

MARITIME BRIEFING

Issue: December 2025

From the Editorial Desk

The Centre for Maritime Economy & Connectivity (CMEC) established by Ministry of Ports Shipping & Waterways (MoPS&W), at RIS, New Delhi is pleased to share the December 2025 issue of the Maritime Briefing covering developments in Maritime Economy, Maritime Technology, Maritime Sustainability, Maritime Training, International Collaboration, and Blue Economy initiatives related to India and the World during the last quarter - September to December 2025.

The segment-wise snapshot of coverage in this Newsletter is given below:

Maritime Briefing Newsletter

Maritime Technology

- Port digitisation Accelerates under One Nation One Port Process (ONOP)
- Digital Centre of Excellence launched by MoPSW & C-DAC
- India-Singapore Green & Digital Shipping Corridor
- NYK-KNCC-PETRONAS MoU advances Elevated Pressure LCO₂ maritime technology

Maritime Sustainability

- India's first indigenous hydrogen fuel-cell vessel launched at Varanasi
- India-Rotterdam maritime cooperation on green ports and decarbonisation
- Inland waterways traffic up 710%, coastal shipping up 118%
- India among global leaders in zero-emission green shipping corridors

Blue Economy

- Integrated shipbuilding ecosystem emerges as Blue Economy
- DHL-CMA CGM partnership deploys second generation biofuels for

Maritime Economy

- Mumbai Harbour World-Class Marina – ₹887 cr investment
- India Maritime Week 2025 – ₹12 lakh cr investments
- Samudra Se Samridhi crosses ₹66,000 cr milestone
- Hooghly Cochin Shipyard contracts second 80-passenger luxury river cruise vessel

Maritime Training & Skill Development

- Tuticorin skill development programmes achieve 100% placement
- Maritime Information Sharing Workshop 2025 (MISW 2025) conducted

International Collaboration

- India-Netherlands Maritime Heritage Partnership signed
- India-Oman Joint Vision Document on maritime collaboration inked
- DGLL hosts 3rd IALA Council Meeting in Mumbai
- India re-elected to IMO Council (2026-27) with highest vote tally
- India-Russia maritime cooperation strengthened (polar waters training & shipping)
- High-level shipbuilding engagements to advance India's maritime vision

MARITIME TECHNOLOGY

Port Digitisation Accelerates: One Nation One Port Process (ONOP) – Targeted to reduce paper-work by 33% to bring-in efficiencies in time and cost.



The Government of India, is accelerating port digitization through the One Nation One Port Process (ONOP), standardizing documentation across all Indian ports and reducing paperwork by 33%. The ONOP framework ensures uniformity in port processes while integrating key stakeholders including Port Authorities, Customs, Immigration, Port Health Organizations, and the Directorate General of Shipping on a unified platform. Complementing

these efforts, the Maritime Single Window (Sagar Setu) enables single-point digital filing for ship-related processes in line with International Maritime Organization (IMO) standards. The Enterprise Business System (EBS) provides a common digital platform across ports, saving over 50 lakh physical documents annually and reinforcing the shift towards paperless, efficient and globally competitive port operations...[read more](#), [citation](#)

Digital Centre of Excellence Launched by MoPSW and C-DAC



The Ministry of Ports, Shipping & Waterways (MoPSW) and Centre for Development of Advanced Computing (C-DAC) signed a landmark Memorandum of Understanding to establish a Digital Centre of Excellence (DCoE) for the maritime sector. The DCoE will provide advanced IT solutions, foster innovation, and guide the modernisation of port operations and shipping logistics through emerging technologies like Artificial Intelligence (AI), Internet of Things (IoT), and Blockchain. This initiative aims to accelerate digital transformation in India's maritime industry.....[read more](#).

