

# Maritime Human Capital-Note

## How to Increase Global Share of Seafarers from 12% to 20%.



### Seafarers as the Crucial component of the maritime industry – The Human Capital



*Over 90% of world trade is carried by sea and is powered by seafarers' expertise and resilience. They ensure the uninterrupted movement of essential goods, fuel, and raw materials.*

#### Challenges of Seafarers at Sea

- Seafarers face long separations from family, isolation and harsh work conditions
- Require strong mental and physical health to cope with the challenges of life at sea.
- Seafaring is still not a gender-equitable workspace and has very limited participation of women.

#### Challenges of Seafarers During Training

- Demand for shipboard placements and simulator-based instruction significantly exceeds existing institutional provisions.
- Evolving certification standards necessitate sustained inter-agency coordination and institutional responsiveness.
- Training curricula require systematic integration of emerging maritime technologies to ensure global competitiveness.

- India is aiming to build a future -ready maritime workforce through training and well -being measures
- **India aims to achieve the vision under Maritime India Vision (MIV) 2030 of provisioning 20% of the world's seafaring pool, against 12% in the late 2010s**

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## I. Status of Seafarers: Human Capital and Vision

Seafarers are recognized as the **Crucial component of the maritime industry**, powering over 90% of world trade through their expertise and resilience, ensuring the uninterrupted movement of essential goods.

### Challenges Faced

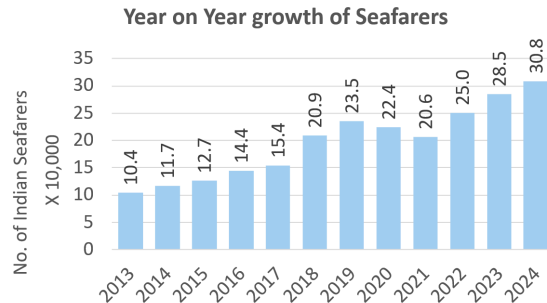
- Seafarers face unique challenges such as **long separations from family, isolation, and harsh work conditions**, necessitating strong mental and physical health.
- Challenges during training include the demand for shipboard placements and simulator-based instruction significantly exceeding existing institutional provisions.
- Evolving certification standards necessitate sustained inter-agency coordination.
- Curricula require systematic integration of **emerging maritime technologies** to ensure global competitiveness.



## Seafarers and the Seafaring industry are already on the rise, with limited representation of women



*The number of Indian seafarers have consistently been on the rise in the last decade. With nearly 3.08 lakh seafarers, India provides approximately 12% of the global seafaring pool.*



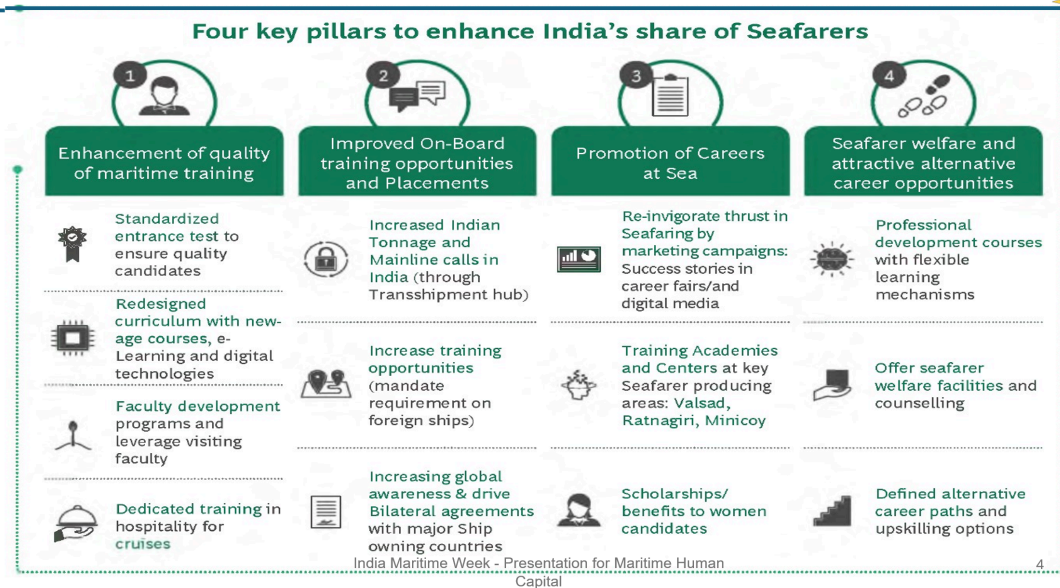
- Of the total pool of Indian seafarers, women seafarers represent less than 2%.
- Statistics clearly indicate that seafaring is not a gender-equitable workspace currently.

