Centre for Policy Research in Maritime Studies [C-PRiMeS]

C-PRiMeS Event Forums (Year 2024)

IMU-NIAS Maritime Talks [INMarTs] Series 2: Panel Discussion on 'Ocean Governance'

On 15 April 2024, the Indian Maritime University (IMU) Visakhapatnam Campus, in collaboration with the National Institute of Advanced Studies (NIAS), hosted a one-day seminar at Hotel Greenpark, Visakhapatnam. The event was guided by the Centre for Policy Research in Maritime Studies (C-PRiMeS) and brought together experts from various fields to discuss critical issues surrounding ocean governance, sustainable maritime practices, and their broader implications for global and regional maritime policy.

The seminar was inaugurated with a warm welcome by Prof. V.K. Kesavadev, Director of IMU Visakhapatnam Campus, who underscored the significance of understanding the evolving dynamics of ocean governance in the context of climate change, maritime security, and sustainable economic development. Dr. Rajoo Balaji, Pro Vice Chancellor of IMU, delivered the keynote address, setting the tone for the day's discussions on the future of ocean governance and its relevance to India's strategic interests in the Indian Ocean region.

The seminar featured a distinguished panel of experts who shared their insights into the multifaceted challenges and opportunities in ocean governance:

- Dr. Jai Acharya, Principal Consultant at International Maritime Management and Consultancy, Singapore
- Dr. Radha Raghuram Patruni, Associate Professor at GITAM School of Business, GITAM
- Prof. Suba Chandran, Professor & Dean of the School of Conflict & Security Studies at NIAS

Additionally, four research scholars and associates of Prof. Suba Chandran presented their views on various aspects of ocean governance, highlighting the need for collaborative efforts to address the evolving challenges of maritime security, climate change, and resource management.

C-PRiMeS, the policy research wing of Indian Maritime University has been hosting a number of expert discussion forums on various maritime topics of interests.

This report is a compilation of the events.

Compilation prepared by C-PRiMeS team.

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Key Takeaways and Discussions

The seminar provided a platform for deep discussions on several key themes, with particular emphasis on the need for collaboration between IMU and NIAS to strengthen India's position in global ocean governance.

- **Collaborative Research Initiatives:**

The seminar highlighted the importance of joint studies between IMU and NIAS on the impacts of science, technology, and climate change on the Indian Ocean and beyond. The potential to establish a focused task force to explore the nature of ocean governance was a major takeaway, with an emphasis on providing India with the tools to set strategic goals in ocean policy and governance.

- **Ocean Governance and Environmental Sustainability:**

As global attention shifts towards oceanic geopolitics, the seminar explored the opportunities for research on topics such as green shipping, coastal communities, and the broader blue economy. This multi-disciplinary approach seeks to integrate environmental protection with economic growth, ensuring that the ocean remains a vital resource for future generations.

- **The Importance of Joint Studies:**

As global focus increasingly shifts from land-based geopolitics to ocean-centric dynamics, joint studies between IMU and NIAS, particularly in areas such as the interactions between the ocean and atmosphere, the impact on coastal communities, green shipping in the context of the blue economy, can provide invaluable insights, offering a deeper understanding of these emerging challenges and opportunities.

- **Submission of Reports to the Ministry:**

Reports on the findings of these joint studies should be submitted to the Ministry of Ports, Shipping, and Waterways. The report will serve as a basis for proposing a collaborative strategy to advance India's initiatives on the blue economy, with particular emphasis on green shipping. This submission will help to foster an integrated approach that aligns with India's maritime ambitions, promoting sustainable development in the sector.

This Panel Discussion provided valuable insights into the evolving challenges and opportunities in maritime governance. The discussions highlighted the necessity of collaboration between institutions like IMU and NIAS to enhance India's strategic positioning in global ocean governance. Key takeaways from the seminar emphasized the importance of collaborative research initiatives, particularly focused on the impacts of science, technology, and climate change in the Indian Ocean. Furthermore, the integration of environmental sustainability with economic growth through initiatives such as green shipping and the blue economy was identified as critical for the future of

ocean governance. As the seminar emphasized the need for comprehensive studies and reports to be submitted to relevant authorities, it underscored the role of India in shaping global maritime policies, with a focus on sustainable practices. Ultimately, the event reinforced the call for a unified, multi-disciplinary approach to safeguarding the oceans, ensuring they remain vital resources for future generations.

Executive Certificate Programme (ECP) on 'Sea Port Security Management & Emerging Technologies'

The Executive Certificate Programme (ECP) on 'Seaport Security Management & Emerging Technologies' was held from April 24 to April 26, 2024, at the Dakshina Chitra Heritage Museum in Chennai. Organized in collaboration with the Center for Human Security Studies (CHSS), this 3-day program aimed to empower participants in the critical field of seaport security, specifically in the context of emerging technologies such as Artificial Intelligence (AI), Blockchain, Internet of Things (IoT), and 5G. Given that India's seaports are vital to the nation's security and global trade, this course emphasized the integration of these technologies to enhance both physical and digital security measures at ports.

The program attracted 23 participants, including 12 port officials (10 representatives from major ports and 2 from Adani Port) and 11 research-focused students from CHSS. The course content was structured to address the latest advancements in seaport security, covering theoretical insights, practical applications, and case studies. Through expert-led sessions and panel discussions, the program aimed to equip participants with the necessary knowledge to manage evolving security challenges in seaport operations.