India-Singapore Green and Digital Shipping Corridor



India and Singapore have solidified their maritime partnership through a Letter of Intent (LoI) on Green and Digital Shipping Corridor (GDSC) collaboration, formalised at Singapore Maritime Week in January 2025 and further developed during India Maritime Week 2025 in October. Under this partnership, both nations are advancing digitalisation and decarbonisation projects, establishing integrated frameworks for low-

emission maritime operations. This collaboration leverages India's expertise in information technology and green fuel production alongside Singapore's established role as a global maritime hub....[read more](#).

NYK-KNCC-PETRONAS MoU Advances Elevated Pressure LCO₂ Maritime Tech



NYK Line, KNCC, and PETRONAS CCS Solutions signed an MoU on December 23, 2025, to develop a carbon capture and storage (CCS) value chain using KNCC's Elevated Pressure (EP) liquefied CO₂ (LCO₂) marine transport technology for Southeast Asia. The EP method maintains CO₂ liquid at ambient temperatures (0-10°C) and 34-45 barG in specialized pressure vessels, reducing energy needs by up to 20% versus traditional refrigeration, enabling efficient cross-border shipping,

temporary storage, and offshore injection to position Malaysia as a CCS hub. This builds on prior demonstrations and Lloyd's Register AiP, accelerating scalable maritime decarbonization for global markets....[read more](#), [citation](#).

MARITIME ECONOMY

World-Class Marina at Mumbai Harbour: ₹887 Crore Investment to Boost Maritime Tourism



The Union Government has approved the development of a world-class marina at Mumbai Harbour at an estimated cost of ₹887 crore, a move aimed at boosting coastal shipping, maritime tourism and waterfront-led urban development in India's financial capital. The proposed 'Viksit Bharat Mumbai Marina' project will be developed over nearly 12 hectares of water area with capacity to berth 424 yachts of up to 30 metres in length. The Mumbai Port

Authority will invest around ₹470 crore to build the core marine infrastructure on an EPC basis, while a private operator will develop onshore facilities with an estimated investment of ₹417 crore. The project is expected to create over 2,000 jobs across marina operations, hospitality, cruise services and allied sectors, positioning Mumbai as a global maritime tourism hub. Tenders have been floated with bids scheduled to close on December 29, 2025....[read more](#).

India Maritime Week 2025: Historic Global Maritime Gathering Achieves ₹12 Lakh Crore Investment Commitments



India Maritime Week 2025 (27–31 October, Mumbai) emerged as the world's most successful maritime gathering. The five-day event witnessed participation from over 93 countries with more than 100,000 delegates, stakeholders, and industry leaders. Over 600 Memoranda of Understanding (MoUs) worth ₹12 lakh crore were signed, representing a remarkable 41% surge from the Global Maritime India Summit (GMIS) 2023. The investment distribution reflects a comprehensive maritime vision: 30% directed toward port development and modernisation, 20% toward sustainability initiatives, 20% for shipping and shipbuilding, 20% for port-led industrialisation, and 10% for trade and business knowledge partnerships. The event saw announcements of SCI fleet expansion to 216 vessels by 2047 (₹1 lakh crore investment), Oil and

Gas PSUs launching 59 shipbuilding orders (₹47,800 crore), and the Green Tug Programme with 100 eco-friendly tugs by 2040 (₹12,000 crore investment)....[read more](#), [citation](#).

Samudra Se Samriddhi – Transforming India’s Maritime Sector: ₹66,000 Crore Investment Milestone



The “Samudra Se Samriddhi – Transforming India’s Maritime Sector” event, held in September 2025, marked a historic achievement in India’s maritime development. The event witnessed the exchange of 27 significant Memoranda of Understanding, unlocking investment potential exceeding ₹66,000 crore and paving the way for more than 1.5 lakh employment opportunities

across maritime sectors. Notable projects included the Greenfield Port at Bahuda in Odisha with 150 MMTPA capacity (₹21,500 crore investment), Water Metro Project in Patna with electric ferries (₹908 crore investment), and a strategic Vessel Owning Joint Venture Company between SCI and Oil PSUs. Additionally, a ₹266 crore lighthouse museum at the National Maritime Heritage Complex (NMHC) in Lothal, Gujarat, was announced, expected to generate approximately 22,000 jobs....[read more](#)