### Growth and Global Aspiration

- The number of Indian seafarers has consistently been on the rise in the last decade.
- India currently has nearly **3.08 lakh seafarers**, providing approximately **12%** of the global seafaring pool.
- India aims to achieve the vision under the **Maritime India Vision (MIV) 2030** of provisioning **20%** of the world's seafaring pool, against 12% in the late 2010s.
- **Gender Gap:** Seafaring is **not a gender-equitable workspace currently**. Women seafarers represent **less than 2%** of the total Indian pool.



## Four Key Pillar To Enhance India's Seafarers



To increase India's global share of seafarers and strengthen maritime competitiveness, four strategic pillars have been identified to guide policy initiatives and targeted interventions. These pillars collectively address the quality of training, expansion of job opportunities, career promotion, and long-term welfare and alternative career pathways for Indian seafarers.

### Enhancement of Quality in Maritime Training

A strong training foundation is essential to develop a technically proficient and globally competitive maritime workforce. Key measures include:

- **Standardized entrance testing** to ensure high-caliber candidates enter maritime education.
- **Curriculum redesign** focusing on emerging technologies, digital platforms, and e-learning to keep pace with global requirements.
- **Faculty development initiatives**, including visiting experts and structured professional enhancement programs.
- **Dedicated cruise-sector training**, leveraging India's hospitality strengths to tap a high-growth global market.

These interventions aim to create a consistent and competency-driven maritime training ecosystem in India.

### Improved On-Board Training Opportunities and Placements

The shortage of shipboard training berths is a critical constraint affecting employability. To address this, the strategy focuses on:

- Increasing Indian tonnage and **mainline port calls**, enhancing domestic opportunities through the transshipment hub model.
- Expanding **training opportunities** by mandating berths onboard foreign-flag vessels.
- Strengthening **global awareness and bilateral collaborations** with major ship-owning nations.

These steps aim to ensure seamless progression from training to sea-service and eventual certification.

### Promotion of Careers at Sea

Long-term sustainability requires enhanced career attractiveness and positive industry perception. The approach includes:

- Career promotion through **marketing campaigns, fairs, and digital platforms** showcasing success stories.
- Establishment of **Training Academies and Centers** in key maritime talent clusters such as Valsad, Ratnagiri, and Minicoy.
- **Scholarships and benefits** to support women candidates and encourage gender diversity.

The objective is to build strong visibility and aspiration for maritime careers among youth nationwide.

### Seafarer Welfare and Attractive Alternative Career Opportunities

Retention and long-term well-being are essential to strengthening India's maritime workforce. Supporting measures include:

