

## Maritime Sector-A Compass to the Vision of Aatmanirbhar Bharat.

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### ABSTRACT

Over the recent years, shipbuilders are adopting technologies which are more digitalized and data driven to meet the present demand to build ships faster, efficient and cost effective. This process requires integration of various shop floor activities, which would avoid movement of data in the form of papers/hardcopy plans between shop floors as the ship building starts its journey from design office. The industry has recognized the need to move towards "Datacentric Operations" to cater the data needs of all stakeholders including flag, classification society, owner etc.

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### Introduction:

Since ancient times, India has popularly been known as the Golden bird, signifying the participation of our nation in trade activities across the globe. This can be attributed to the geographical advantage of the location of the Indian peninsula with a coastline close to 7517 kilometers which makes it a highly favored and accessible checkpoint with 12 major ports. The importance of the trade sector in the fore sailing of our nation can be easily appreciated by a multitude of statistics. However ground zero reports paint a completely different picture. The cause of failure of the Indian maritime industry is multifactorial. The dereliction of the same has become more evident with the backdrop of the Covid-19 pandemic. The take home message during the process of recovery is that 'trade' cannot be separated from fiscal and monetary policy measures as an essential ingredient.

### Financial Aspect:

#### A. Challenges:

- **Heavy Tax Regime:** Taxes levied on various monetary activities prove to be a huge burden for the industry, thus handcuffing Indian ship owners & keeping them from progressing.
- **Inability to gather foreign investment:** Despite the allowance of **100% FDI** in shipping since 1997, we have not garnered any investment from

the global forum rather, we have been losing out on our companies for reasons well known but not catered to.

- **Excessive 'Nirbharta' on foreign transshipment ports:** An unfortunate scenario is that dealing of our own domestic products is not being fulfilled by our own shippers. To make matters worse, there are recent relaxed restrictions on Cabotage Rules and views on changing the ROFR (Right of First Refusal) Clause.

#### B. Solutions:

- **Reforming the taxation Structure:** This is the most important step which would make working easier for our shippers & put India at a better position in global market. As a market stat line trade through Indian shipping is 6 times costlier as compared through foreign shipping.
- **Scrapping of unnecessary charges:** Removal of irrational costs ("India costs") levied on Indian companies with the justification to benefit foreign contenders will provide relief to our companies and help in internalisation of the sector.

- **Empowering Indian Shipping Industry:** Indian policy makers have somehow managed to weaken indigenous maritime industry by formulating irrational rules and regulations. Every policy formulation should maintain a **balance** between domestic/new start-ups and foreign partners.
- **Maritime Development Fund:** Long term funds are a crucial factor to support the extensive monetary requirements of the sector since this is one industry that requires a substantial amount of capital investment and running costs
- **Our seafarers prefer sailing abroad:** Poor incentives & burden of taxation are driving away Indian mariners in search of better opportunities to foreign companies.
- **Requirement of Digital Development:** Fast tracking the sinfully sluggish system is the need of the hour and digitization is the logical answer.

#### B. Solution:

- The Sagarmala project has produced about 10,000 jobs in the past 3 years and the goal is to create more opportunities.

### Infrastructure:

#### A. Challenges:

- **Assisting Infrastructure:** The crumbling state of infrastructure required to support shipping activities has strung out 2 major problems:
  - Increased cost associated with cargo transportation, devastating 11% of landed costs as compared to global average of 6%.
  - Dependence on neighbours to cater for our own needs, which breathes heavily on our annual revenue USD 230 million.
- **Topographical Constraints:** Shallow ports at the Indian coastline are a huge drawback limiting the docking of big ships & vessels.
- **Limited Terminal Capacity & Pre-berthing Time:** Indian ports are unequipped in terms of cargo handling & terminal capacity making them unfavourable for cargo vessels with bulk material and significant capital investments

#### B. Solutions:

- The Sagarmala Programme, by the GOI aims to launch a total of 189 projects catering to the infrastructure, modernisation & connectivity requirements. This involves a capital investment of 1.42 trillion (\$ 22 billion) Rupees.
- Establishment of the National Industrial Corridor Development and Implementation Trust (NICDIT) in 2016 will aid in developing 5 industrial corridors.
- The vast inland waterways prove to be a golden advantage to our nation and the government is planning to develop this sector, thus attracting private investment.