Hooghly Cochin Shipyard Signs Contract for Second 80-Passenger Luxury River Cruise Vessel - 2



Hooghly Cochin Shipyard Limited (HCSL), a wholly owned subsidiary of Cochin Shipyard Limited (CSL), has signed a landmark contract with Heritage River Journeys Pvt. Ltd. to build an 80-passenger luxury river cruise vessel-2. This marks the second vessel in the series to be constructed under Indian Register of Shipping (IR) Class certification. The new vessel will feature state-of-the-art amenities and provide premium onboard experiences for passengers, catering to the rising demand for luxury travel

along India’s river networks. With eco-friendly designs and advanced onboard systems, the project emphasises sustainable tourism and represents a significant step in India’s efforts to enhance inland waterway tourism and luxury river cruise services....[read more](#), [citation](#).

MARITIME SUSTAINABILITY

India's First Indigenous Hydrogen Fuel Cell Vessel Launched in Varanasi



India launched its first fully indigenous hydrogen fuel cell-powered passenger vessel into commercial service in Varanasi, marking a significant milestone in the nation's green maritime transition. Union Minister for Ports, Shipping and Waterways Sarbananda

Sonowal flagged off the vessel's maiden commercial run from Namohat on December 11, 2025. Developed by Cochin Shipyard Ltd. (CSL) for the Inland Waterways Authority of India (IWAI), the vessel showcases India's commitment to clean energy, innovation, and sustainable inland waterways development. The vessel will significantly improve urban mobility in Varanasi with zero noise, zero smoke and zero emissions, while enhancing tourism and generating employment, positioning the city among the world's early adopters of hydrogen-powered public transport...[read more](#).

India-Rotterdam Partnership for Maritime Cooperation



Port of Rotterdam and Deendayal Port Authority signed an MoU for institutional cooperation and digital knowledge exchange during India Maritime Week 2025. This partnership is part of a larger Green and Digital Sea Corridor initiative between India and the Netherlands, promoting maritime cooperation and sustainable shipping practices through institutional collaboration and digital innovation....[read more](#).

Inland Waterways Surge 710%, Coastal Shipping Growth Reaches 118%



Inland waterways achieved record cargo movement of 146 million metric tonnes (MMT) in 2025, up from 18 MMT in 2014, representing 710% growth. The number of operational waterways expanded from 3 to 29. The Haldia Multi-Modal Terminal (MMT) was handed over to IRC Natural Resources under PPP model, offering 3.08 MMTPA capacity. Coastal shipping cargo movement nearly doubled from 87 MMT to 165 MMT over the past decade (118% growth), reinforcing the shift toward efficient, low-cost,

and eco-friendly maritime transport. Over ₹1,000 crore has been invested in inland waterway infrastructure across Northeast India, with ₹300 crore in completed projects and the remainder approaching completion...[read more](#), [citation 1](#), [citation 2](#) & [citation 3](#).

Global Green Shipping Corridors Expand: India Among Leaders in Zero-Emission Maritime Trade Routes

The Global Maritime Forum and Getting to Zero Coalition released a landmark progress report on November 27, 2025 revealing that global green shipping corridors have expanded to 84 active initiatives, with 25 new initiatives launched in 2025. Major developing economies including India, China, and Brazil have emerged as key leaders in establishing zero-emission maritime trade routes designed to demonstrate and scale novel zero-emission fuels, vessels, and technologies. The report emphasizes that these green corridors represent strategic economic infrastructure rather than mere environmental projects, providing first-mover competitive advantages across energy, trade, and technology sectors. For the first time since the report's inception in 2022, four green corridors have reached the 'realisation stage' with construction and operation of vessels, infrastructure, and fuel plants underway. The report warns against a 'wait and see' approach following the IMO Net-Zero Framework delay to October 2026, calling on governments and industry to leverage emerging national policies including the EU's Global Gateway initiative, H2Global, and Australia's Hydrogen Headstart programme to accelerate progress....[read more](#).