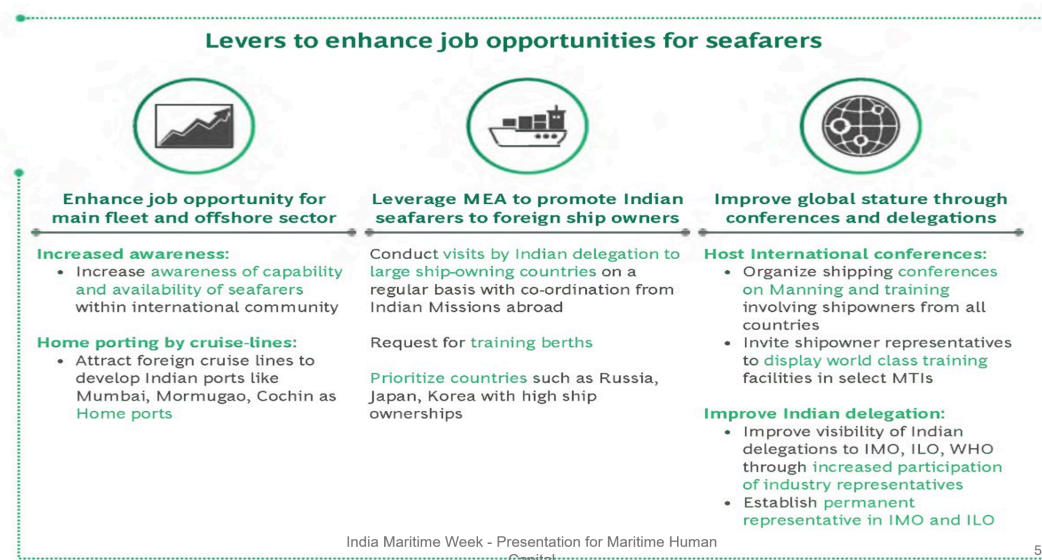
- Expanded **professional development programs** with flexible upskilling opportunities.
- Strengthened **seafarer welfare, counselling and support services** to ensure dignity and resilience at sea.
- Defined **alternative career pathways**, enabling smooth transition to shore-based maritime roles after active sailing.

This pillar emphasizes holistic security — professional, psychological, and economic — for seafarers throughout their career lifecycle.





## Levers To Enhance Job Opportunities for Seafarers



Strengthening employment outcomes for Indian seafarers requires a multifaceted strategy that expands global visibility, deepens international collaboration, and leverages India's maritime strengths. The following levers aim to significantly increase job opportunities across both main fleet and offshore sectors.

### Enhance Job Opportunities in Main Fleet and Offshore Sector

Efforts are focused on improving India's visibility and attractiveness as a source of skilled maritime personnel:

- **Increasing global awareness** of Indian seafarers' competence and availability among the international shipping community.
- Promoting **home-porting of foreign cruise vessels** at Indian ports such as Mumbai, Mormugao, and Cochin to generate direct placement and operational roles.
- Encouraging **growth in cruise tourism**, which further drives onboard employment opportunities for Indian seafarers.

These measures position India as a key manpower hub for both commercial and passenger shipping sectors.

### Leverage Ministry of External Affairs (MEA) to Promote Indian Seafarers

International diplomacy serves as a critical enabler for maritime labour mobility:

- **Delegation visits** to major ship-owning nations, coordinated through Indian Missions abroad, to advocate for the hiring of Indian crew.

- Requests for **increased allocation of cadet training berths** from global shipping companies.
- Strategic prioritization of countries like **Russia, Japan, and South Korea**, which have significant fleet ownership and talent demand.

This approach builds strong international pipelines for training and employment across diverse fleet segments.

### **Improve India's Global Stature through Conferences and Delegations**

Enhanced representation and thought leadership help strengthen India's position in the global maritime ecosystem:

- Hosting **international conferences** on key topics such as ship manning and training, with participation from shipowners worldwide.
- Inviting global stakeholders to **experience India's world-class maritime training infrastructure** through visits to select MTIs.
- Increasing the presence of India's **industry representatives in multilateral forums** including IMO, ILO, and WHO.
- Pursuing **permanent representation** for India in the IMO and ILO to reinforce global influence and policy engagement.

These efforts create sustained visibility and reinforce India's brand as a reliable and skilled maritime workforce provider.



## Sagar Mein Yog – to Ensure the holistic wellness of seafarers



*Seafarers may face multiple challenges in coping with the challenges of life at sea. Hence, the Sagar Mein Yog initiative has been taken to cater to the complete wellness of seafarers.*

### About Sagar Mein Yog

- A flagship initiative by the DGS, India, aimed at promoting physical and mental well-being among seafarers through yoga and mindfulness practices.
- Programme seeks to provide complete wellness at Sea/Shore
- Aligned with MIV 2030 Deliverable 10.16.3 for promoting mental well-being
- Integrates yoga into their daily routines and complete wellness of all ranks of Indian seafarer's pre-sea/post-sea and on board the ships and their families pan-India in partnership with DG(S).

