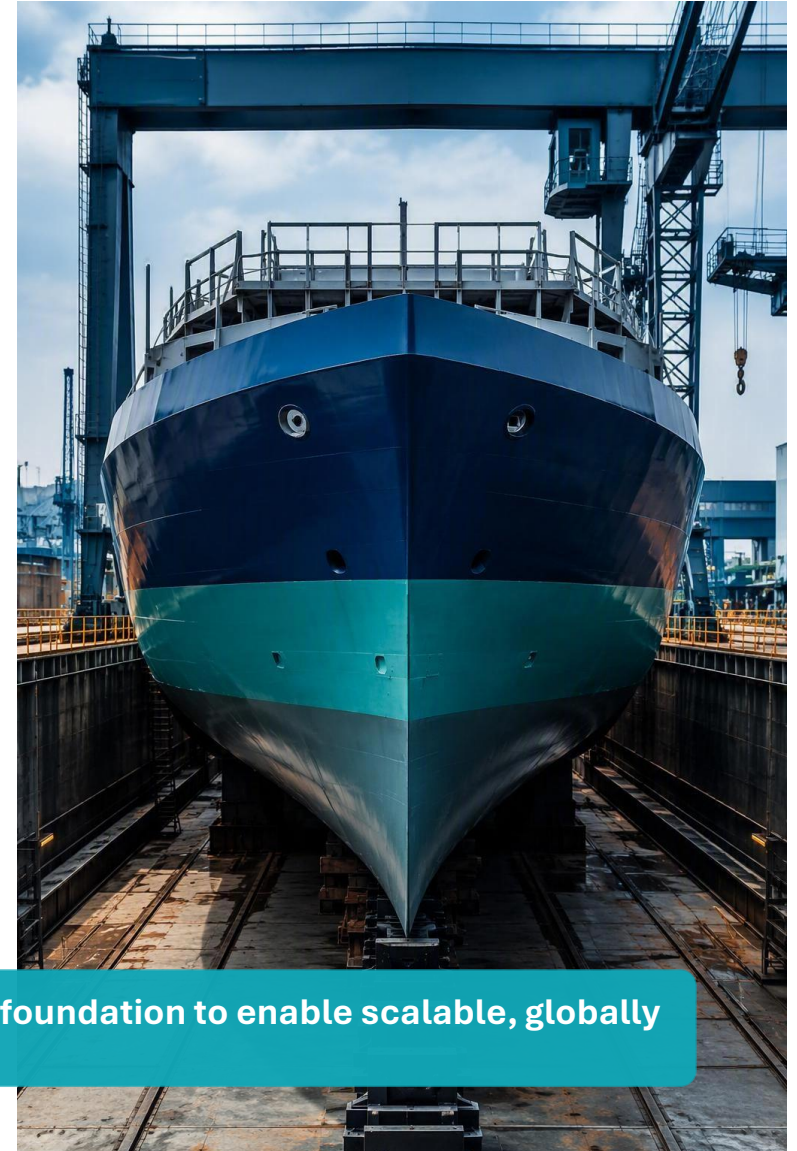


DGS–IRS Collaboration for Shipbuilding Transformation



- **Digital ecosystem development:** IRS can support the development and operationalisation of a comprehensive national shipbuilding and ship recycling portal, enabling seamless workflows, technical integration and industry-wide transparency.
- **Knowledge repository:** IRS can contribute to establishing a national maritime knowledge repository by consolidating standards, design practices and regulatory guidance into a single authoritative technical reference for the sector.
- **Training & certification:** IRS can collaborate on human resource development through structured training, certification frameworks and capability-building programs for shipyards, designers and ancillary industries.
- **Indigenization & standardization:** IRS can support the standardization and indigenization of shipbuilding component manufacturers through technical validation, certification frameworks and alignment with class-compliant standards.
- **Design approval & capacity building:** IRS can provide technical design approvals, classification support and structured capacity-building initiatives to strengthen shipyard capabilities and accelerate India's shipbuilding ambitions.

DGS and IRS together can build a robust technical, institutional and capability-driven foundation to enable scalable, globally competitive shipbuilding in India.