### Human Resource and Digital Development:

#### A. Challenges:

- **Failure to leverage Labour Resources:** Shabby management of the labour resources along with ineffective policies has created a human resource deficit.

#### Digitization:

Prioritization of the process of digitization is crucial. Furthermore, implementation of newer techniques at various levels of the sector will be Hail Mary for the industry in today's time & age.

#### Socio-Political Aspect:

##### A. Challenges:

- **Wrath of Bureaucracy:** The democratic approach may sound very appealing however its sloth like pace does not convert to positive on ground reforms. Before coming to any conclusion the government needs to keep in mind of multiple stake holders.
- **Private Participation still AWOL:** Lack of Private participation is responsible for the many discrepancies & deficiencies in Indian maritime sector. More Private involvement can help this sector grow by leaps and bounds.

##### B. Solution

- **Liberalization:** A string stretched too far is bound to snap. Stringent regulations & contracts restrict functional flexibility of the sector. Call of the hour is to strengthen the Public-Private Partnership (PPP), so that we can adapt the pros of each arena to launch a stable & sturdy Indian maritime policy into global trade sector.
- **Partnerships can go a long way:** A give & take relationship with our land locked neighbours can bring in loads of investments in terms of technology and manpower. This can be done with prominent organisations G7, SAARC, BIMSTEC, SCO & BRICS. India being an active participant & important contender in the fore mentioned bodies can use its position to reap huge benefits. Eco-friendly projects can attract European Union under Paris Agreement.
- **Modernisation with maritime clusters:** A futuristic concept of development of maritime clusters will bring in huge opportunities & innovations in all spheres of the sector. The government of India has identified 2 states-Tamil

Nadu & Gujarat, to be prospective choices for such an initiative.

- India can look with a vision of Carbon Neutral Nation for future timeline.
  - Major policy & strategy reforms are required in the current Maritime sector to make India Aatmanirbhar.
  - Understanding India and global relations affecting trade and hence the shipping sector is essential for the nation's progress.
  - Awareness regarding the past, present and future of the Indian shipping industry and the fact that with changing times, various aspects of the industry need to evolve to catch up to the global demands.

### **Conclusion:**

Given the present scenario, India one of the major economies in the world. All now it depends upon the policy & approach with which we shape our maritime sector because that will eventually lead to the future of this nation. Therefore, it can be convincingly concluded that India is on the cusp of major maritime revolution which will play out over the next couple of years.

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## INTERNATIONAL SHIPPING CONFERENCE 2020



# INTERNATIONAL SHIPPING CONFERENCE 2020



The Institute of Marine Engineers India (IMEI) Kolkata Branch and The Company of Master Mariners of India (CMMI) Kolkata Chapter jointly organized the International Shipping Conference – ISCO 2020 with the theme Maritime -Sustainability- Global Opportunities. This is the first ever known International conference being hosted at city of joy Kolkata on a web platform. Chairman Apeejay Surrendra Group & Apeejay Shipping Limited Shri Karan Paul inaugurated the Conference. In his inaugural address as the Chief Guest of the conference he said that Shipping is an

essential service that is the backbone and lifeblood of the world economy and seafarers have worked round the clock tirelessly. Appreciating initiatives of Ministry of Shipping and DG Shipping in solving nearly all issues of crew change in Indian ports, he said, crew changes remain a challenge in foreign ports. Mr Paul said that economical and environmental sustainability go hand-in-hand in Shipping Industry. Emphasizing the need to adopt newer technologies and use of





alternate fuels to meet targets set by IMO, he said measures have been taken by 18 leading banks towards decarbonisation called Poseidon principles and by leading Charterers in transparently sharing their carbon emission data. Pursuing diversity in crew and gender equality will make Shipping the magnet for the best talent in the world, Mr Paul said collaboration and inclusivity will ensure that the next decade will be one of Change that propels growth.