### 10 components of Sagar Mein Yog



## Strategic Initiatives for Well-being and Inclusivity

India is aiming to build a future-ready maritime workforce through training and well-being measures.

### Sagar Mein Yog (SMY) – Holistic Wellness

SMY is a flagship initiative aimed at promoting **physical and mental well-being** among seafarers through yoga and mindfulness practices.

**Objective:** To provide complete wellness at Sea/Shore and integrate yoga into the daily routines of all ranks of Indian seafarer's (pre-sea/post-sea and on board) and their families pan-India. The initiative is aligned with **MIV 2030 Deliverable 10.16.3** for promoting mental well-being.



## Components of Sagar Mein Yog (1/2)



**10 Dimensions of Wellness launched by Hon'ble Union Minister of Ports, Shipping and Waterways on 21<sup>st</sup> June 2025 during the Celebrations of International Yoga Day at Gateway of India, Mumbai**

**Physical:** This encompasses taking care of your body through healthy habits like exercise, nutrition, sleep, and avoiding substance abuse.

**Emotional:** This involves understanding, managing, and expressing your emotions in a healthy way, as well as coping with stress and life challenges.

**Intellectual:** This dimension focuses on engaging your mind through learning, curiosity, and continuous growth, seeking knowledge and expanding your horizons.

**Spiritual:** This refers to finding meaning and purpose in life, connecting with something larger than yourself, and practicing values and beliefs that align with your core values.

**Social:** This involves building and maintaining healthy relationships, connecting with others, and participating in social activities that foster a sense of belonging.

The 10 Dimensions of Wellness were launched by the Hon'ble Union Minister of Ports, Shipping and Waterways on June 21, 2025, during the celebrations of International Yoga Day:

1. **Physical:** Taking care of the body through healthy habits like exercise, nutrition, sleep, and avoiding substance abuse.
2. **Emotional:** Understanding, managing, and expressing emotions in a healthy way, and coping with stress and life challenges.
3. **Intellectual:** Engaging the mind through learning, curiosity, continuous growth, seeking knowledge, and expanding horizons.
4. **Spiritual:** Finding meaning and purpose in life, connecting with something larger than oneself, and practicing aligning values and beliefs.
5. **Social:** Building and maintaining healthy relationships, connecting with others, and participating in social activities that foster a sense of belonging.



## Components of Sagar Mein Yog (2/2)



**Environment:** This dimension emphasizes understanding and respecting the environment, making sustainable choices, and contributing to a healthy planet.

**Financial:** This focuses on managing your finances responsibly, setting financial goals, and ensuring financial stability and security.

**Occupational:** This involves finding satisfaction and meaning in your work, balancing work and life, and pursuing a career that aligns with your values and goals.

**Cultural:** Cultural wellbeing comes from being valued for the differences that define us and our beliefs, our history, and our roots.

**Digital:** This refers to understanding the impact of technology on your well-being, using technology responsibly, and maintaining a healthy balance between online and offline activities.

6. **Environment:** Understanding and respecting the environment, making sustainable choices, and contributing to a healthy planet.
7. **Financial:** Managing finances responsibly, setting financial goals, and ensuring financial stability and security.
8. **Occupational:** Finding satisfaction and meaning in work, balancing work and life, and pursuing a career that aligns with one's values and goals.
9. **Cultural:** Cultural well-being comes from being valued for the differences that define us, our beliefs, our history, and our roots.
10. **Digital:** Understanding the impact of technology on well-being, using technology responsibly, and maintaining a healthy balance between online and offline activities.



## Sagar Mein Yog – to Ensure the holistic wellness of seafarers



### Status of SMY and Activities Planned

#### Launch of the Learning Management System (LMS)

- Learning Management System (LMS) is being developed that would be launched for access to seafarers.
- LMS to be gradually made mandatory for seafarer training in Maritime Training Institutes (MTIs) in the first phase.
- In the second phase, the SMY training through the LMS to be made mandatory for all serving seafarers.