Ship Recycling and Hong Kong Convention Compliance



Ship Recycling – India's Global Leadership



- Recycling governed internationally by the **Hong Kong Convention (HKC)**
- Integral to the **circular economy**, reducing the demand for virgin raw materials (97-98% Materials recoverable)

India is a leading hub with world's largest ship recycling cluster

35.4%

India leads Global Ship Recycling with a 35.4% share in 2025

115

HKC Compliant Yards present in India

20-25%

India's ferrous scrap requirement met, reducing import dependence

15k+

Direct employees & indirect livelihood opportunities for thousands





Ship Recycling Statistics in India



Yard	Total Number of Plots	Operational Plots	HKC Compliant yards
Alang, Bhavnagar (Gujarat)	150	128	115
Steel Industries Limited (Kerala)	1	1	0
Amar Iron Udyog, Kolkata (West Bengal)	1	1	0

Timeline	No of Vessels	Total LDT
March 1983 – March 2026	8956	71328850.09
FY 2025 - 2026	119	1087447.01





Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships



Inventory of Hazardous Materials

All **in-service ships to comply** with:

- Flying the flag of a state party to the Convention, or
- Calling at a port in a country that is a party to the Convention.

When?

- **New builds:** From **26 June 2025**.
- **Existing ships:** By 26 June 2030, however, we strongly recommend the **next harmonised survey** after 26 June 2025.

What is required?

- A **valid Inventory of Hazardous Materials (IHM)**.
- An **International IHM Certificate**, valid for **5 years**, issued by the **RO** or **flag State**.



Final Survey

All **in service ships going for recycling** to comply if:

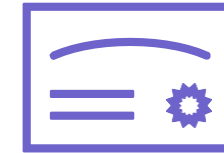
- flying the flag of a state party to the Convention, or
- being recycled in a country party to the convention.

When?

- Any **ship going for recycling** on or after **26 June 2025**

What is required?

- **IHM part I** and valid **certification**
- IHM **parts II & III**
- a **ship specific recycling plan** from an authorised recycling facility
- An **international ready for recycling certificate**. Valid for **3 months**. Issued by **RO** or **flag State**.



Ship Recycling Facility Certification

All **recycling facilities** operating in countries party to the convention.

When?

SRF certification need certification from **26 June 2025**.

What is required?

- **Ship Recycling Facility Plan**
- Produce **ship specific recycling plans**
- Access to appropriate **medical and waste treatment facilities**.
- Be **authorised** by their competent authority
- Hold a valid **Document of Authorisation for Ship Recycling (DASR)**.



ISO Compliance



Strengthening India's Global Credibility

Enforcing ISO management systems ensures ship recycling operations at Alang are **system-driven, auditable and internationally benchmarked**, complementing HKC compliance.

Key ISO Standards for Ship Recycling Yards

ISO 9001 – Quality Management: Streamlined processes, documentation and continual improvement.

ISO 14001 – Environmental Management: Pollution control, waste handling and eco-monitoring.

ISO 30000 – Ship Recycling Management: Integrates HKC principles for safe and compliant recycling.

ISO 45001 – Occupational Health & Safety: Worker safety, risk control and preventive culture.

Impact of Enforcement

- Builds **credibility and transparency** in global markets.
- Enhances **environmental, health and safety performance**.
- Improves **audit readiness** for IMO and EU inspections.
- Positions **Alang as a benchmark for responsible recycling**.



ISO 9001
Quality Management System (QMS)



ISO 14001
Environmental Management System (EMS)



ISO 30000
Ship Recycling Management System (RSMS)



ISO 45001
Occupational Health & Safety Management System (OHSMS)



Training, Certification & Competency Framework for Ship Recycling Workforce



A standardised national framework is required to ensure that ship recycling personnel possess the knowledge, practical skills and safety competencies necessary for HKC-compliant, environmentally sound and incident-free operations.

Core Training Areas

General Safety and Safe Working Practices

- PPE use and maintenance
- General and job-specific hazard awareness
- Injury, incident and near-miss reporting
- Safe work procedures and worker responsibilities

High-Risk Ship Recycling Operations

- Gas cutting and hot-work safety
- Safe-for-entry and safe-for-hot-work procedures
- Confined-space entry
- Working aloft and fall protection
- Lifting, rigging, crane and winch operations
- Cylinder and cutting-equipment safety

Environmental Protection and Waste Management

- Waste segregation and hazardous-waste control
- Pollution prevention and spill containment
- Conservation and good housekeeping
- Downstream waste disposal and traceability
- Environmental monitoring and regulatory compliance

Hazardous Materials Management

- Identification and communication of hazardous materials
- Asbestos-containing materials, batteries, oils, chemicals and toxic residues
- Isolation, removal, handling, transportation, storage and disposal
- Inventory of Hazardous Materials awareness