Captain Narasimhan, ISCO organizing committee member and CEO of Apeejay Shipping released the ISCO souvenir on behalf of Mr. Karan Paul. Capt B K Jha, Master, CMMI & Shri Uday Purohit, President IMEI expressed their joy over both organizations joining hands together to organize an event of this magnitude especially during difficult times of COVID. Earlier in his address Shri Amit Bhatnagar, Chairman Kolkata Branch, IMEI and ISCO Convener, informed the gathering that 25 papers will be presented during the conference by the speakers located in different parts of the world in the next 2 days of the conference. The Kolkata Chapter Chairman, CMMI & Co Convener Capt Kaustuv Dutta stated that the conference topics covers a wide array of various shipping fields starting from regulations to conventions and will be beneficial for acquiring new knowledge in shipping technology, innovation & business perspectives. In his welcome



address Shri Amitava Banerjee, Chairman ISCO welcomed the delegates from across the globe.

Capt D N Goswami compered the proceedings befittingly.

Among the eminent personalities present were Mr. S Hajara, Former Chairman, SCI and Shri KM Rao, Principal Officer, Mercantile Marine Department, Kolkata.

The inaugural session of the conference ended with a vote of thanks by the Secretary of the IMEI Kolkata Branch, Shri. Gautam Sen.

## PLENARY AND SESSION I (INAUGURATED BY MR. ARUN SHARMA, EXECUTIVE CHAIRMAN & VICE CHAIRMAN IACS)



The Technical Seminar and Plenary session of the Conference was inaugurated by Shri Arun Sharma, Chairman, Indian Register of Shipping on 27th November, who in his inaugural address stated that Maritime Sustainability will depend on a fine balance between the economic, environment and social aspects. He also stated that existing fleets must move towards efficient operations to reduce fuel consumption. He believed that technology adoption will be a game changer. Shipping must learn uptake of technology and digitalisation from auto and aviation industries. In the future we will see a smart ship, smart fleet, and a smart model efficient in terms of delivery, environment, and cost. He



called upon the industry that there is no room for pessimism or despair at the same time no room for complacency.

Eminent speaker Mr Jagmeet Makkar, Chairman, Maritime and Logistics Arbitration at Hong Kong Centre of International Commercial Arbitration and Chairman, Hong Kong branch of the Institute of Chartered Shipbrokers spoke on 'Maritime Education: Need for Cross Functional Approach'. All functions to work together and be ready for further skills.



R. Adm. N. K. Mishra, Former, Chairman & Managing Director, Hindustan Shipyard Limited spoke on 'Towards Shipbuilding 4.0 – Indian Perspective'. In his presentation covered issues like additive manufacturing and 3 D printing. He advocated design maturing, implementation of ERP and unified database.



Dr B. K. Saxena spoke on 'Future of Maritime Education & Training for Maritime Sustainability'. Curriculum needs to be dynamic to meet the technological advancements. It is important to identify what is changing and what will be changing in future. The process of change needs to start from top and to involve every layer.



Mr Sujay Baug spoke on 'Maritime Sustainability: Global Opportunities'. He



stressed on environment sustainability and gender equality. Also, inland waterways development for sustainability.

The plenary session of the conference ended with a vote of thanks by the Secretary of the CMMI Kolkata Chapter, Capt. S L Mohapatra.

## SESSION II (Future of Shipping: Chaired by Mr. S Hajara, Former Chairman & Managing Director SCI)



Capt. Vinod Naveen spoke on 'Digitalisation and Blockchain' and its applicability in future shipping.



Mr Karan Doshi and Mr Apurba Ranjan Kar speaking on 'Remote Surveys – The past, the present and the future', deliberated on the advantages, shortcomings, complexities, and challenges concerning the same.