#### Training of Trainers (ToT)

- ToT, aimed at providing certification and equipping Yog gurus to deliver the Yog syllabus effectively to other trainers and, eventually, to the students (seafarers)
- In the first phase, nominations will be invited from Maritime Training Institutes (MTIs) conducting pre-sea courses. A pilot batch of the ToT programme will be conducted initially, followed by regular sessions on a quarterly basis.
- In the second phase, the ToT programme will be extended to MTIs conducting post-sea courses, thereby ensuring comprehensive coverage and capacity-building across the maritime training ecosystem.

### Implementation Status:

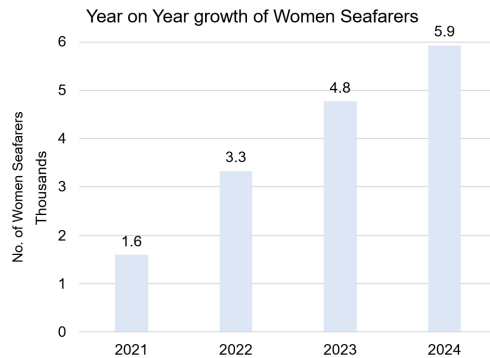
- **LMS Launch: A Learning Management System (LMS)** is being developed and will be launched for access to seafarers.
  - **Phase 1:** The LMS will be gradually made mandatory for seafarer training in MTIs.
  - **Phase 2:** The SMY training through the LMS will be made mandatory for all serving seafarers.
- **Training of Trainers (ToT):** ToT aims to provide certification and equip Yoga gurus to deliver the Yog syllabus effectively.
  - **Phase 1:** Nominations will be invited from MTIs conducting **pre-sea courses**. A pilot batch will be conducted, followed by regular sessions on a quarterly basis.
  - **Phase 2:** The ToT program will be extended to MTIs conducting **post-sea courses**, ensuring comprehensive coverage.



## Sagar Mein Samman – Enhancing the participation of women (1/2)



*The Maritime India Vision (MIV) 2030 has identified the need to develop a gender equitable workforce and enhance the participation of women in seafaring. Accordingly, the Sagar Mein Samman has been initiated.*



### Key Objectives of SMS

**Empowerment:** Equip women with skills and confidence to take up leadership roles

**Inclusivity:** Promote unbiased recruitment and representation at all levels

**Safety:** Ensure a harassment-free, supportive work environment

**Skill Development:** Provide tailored training, certifications, and industry exposure.

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## Sagar Mein Samman (SMS) – Gender Equity

SMS has been initiated to address the MIV 2030 goal of developing a **gender equitable workforce** and enhancing the participation of women in seafaring.

### Key Objectives (Four Pillars):

1. **Empowerment:** Equip women with skills and confidence to take up leadership roles.
2. **Inclusivity:** Promote unbiased recruitment and representation at all levels.
3. **Safety:** Ensure a **harassment-free, supportive work environment**.
4. **Skill Development:** Provide tailored training, certifications, and industry exposure.



### Strategies for enhancing the participation of women

- Formulation and Enforcement of an Anti-Harassment Policy

Develop & implement a robust anti-harassment framework applicable across maritime institutions, vessels, MTIs and allied bodies, with clear reporting mechanisms and accountability protocols

- Gender-Neutral Advocacy in Maritime Conventions

Proactively engage with international bodies to promote the use of gender-neutral language and inclusive provisions within key conventions such as SOLAS, STCW, MLC etc.

- Official Corporate Social Responsibility (CSR) Mandates for Maritime Institutions

Enforce CSR obligations for Maritime Training Institutes (MTIs), legal institutions, shipping companies, and associated entities to support gender equity programs, infrastructure, and awareness campaigns

- Benchmarking Global Best Practices

Conduct a comparative policy review and adopt proven practices from gender-progressive maritime nations, including Norway, Sweden, Chinese Taipei, the Philippines, and Denmark.