Emergency Preparedness and Response

- Fire prevention and firefighting
- First aid and rescue
- Oil and hazardous-material spill response
- Emergency evacuation
- Use of firefighting equipment and breathing apparatus
- Roles and responsibilities during crisis

Occupational Health and Worker Welfare

- Exposure prevention and occupational health risks
- Health surveillance and medical response
- Hygiene, sanitation and welfare provisions
- Worker rights, grievance redressal and safety communication

Proposed Competency Categories

Foundation Safety Competency

Mandatory induction, PPE, hazard awareness, safe work practices and incident reporting for all workers

Trade-Specific Competency

Practical certification for cutters, riggers, crane operators, hazardous-material handlers and other specialised personnel

Supervisory Competency

Job hazard analysis, permit-to-work controls, worksite supervision, emergency coordination and compliance monitoring

Management & Compliance Competency

HKC implementation, HSSE governance, audits, incident investigation, documentation and continual improvement



European List of Approved Ship Recycling Facilities (EU SRR)



The European Union maintains an official **European List of Ship Recycling Facilities** under EU SRR. As per the **15th Edition (27 Feb 2026)**, the list includes **facilities across EU Member States and Non EU countries**



High-capacity yards concentrated in Türkiye and USA
Majority of European facilities operate as Small to medium capacity, dock-based yards

Region	No. of Facilities
Europe (EU + Norway + UK)	30
Türkiye	10
United States	1
Total	41

Country	No. of Yards
Denmark	5
Norway	6
Netherlands	4
France	4
Spain	2
Lithuania	2
United Kingdom	2
Belgium	1
Germany	1
Italy	1
Estonia	1
Türkiye	10
United States	1

No Indian ship recycling facilities are included in the European List

- Plot No. 59- YS Investments recycler (3 audits)
- Plot No. 78- Shri Ram Vessel Scrap (3 audits)
- Plot No. V1- Priya blue Industries Pvt. Ltd. (3 audits)
- Plot No.02 - Leela Ship Recycling Pvt.Ltd. (1 audit)
- Plot No. 30 - JRD Industries (1 audit)
- Plot No. V 7 - R.K. Industries (Unit-II) LLP (1 audit)

Around 30 other yards have also applied to EU for compliance verification audit and inspection.



On 1 July 2026, Hon'ble Union Minister for MoPSW, Shri Sarbananda Sonowal, interacted with EU Commissioner Jessika Roswall regarding the inclusion of eligible Indian ship recycling yards under the EU Ship Recycling Regulation.



Ship Recycling Credit Note

Global First

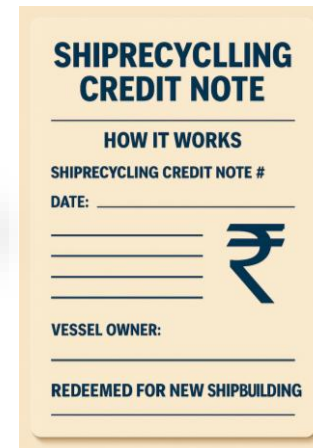


₹ 4,001 Cr allocated under the SBFAS with 10-year validity from 24th September 2025 to 31st March 2036



SHIP RECYCLING
(HKC compliant Indian recycling yard)

40%
Fair Scrap Value



Valid for 3 Years from date of completion of recycling

New Build Offset



Upto 5% of new vessel value



NEW SHIPBUILDING
(Indian Shipyard)