Dr Jossia Joseph, Dr C. Anoop Prasad and Dr R. Venkatesan, speaking on 'Sustainable Ocean Observation towards an Ocean Based Blue Economy', narrated a study of moored buoy observations off Chennai in delineating the variability in sea state.



## SESSION III (Shipbuilding & Training, Chaired by Mr. J Dasgupta, Chairman, Institute of Naval Architects)



Capt. Debashis Basu, speaking on 'Using Gamification in Maritime Training', talked about using games to enhance the skills and confidence levels of seafarers.



Mr Jagmeet Makkar, speaking on 'Cropping of Propeller Blades: Effect on Engine Performance and Torsional Vibrations – A Case Study', discussed an actual case where cracks had appeared and measures were taken, even as the vessel was under commercial pressure to sail.



Mr Sanil Peter, speaking on 'Development of New Ship Building & Repair Facilities in the East Coast: Factors and Challenges', narrated the history of shipbuilding on the east coast and talked about the present ventures in the field undertaken by Cochin Shipyard Limited in the region.



### **SESSION IV (Commercial Aspects & Safety: Chaired by Capt M M Saggi, Former Nautical Advisor to Govt. of India)**

Mr Jagmeet Makkar, speaking on 'Charter Party: Disputes & Prevention: Speed and Consumption Claims', discussed the basic concepts regarding the matter, and ways to minimise or avoid claims on this count.



Capt. Jeetendra Kampani, speaking on 'Elements of International Trade and Business Development', discussed how knowledge of the basic aspects of commerce and trade could help seafarers and others to become entrepreneurs.



Capt. Deb Narayan Goswami, speaking on 'Cost of Injury in the World of Captured Regulation', talked about how to lessen the risk of accidents and get a better return on investments by ship owners or operators, with reference to flag and class inspections.



### **SESSION V (Safety & Security: Chaired by Capt D N Goswami, Sailing Master)**

Capt. Bidyut Kumar Banerjee, speaking on 'Safety in Shipping - It could be worthwhile to have', discussed factors contributing to accidents, and ways of preventing them.



Mr Pralay Kumar Bhattacharya, speaking on 'Security Threats and Impact on Maritime Sustainability', shared information on different types of security threats to ships, together with statistical data and case examples.



Mr R. Srinivas, speaking on 'Implementation of Cyber Risk





Management in a Shipyard', identified key challenges and methodologies, in the background of cyber-attacks.

### SESSION VI (Student Session: Mr K M Rao, Principal Officer, Mercantile Marine Department, Kolkata)



Cdt Shree Waghmare, spoke on 'Watt in Water: Energy from the Oceans to Propel Ships',



Cdt Ansh Bhatnagar spoke on 'Future of Shipping and Underwater Research – Hybrid Underwater Vehicle'



Cdt Soumik Dutta spoke on 'Study of Hydrodynamic Coefficient & Motion Nature Due to the Shape Change of Floating Objects'.



Cdt Jawaad Zulqernine Muhammed spoke on 'A Comparative Study on the Resistance of KCS and JBC Hull for Determination of Optimal Ship Speed'.



Cdt Ayush Sharma spoke on 'Maritime Sector – A Compass to the Vision of Aatma Nirbhar Bharat'.

Cdt Md Abir Mahadi spoke on 'A Study on Motion Sickness Incidence at Several Positions of a Ship in Irregular Waves'.

### SESSION VII (Inland Water Transport: Chaired by Capt Bidyut Banerjee, Sailing Master)

Capt. S. Subhedar, speaking on 'Inland Water Transport', discussed the present issues facing this sector, and the opportunities and challenges ahead, in physical and financial terms.



### SESSION VII (Inland Water Transport: Chaired by Capt Bidyut Banerjee, Sailing Master)



Capt. S. Subhedar, speaking on 'Inland Water Transport', discussed the present issues facing this sector, and the opportunities and challenges ahead, in physical and financial terms.



Mr S. Dandapat, speaking on 'Indo-Bangladesh Protocol on Inland Water Trade', elaborated on the various regulations, protocols, agreements and legalities concerned with the subject.