- Institutional Resource Commitment

Secure long-term commitments for scholarships targeted at women & underrepresented groups, Inclusion mandates for MTIs e.g., gender-equal intake policies, gender-sensitive infrastructure Identification & removal of systemic barriers obstructing women's entry & retention in maritime careers

### Strategies for Enhancement:

1. **Policy and Enforcement:** Formulation and Enforcement of a robust **Anti-Harassment Policy** applicable across all maritime institutions, vessels, MTIs, and allied bodies.
2. **Global Advocacy:** Proactive engagement with international bodies to promote **gender-neutral language and inclusive provisions** within key conventions such as SOLAS, STCW, and MLC.
3. **Mandates:** Enforce **Official Corporate Social Responsibility (CSR) Mandates** for MTIs, shipping companies, and associated entities to support gender equity programs.
4. **Institutional Commitment:** Secure long-term commitments for scholarships targeted at women and enforce **Inclusion mandates for MTIs** (e.g., gender-equal intake policies, gender-sensitive infrastructure).
5. **Benchmarking:** Conduct a comparative policy review to adopt proven practices from gender-progressive maritime nations, including Norway, Sweden, the Philippines, etc.





# Who is a Competent Seafarer?



*“While compliance with standards is essential for serving on board ships, the skills and competence of seafarers can only be adequately underpinned, updated and maintained through effective Maritime Education, Training, Assessment and reliable Certification of their Competency”*

*-Koji Sekimizu, ex-Secretary-General of the International Maritime Organization (IMO)*

## Competency, Quality, and Digital Transformation

Quality now defines competitiveness, demanding digitally skilled, safety-compliant, and green-ready seafarers.

### Competent Seafarer

- A competent seafarer requires compliance with standards, and skills must be underpinned, updated, and maintained through effective Maritime Education, Training, Assessment, and reliable Certification.
- **IMO Perspective:** Koji Sekimizu, ex-Secretary-General of the IMO, stated that while compliance with standards is essential, the skills and competence of seafarers must be underpinned, updated, and maintained through effective Maritime Education, Training, Assessment, and **reliable Certification of their Competency**



## Examination Reforms



Sequence of Examination Reform for the different examination carried out:

1. CoC (Written & Oral)      2. MTI Exit Examination      3. BES Ratings Exit Examination

### CoC (Written & Oral)

- Mandatory Certificate of Competency (CoC) for seafarers.
- Verifies qualifications for shipboard duties.
- Globally recognized, aligned with STCW Convention.

### MTI Exit Examination

- Required after completing STCW-mandated courses at DGS-approved MTIs.
- Earlier, MTIs conducted their own assessments.
- Ensures seafarers meet minimum competency standards.

### BES Ratings Exit Examination

- Mandatory for those completing GP Rating or CCMC courses.
- Qualification needed for employment in deck, engine, or catering departments.

## Examination Reform Sequence:

The DGS has reformed the examination process across three stages:

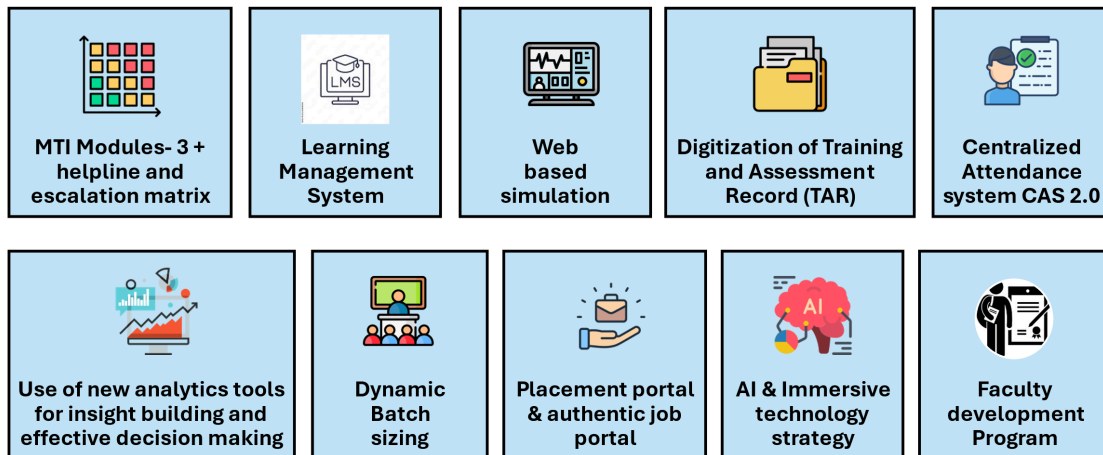
1. **CoC (Written & Oral):** This is the mandatory Certificate of Competency (CoC) for seafarers. It verifies qualifications for shipboard duties, is globally recognized, and aligned with the STCW Convention.
2. **MTI Exit Examination:** This is now required after completing STCW-mandated courses at DGS-approved MTIs, ensuring seafarers meet minimum competency standards (whereas MTIs previously conducted their own assessments).
3. **BES Ratings Exit Examination:** This is mandatory for those completing GP Rating or CCMC courses and is required for employment in the deck, engine, or catering departments.