Stackable



Partial Utilization



Transferable



Market-Driven



Eligibility criteria and condition for redemption under the scheme

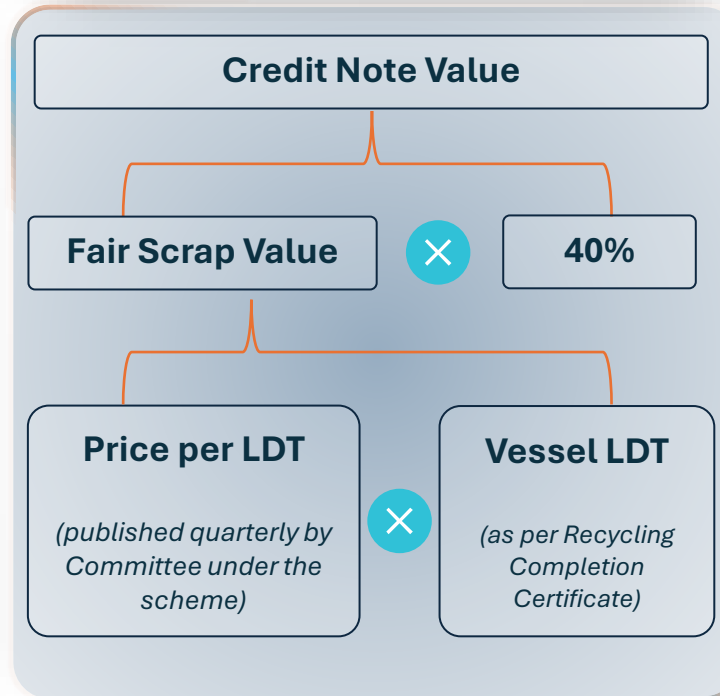


Eligibility of Vessels

- Available for **all vessels** (Indian or foreign flagged)
- Scrapped in **HKC compliant** Ship Recycling Yard in India
- Permission for recycling has been granted on/**after 24th Sept'25**
- **Certificate of Recycling/** Demolition Completion available



Credit Note Valuation



Redemption Conditions

- New build Vessel must be registered under SBFAS & be delivered within the approved construction timeline
- Redemption at any time after the launching of the Vessel and before release of final tranche of assistance under SBFAS
- For vessels not excluded under the guidelines *(Indian vessels less than 24 m in length, vessels made of wood, vessels built for defence purposes)*

Online Application Process



shipbuilding.dgshipping.gov.in



First Ship Recycling Credit Note Issued on 29 May 2026



Certificate Number : DGS/

Name of the Vessel

IMO number of the Vessel

Particulars of the Vessel Recycled

Type of the Vessel

Gross Tonnage

Flag at the time of Scrapping

Ship Recycling Details

Name of the Ship Recycling Yard

Address of the Ship Recycling Yard

Date of completion of recycling the Vessel

LDT of the Vessel (as per GMB Certificate)

Price per LDT as per published rate (₹)

Currency

Exchange Rate

Details of Financial Assistance

Name of Present Vessel Owner

Value of this Credit Note (₹)

Validity of this Credit Note

The Value of the Credit Note is redeemable against the Construction of new vessel OR can be transferred or sold to any other entity who wishes to use it towards building a new Vessel in India. This is issued in accordance with relevant provisions of the "GUIDELINES FOR IMPLEMENTATION OF SHIPBUILDING FINANCIAL ASSISTANCE SCHEME (SBFAS)" This is issued with the approval of Competent Authority.

Date of Issuance

Authorisation by Competent Authority
(shall be digitally signed)

**First Ship Recycling Credit Note issued to
Bella Shipping LLC, Liberia
For St Kitts and Nevis-flagged Capesize Bulk carrier
“Kosta” at Inducto Steel Ltd at Alang, Gujarat**



Potential Areas for DGMA–IRS Collaboration



IRS may support DGMA in developing a structured pathway for assessing nuclear applications in merchant shipping, ports and coastal infrastructure, with initial focus on feasibility, safety, regulation and technical standards.

Ship Recycling Credit Note Implementation

- Develop standardised technical verification protocols
- Support scrutiny of recycling certificates and vessel particulars
- Assist in resolving technical discrepancies and exceptional cases
- Strengthen digital audit trails for issuance, transfer and redemption

Sustained HKC Compliance

- Standardise survey, inspection and audit procedures
- Support periodic monitoring of authorised recycling facilities
- Develop guidance for IHM, final survey, SRP and Ready-for-Recycling certification
- Facilitate corrective action and continual compliance improvement

Alignment with EU Ship Recycling Standards

- Undertake HKC–EUSRR gap assessments
- Assess yard readiness against applicable EU requirements
- Support documentation, evidence and audit preparedness
- Assist Indian yards in progressing towards European List recognition

Yard Standards and Technical Support

- Develop harmonised technical and HSSE benchmarks
- Support ISO-based management systems and audit readiness
- Strengthen hazardous-material, waste and downstream traceability systems
- Promote standardised operating and emergency procedures across yards

Workforce Training and Certification

- Develop a national training curriculum and competency standards
- Establish role-based certification for workers, supervisors and management
- Accredite training centres, trainers and assessors
- Enable refresher training and digitally traceable competency records



Maritime Security and ISPS Framework



History of International Ship and Port Facility Security (ISPS)



Origin of the ISPS Code:

The ISPS Code was internationally adopted after the 9/11 attacks, which highlighted the potential for merchant ships to be used as tools by terrorists.