Capt. Inderveer Solanki, speaking on 'Augmenting Capacity of Waterways: Manoeuvring Perspective', discussed present issues on the subject.



## || sight of the shore ||

In photo Deck Cadet Stebin Thankachan, MSC Carlotta.  
PC: Supreet Sachdeva & Team MSC Facebook page

### STUDENT SESSION VI PAPER RESULTS

**First Prize: Mr Shree Wagmare.**

**Second Prize: Mr Mohammed Abir Mahadi.**

**Third Prize: Mr Jawaad Zulqernine Muhammed.**

In the end of the conference, a vote of thanks

was proposed by the Vice Chairman of the IMEI Kolkata Branch, Shri. Abhijit Banerjee.

During the conference Indian Register of Shipping (IRS), Bangladesh office signed two contracts of 12nos & 3 nos. classing of new construction vessel, respectively. IMEI, Kolkata Branch signed agreement with Hoon Maritime Institute for promotion of certified training of onboard crew through IRS.

"Thanks are due to the Sailor Today, who not only did a commendable job for the live telecast of the conference in various digital platforms but also provided excellent entertainment during the breaks".

**- Capt Kaustuv Dutta**

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# SESSION SYNOPSIS

Essentially, Indian domestic shipping which has been a neglected sector from Raj days and continuing, is all work in progress ; more sound bites than real work on ground.

ESCAP pending strategies remain as they have been several years. Such as integration of transport modes, competitiveness of water transport, R&D, coastal infra to prevent another KASAB; standardisation, developing I V cadre for modern IWT not Majis of erstwhile city of joy country boats.

Longing to see sights as in Japan Far East, EU UK, Mississippi. So that Made in India becomes reality in terms of dredging rivers by jet suction dredgers in Ganga basin. Innovate to solar power LNG crafts.

Leveraging connectivity at least for NE areas by optimising use of NW2, increasing potential of Kerala back waters.

The need ofcourse is of government support initially to incentivise obtaining suitable vessels, especially to carry bulk, dirty, non-pricy cargo, ro ro, over size cargo, IMDG cargo and river tourism, all possible for creating demand.

Background is comprehensive revision of colonial maritime primary legislation and practices e.g customs, immigration, ports and regulatory bodies working without IMO role in this sector. The 16 operational waterways with little strength of IV fleet is too little to convert under 2% to 5% water transport in next five years. Challenge is real for the country to reduce carbon foot print, land congestion, social costs of road accidents and development of coastal communities. IWT is the key. PPP inj turn is the

way forward. Modal shift policy has to dove tail into logistics policy as in Germany.

Where even dentists invest in IWT. Frankfurt airport fuel is transported by oil barges and pipelines. Highways closed for heavy traffic over weekends forces logistics managers to use Rhine river transport system developed over 100 years by dredging, river training, embankment and policy of simple rules. So that reliable service is set up that is cost effective, indian vessels for indian use at Indian standards by way standardisation and bringing close to end user / proximity of land not sea going ideas! To attract investment need is of win win agreements, long term cargo support and revisit KPMG 2013 report. Leverage JNNURM, MNREGA kind of schemes for IWT together with portion of Maritime Development fund of Rs. 250000 cr at last being mentioned in Maritime vision 2030 draft document with 10% equity of Gol. Fiscal excesses of Customs, Marine police, immigration, high finance rates, taxes has no place in IWT. Reasons for 100% FDI failing will show that there is cause for concern here. Given that Arth Ganga now has water usage as drinking irrigation and navigation. Proposals have been invited for holistic development of Indian rivers.

Therefore, we come to take new draft I V act back to drawing board. Re visit designing IWT of India by India for India; States centric, non-IMO, pan India application, seamless integration on Indian EXIM, coastal IWT systems like infra status case. All we ask for is moolbhut suvida. Nothing else. That is by 2022-24 more Indian companies, more vessels, more business, more seafarers suitably trained.



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