## Digital Transformation and Governance Technological Interventions/adoption in the Maritime Training Sector



Empowering trainers and trainees to achieve excellence beyond traditional boundaries



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### Digital Transformation and Training

Technological interventions are being adopted to empower trainers and trainees beyond traditional boundaries:

- Developing a **Learning Management System (LMS)** and Web-based simulation.
- Implementing **Digitization of the Training and Assessment Record (TAR)**.
- Deploying a Centralized Attendance System (CAS 2.0).
- Using new analytics tools for insight building.
- Developing a placement portal and authentic job portal.
- Strategizing the use of **AI & Immersive technology**.



## Transparency and Zero Tolerance for Fraud



### DG Shipping's campaign against Fake Maritime Institutes

Raising issue over the  
Call/SMS/WhatsApp

**Helpline** between 09:00  
AM – 06.00 PM

Escalation mechanism  
for resolving query

**Follow-up**  
Support and right  
guidance

Analysis  
& Correction  
and recurrence

### Efforts to provide awareness through Social Media



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## Transparency and Zero Tolerance for Fraud

The DGS is undertaking strong measures to protect the integrity of seafarer qualifications and eliminate fraudulent certification practices. This includes active campaigns against fake maritime institutes, supported by social media outreach and awareness videos on preventing cheating and fraudulent activities.

By focusing on secure digital credentials and centralized verification, the DGS aims to uphold the standard that "Quality now defines competitiveness, not just headcount", ensuring that only genuinely competent seafarers, whose skills are underpinned by effective training and reliable certification, receive global recognition.



## Merchant Navy Career Promotion Campaign



### • Ministry of Education

- The introduction of merchant shipping and other maritime topics in the schools of coastal states.
- Under “10 Bagless Days in Schools” for classes 6 to 8 the curriculum will include hobby-based activities to familiarize students with maritime aspects, contributing to their overall educational experience.



### • Ministry of Skill Development And Entrepreneurship (MSDE)

- Development of a premium course for the candidates studying in school.
- To initiate mapping of local ITIs and institutes to the nearest Maritime Training Institutes (MTIs) for supporting and enhancing the skill development and capacity-building efforts of these local institutions.



- Engagement of professional Event Management Firm – 3 BEES Research Foundation to organize a series of exposure trips to educational institutions nationwide

## Career Promotion Campaign

The DGS is collaborating with other ministries to promote maritime careers:

- **Ministry of Education:** Promoting the introduction of merchant shipping and other maritime topics in schools of coastal states. Under “**10 Bagless Days in Schools**” for classes 6 to 8, the curriculum will include hobby-based activities to familiarize students with maritime aspects.
- **Ministry of Skill Development and Entrepreneurship (MSDE):** Developing a premium course for candidates studying in school and mapping local ITIs and institutes to the nearest MTIs for supporting skill development and capacity-building.
- **Outreach:** Engaging a professional Event Management Firm (3 BEES Research Foundation) to organize a series of exposure trips to educational institutions nationwide.