Purpose and Implementation:

1. The ISPS Code was implemented to enhance the security of ships and port facilities globally
2. It came into force on July 1, 2004.

Scope of the ISPS Code:

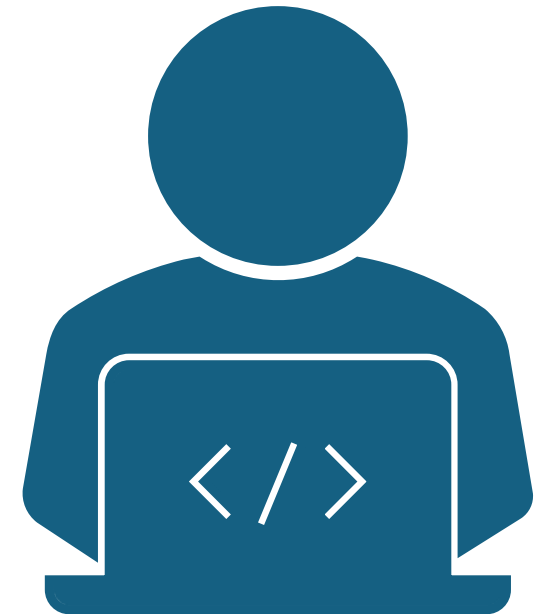
The code includes comprehensive security-related requirements for ships, ports, and governments.

Implementation in India:

In India, the ISPS Code is enforced through Part IX B of the Merchant Shipping Act, 1958, and Section 68D of the Indian Port Act, 1908.

Designated Authority:

The Director General Shipping (DGS) has been appointed as the Designated Authority for the implementation of the ISPS Code in India, as per the directive from the Ministry of Shipping dated July 4, 2003.





ISPS Code & India's Implementation



Origins of the ISPS Code

The ISPS Code was internationally adopted after the 9/11 terrorist attacks, which exposed the vulnerability of merchant ships being used as tools by terrorists. IMO convened a Diplomatic Conference in December 2002 and adopted the Code as an amendment to SOLAS.

Purpose & Implementation

The ISPS Code was implemented to enhance the security of ships and port facilities globally. It came into force on 1st July 2004. It lays down a standardized framework for security assessment, planning, and implementation.

Scope of the ISPS Code

The Code includes comprehensive security-related requirements for ships (>500 GT on international voyages), mobile offshore drilling units, and port facilities serving such ships. It applies to Contracting Governments, ship companies, and port facility operators.

Implementation in India

In India, the ISPS Code is enforced through Part IX-B of the Merchant Shipping Act, 1958 and Section 68D of the Indian Ports Act, 1908. India ratified SOLAS and has been implementing ISPS since July 2004.

Designated Authority

The Director General of Shipping (DGS) has been appointed as the Designated Authority for ISPS Code implementation in India vide Ministry of Shipping directive dated 4th July 2003. DGS approves PFSA's, PFSP's, issues PFSC's, and conducts periodic audits.

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Port Facilities ISPS Compliant in India

ISPS Security Levels

Level 1 NORMAL	Minimum security measures at all times — routine operations.
Level 2 HEIGHTENED	Additional protective measures due to elevated security risk.
Level 3 EXCEPTIONAL	Further specific measures when a threat is probable or imminent.



ISPS - Responsibility of Administration



**Setting of the
applicable security
level**

**Approving port facility
security assessment**

**Determining the port
facilities require to
designate a PFSO**

**Approving a port
facility security plan**

**Exercising control and
compliance
measures**

**Establishing the
requirements for a
Declaration of
Security**

**Communicate
information regarding
any security breach
incident.**

**Test the effectiveness
of the SSP and PFSP**



Solas Chapter XI-B Special Measures for Maritime Security



- **SOLAS Chapter XI-2** and the **ISPS Code** form the basis of maritime security implementation in India.

- **Background of the ISPS Code:**

The ISPS Code was internationally adopted after the 9/11 terrorist attacks, which exposed the vulnerability of merchant ships being used as tools by terrorists. IMO convened a Diplomatic Conference in December 2002 and adopted the Code as an amendment to SOLAS.