MARITIME TRAINING & SKILL DEVELOPMENT

Skill Development Programmes Achieve 100% Placement at Tuticorin



The Centre of Excellence in Maritime and Shipbuilding (CEMS) at V.O. Chidambaranar Port, Tuticorin, successfully completed skill development programmes in November 2025, delivering measurable employment outcomes. All 14 trainees in the Welder and Computer Numerical Control (CNC) Operator batches secured employment, recording 100% placement success. The programme continues to deliver seven specialised vocational courses including Exim & Warehouse Executive, Welding,

CNC Operations, and Supply Chain Executive roles....[read more](#).

Maritime Information Sharing Workshop 2025 (MISW 2025)



The Information Fusion Centre – Indian Ocean Region (IFC-IOR) hosted the third edition of the Maritime Information Sharing Workshop (MISW 2025) from 3–5 November 2025 in Gurugram. Themed “Enhancing Real-Time Coordination and Information Sharing Across the Indian Ocean Region,” the workshop brought together over 57 participants from 30 countries, representing IORA, DCoC/JA, and BIMSTEC. The culminating Table Top Exercise featured the indigenously developed Maritime Analytical Tool for Regional Awareness (MANTRA) software, simulating maritime security scenarios and reinforcing principles of information sharing and coordinated regional response....[read more](#).

INTERNATIONAL COLLABORATION

India-Netherlands Maritime Heritage Partnership Signed



India and the Netherlands signed a historic Memorandum of Understanding on 20 December 2025 to strengthen cooperation in maritime heritage, representing a major step toward developing the National Maritime Heritage Complex (NMHC) at Lothal, Gujarat. The MoU brings together the NMHC (developed under the Ministry of Ports, Shipping and Waterways) and the National Maritime Museum in Amsterdam, enabling collaboration on museum design, curation, conservation, joint exhibitions, research initiatives, and cultural exchange programmes. The NMHC at Lothal will showcase India's 4,500-year maritime legacy. The complex is expected to generate approximately 22,000 jobs upon full implementation, with Union Minister of Ports, Shipping & Waterways Sarbananda Sonowal describing it as bringing “world-class expertise in conservation, curation and museum design” and aligning with Prime Minister Modi's vision of combining heritage with innovation....[read more](#).

India-Oman Joint Vision Document on Maritime Cooperation



During Prime Minister Narendra Modi's State visit to Oman in December 2025, India and Oman adopted a Joint Vision Document on Maritime Cooperation, reflecting their shared commitment to regional maritime security, blue economy, and sustainable use of ocean resources. The two countries also welcomed a Memorandum of Understanding on Maritime

Heritage and Museums, enabling collaboration between museums through joint exhibitions and research. These agreements underline the shared maritime traditions and strategic partnership

between the two maritime neighbours. The upcoming maiden voyage of INSV Kaundinya to Oman highlights India and Oman's shared maritime traditions....[read more](#).

DGLL Successfully Hosts 3rd IALA Council Meeting in Mumbai



The Directorate General of Lighthouses and Lightships (DGLL), under the Ministry of Ports, Shipping and Waterways, successfully hosted the 3rd Council Meeting of the International Organization for Marine Aids to Navigation (IALA) in Mumbai from 08–12 December 2025. The high-level meeting brought together over 60 international delegates from more than 30 countries, reflecting the growing global confidence in India's leadership in the maritime sector. The

Council Meeting was virtually inaugurated by Union Minister Sarbananda Sonowal on 09 December 2025. On the occasion, the Minister launched the Digital Ticketing Portal for Lighthouse Tourism, a major initiative aimed at enhancing digital access, transparency, and visitor convenience across 75 lighthouse tourism destinations in the country. The deliberations resulted in updating existing IALA Standards and Guidelines, along with formulation of new global standards aimed at enhancing and harmonising marine aids to navigation worldwide....[read more](#).