## The need to enhance the quality of Indian Seafarers – About the Shipping Corporation of India



### Strategic Imperative

- Global shipping demands **digitally skilled, safety-compliant, and green-ready** seafarers
- Quality now defines competitiveness, not just headcount

### SCI's Institutional Edge

- India's flagship carrier with diversified fleet & global footprint
- Owns and operates **MTI Powai** one of Asia's premier maritime training campuses
- Seamless talent pipeline- cadet intake, structured sea-time & officer grooming

### Enablers in Action

- Advanced simulators, STCW+ curriculum, Cyber & soft skills integration
- Sustainability modules: LNG handling, emissions control, green ops
- Leadership training embedded across ranks

### Way Forward

- Scale cadetship & upgrade MTI with **AR/VR, AI-led learning, and green fuel labs**
- Benchmark SCI training to top global academies
- Act as the **national model for seafarer excellence**, setting the bar for others

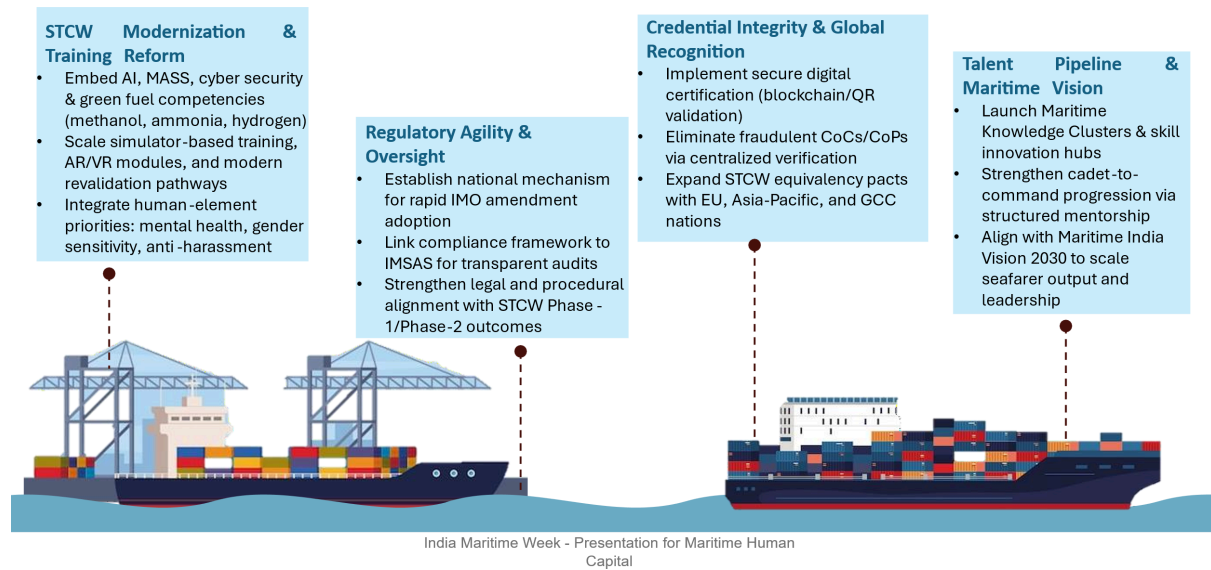
## Shipping Corporation of India (SCI) as the National Model

SCI acts as India's flagship carrier, operating MTI Powai, one of Asia's premier maritime training campuses, enabling a seamless talent pipeline. The **Way Forward** for SCI includes:

- Scaling cadetship and upgrading MTI with **AR/VR, AI-led learning, and green fuel labs**.
- Benchmarking SCI training to top global academies.
- Acting as the national model for seafarer excellence.



## Future amendments to the STCW convention in India



### STCW Modernization and Regulatory Oversight

Future amendments and training reforms focus on preparing the workforce for emerging industry demands:

- **New Competencies:** Training will embed competencies related to **AI, MASS, cyber security, and green fuel** (methanol, ammonia, hydrogen).
- **Modernization:** Scaling up **simulator-based training, AR/VR modules**, and modern revalidation pathways.
- **Human Element:** Integrating human-element priorities such as **mental health, gender sensitivity, and anti-harassment** into training.
- **Credential Integrity:** Implementing **secure digital certification** (using blockchain/QR validation) and centralized verification to eliminate fraudulent CoCs/CoPs.
- **Talent Pipeline:** Strengthening **cadet-to-command progression** via structured mentorship.