- Under **Regulation 3, Contracting Governments / Administration** are responsible for **setting security levels** and ensuring communication to ships and port facilities.
- Under **Regulation 4, ships and companies** are required to comply with ISPS requirements, including **verification and certification**.
- **Till date Directorate General Maritime Administration functions both as the Administration** and Designated Authority for implementation of **ship and port security requirements** under SOLAS and ISPS Code with the support of Recognized Security organization Indian Register of Shipping.
- **74 EXIM port facilities** in India are presently **ISPS compliant**.
- Recently, Central Industrial Security Force (CISF) Technical Consultancy Wing has been authorized as a Recognized Security Organization (RSO) for port facilities only.



Global ISPS Practices



Global Best Practices:

- Globally, maritime administrations like DGMA manage ship security as part of their Flag State Responsibilities. Also, many administrations manage the Port Facility security functions.
- While most international frameworks lack bodies solely dedicated to port security, India is uniquely instituting BoPS as a distinct Authority for port facilities and vessel/port interface.



International Standards – Institutional Framework for Maritime Security



- Globally, maritime administrations like DGMA manage ship security as part of their Flag State Responsibilities and port facility security
- While most international frameworks lack bodies solely dedicated to port security, India is uniquely instituting BoPS as a distinct Designated Authority for port facilities and vessel/port interface.

Country	ISPS Code Implementation Agency	Key Security Functions
Singapore	Maritime and Port Authority (MPA)	Security of Ships and Port Facilities.
United States of America (USA)	U.S. Coast Guard (USCG) (Maritime Administration)	Security of Ships and Port Facilities.
United Kingdom (UK)	Maritime and Coastguard Agency (MCA)	Security of Ships and Port Facilities.
Australia	a) Department of Home Affairs b) Australian Maritime Safety Agency	a) Port / offshore facility security – Department of Home Affairs; b) Ship security / maritime safety – AMSA
Denmark	Danish Maritime Authority	Security of Ships and Port Facilities.
Brunei	Maritime and Port Authority	Security of Ships and Port Facilities.
Malaysia	a) Marine Department b) MMEA	a) Port facility & ship security compliance – Marine Department; b) Maritime enforcement / patrol – MMEA
Philippines	a) Marina b) Philippine Coast Guard (PCG)	a) Ship Security functions under ISPS b) Port security monitoring and emergency response

Bureau of Port Security

(Ministry of Ports, Shipping and Waterways)

Government of India

01.07.2026





Bureau of Port Security (BoPS)



- **Bureau of Port Security (BoPS)** has been constituted under **Section 13(1) of the Merchant Shipping Act, 2025**, vide [notification](#) dated **27.06.2026**.
- Draft Cabinet Note for creation of **DG / ADG posts (Level 15 / Level 14 IPS)** for operationalisation of BoPS was submitted on **18.06.2026**.
- Proposal for creation of **75 additional posts** for BoPS was submitted to **Department of Expenditure (DoE) on 23.06.2026**. As advised by DOE the proposal will be resubmitted after cabinet approval of **DG / ADG posts**.
- [Organogram](#) of BoPS finalized after inter-ministerial consultations with MHA and other stakeholders.
- Draft Bureau of Port Security (BoPS) Rules and Ship & Port Facility Security (SPS) Rules have been prepared and submitted to MoPSW.



Provision of Merchant Shipping Act, 2025



- BoPS is a unique institutional framework created by India under the Merchant Shipping Act, 2025.
- ISPS Code, provides for a Designated Authority (DA) only for Port Facilities which gives the flexibility to the Administration as far as security of Port Facilities.

Provision of Merchant Shipping Act, 2025 regarding BoPS:

- The Merchant Shipping Act, 2025 under Section 13 mandates the constitution of a body for the security of vessels and port facilities.
- The Merchant Shipping Act, 2025 under Section 13(3) specifically requires that, while framing the rules, due consideration shall be given to the provisions of the International Ship and Port Facility Security (ISPS) Code under the Safety Convention.
- The Bureau of Port Security (BoPS) handles port facility security and vessel/port interfaces.



Ease of Doing Business and Regulatory Certainty



- Retaining ship security with the DGMA ensures a single window interaction for shipowners, operators, and Recognized Security Organizations (RSOs).
- Transferring these functions to BoPS would necessitate duplicated approvals, parallel oversight structures, and system re-engineering, increasing the compliance burden.
- The proposed framework is DGMA for ships and BoPS for ports fully aligns with international legal instruments, ease of doing business, and regulatory predictability.

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