India-Russia Strengthened Maritime Collaboration with Polar Waters Training and Shipping Cooperation MoUs

India and Russia have strengthened their maritime collaboration with two key Memoranda of Understanding signed during the State Visit of the President of the Russian Federation to India in December 2025. The first MoU between the Ministry of Ports, Shipping and Waterways and Russia's Ministry of Transport focuses on facilitating training of Indian seafarers in polar waters through programmes designed by Russian agencies specialising in Arctic operations. The second MoU between the Ministry of Ports, Shipping and Waterways and Russia's Maritime Board entails cooperation in various sectors of the maritime domain including shipping, ports, joint mineral exploration, research and development. These agreements underscore the shared commitment of both nations to advancing maritime cooperation and supporting long-term connectivity and growth....[read more](#).



India Re-Elected to IMO Council for 2026–27 with Highest Vote Tally



India has been re-elected to the Council of the International Maritime Organization (IMO) for the 2026-27 biennium with the highest vote tally in Category B. India secured 154 out of 169 valid votes cast during the elections held at the 34th Session of the IMO Assembly in London on November 28, 2025. Union Minister of Ports, Shipping and Waterways Sarbananda Sonowal expressed delight at the achievement, stating it is a proud moment for India's maritime sector. The re-election highlights India's large-scale international support to continue serving the global maritime domain and reflects confidence in India's growing maritime profile and

its constructive role in global maritime diplomacy.....[read more](#).

Hardeep Singh Puri Holds Key Shipbuilding Meetings to Boost India's Maritime Vision



Shri Hardeep Singh Puri, Minister of Petroleum and Natural Gas, visited HD Hyundai Heavy Industries shipyard in Ulsan on November 14, 2025 as part of high-level meetings held in Korea on 13-14 November to strengthen maritime and shipbuilding cooperation aligned with India's Maritime Amrit Kaal Vision 2047. The engagements aim to expand India's commercial fleet, enhance domestic shipbuilding capacity, and boost global competitiveness across ship operations, shipyards, and maritime plant sectors.

Today's visit builds on discussions with Korea's leading shipbuilding and shipping companies to advance mutually beneficial collaboration between the two maritime nations....[read more](#).

BLUE ECONOMY INITIATIVES

India's Integrated Shipbuilding Ecosystem Emerges as Pillar of Blue Economy



The Samudra Utkarsh seminar organised by the Department of Defence Production on November 25, 2025, Union Defence Minister Shri Rajnath Singh highlighted India's integrated end-to-end shipbuilding ecosystem as a vital pillar of the emerging Blue Economy. Indian shipyards are capable of delivering Indigenous Aircraft Carriers (INS Vikrant), Kalvari-class submarines, stealth frigates and destroyers, passenger and cargo vessels, coastal ferries, pollution-control and

research ships, world's most advanced deep-sea mining support vessel for ISRO, green-fuel vessels, LNG carriers, and high-efficiency commercial ships. The sector is adopting environment-friendly technologies and aims to become the preferred sustainment and repair hub for the entire Indo-Pacific region, with some shipyards on track to achieve 100% indigenous content within this decade.....[read more](#).

DHL-CMA CGM Partnership Deploys Second-Generation Biofuel for Sustainable Ocean Shipping



DHL Global Forwarding and CMA CGM have agreed to jointly use 8,990 metric tons of UCOME second-generation biofuel, enabling an estimated 25,000 metric tons of CO₂e well-to-wake emission reduction for ocean freight transported under DHL's GoGreen Plus service. Through DHL's GoGreen Plus and CMA CGM's ACT+ low-carbon transport offering, shippers can integrate sustainable maritime transport into their logistics operations. DHL's

GoGreen Plus service enables customers to cut well-to-wake emissions by up to 80% GHG emissions compared to conventional maritime fuel. Both DHL and CMA CGM are committed to reaching net-zero GHG emissions by 2050. CMA CGM has already cut the carbon intensity of its shipping activities by 57% since 2008 and is investing heavily in alternative fuels and dual-fuel vessels.....[read more](#).

=====