The primary goal of the program was to empower participants with a deep understanding of the significance of seaport security, particularly in India, which is home to 12 major ports and over 180 minor ports. As critical nodes in the global supply chain, securing these seaports is crucial for the nation's economic and national security.

The key objectives of the program included:

- Understanding the roles and responsibilities of various stakeholders in ensuring seaport security across India's 7,516 km coastline
- Leveraging cutting-edge technologies for effective surveillance, threat detection, and response at seaports
- Building synergies among different departments to ensure adherence to national and international laws, conventions, and government policies

- Addressing both physical and digital security challenges faced by major and minor ports
- Understanding emerging cyber threats and their implications for port operations and national security
- Promoting the use of AI, Blockchain, IoT, Big Data, and other technologies to modernize port security systems and improve operational efficiency

Key Discussions and Expert Contributions

Several key discussions and expert contributions enriched the program, offering a wealth of knowledge and perspectives on seaport security management:

- **Significance of Seaport Security:**

Dr. Rajoo Balaji, Pro-Vice Chancellor of Indian Maritime University, highlighted the importance of seaport security in India's economic and national security framework, emphasizing the strategic role ports play in facilitating trade and safeguarding national interests.

- **Technological Advancements in Seaport Security:**

Leading experts discussed the integration of advanced technologies like AI, Blockchain, IoT, and 5G into port security systems. Mr. Jonu Rana and Mr. Nihit Saksena showcased real-world applications of AI, machine learning, and blockchain in seaport operations. They emphasized how AI can help with vessel traffic management, and blockchain technology can secure data integrity and streamline port transactions.

- **Cyber security and Legal Aspects:**

Experts like Mr. Anil Anisetti discussed the growing threat of cyber-attacks on seaports. Dr. Kathiyani Juneja elaborated on international conventions such as the ISPS Code, providing an understanding of global regulations and laws governing port security. A critical discussion on the legal frameworks needed for effective port security management took place, led by Dr. Balkista Reddy, focusing on the Indian Port Trust Act, 1963, and Major Port Trust Authorities Act, 2021.

- **Customs Role in Security:**

The role of customs in controlling smuggling, drug, and arms trafficking was thoroughly examined by Dr. Shreekumar Menon, IRS, and Dr. Arjun Banerjee, IRS, who discussed the importance of coordination between seaport authorities and customs for securing international trade.

- **National Security Perspective:**

Smt. Anjana Sinha, IPS, addressed the implications of seaport security on national security. She highlighted the importance of an integrated security approach that ties together maritime, coastal, and national security.

- **Port Security and International Cooperation:**

A new point added by Dr. Suraj Kumar, a senior maritime security expert, emphasized the growing need for international cooperation in seaport security. He stressed how coordinated efforts between global port authorities, international agencies like INTERPOL, and national security bodies are crucial for combating international threats, such as piracy and terrorism, which may target ports.

- **Impact of Climate Change on Seaport Security:**

Dr. Anjali Mathur, an environmental security expert, introduced a discussion on how climate change is increasingly affecting seaport security. She highlighted the risks posed by rising sea levels and extreme weather events, calling for more resilient infrastructure and advanced monitoring technologies to protect ports from these emerging environmental threats.

- **Emerging Technology and Seaport Security:**

Mr. Koen Cornilly from Port of Antwerp & Bruges, Belgium, delivered a comprehensive speech on the role of emerging technologies in enhancing seaport security. He discussed how innovative solutions like predictive analytics, drones, and blockchain can help streamline port operations and mitigate security risks. He also highlighted the importance of global collaboration in adopting technological solutions for future proofing port security.

- **Cyber security, AI, and Machine Learning Threats at Seaports:**

Dr. Rajesh Pasupuleti, Assistant Scientist at the University of Miami, USA, presented an insightful lecture on cyber security and the evolving threats posed by
Artificial Intelligence (AI) and Machine Learning (ML) at seaports. He discussed how AI and ML can be used to predict and counteract cyber threats but also highlighted the risks of malicious AI algorithms targeting port infrastructure. Dr. Pasupuleti stressed the need for continuous monitoring and the development of robust cyber security frameworks to safeguard port operations in the digital age.

The feedback from the participants reflected the program's effectiveness in addressing the most relevant security challenges faced by seaports today.

- Several participants indicated their intent to apply technologies like AI and Blockchain at their respective ports, especially in strengthening cyber security frameworks
- Participants noted that understanding the impact of cyber threats on port infrastructure, coupled with practical solutions for mitigating these risks, was a critical takeaway
- Participants recommended incorporating more real-world case studies to demonstrate the practical application of security technologies and the challenges faced by ports globally

- It was suggested that future programs should invite a broader range of stakeholders, including coast guards, state police, and intelligence agencies, to provide a comprehensive view of the security challenges at seaports

By focusing on both the physical and digital security aspects of seaport operations, the program provided participants with the knowledge and skills necessary to tackle current and future security challenges. The discussions and expert contributions provided valuable insights into current and future challenges, and the feedback from participants will serve as a foundation for continuously improving future training programs. By empowering participants with the knowledge and tools needed to integrate emerging technologies into seaport security, the program has contributed significantly to enhancing India's preparedness in safeguarding its critical maritime infrastructure

Research & Development Conclave

With the vision to enhance India's maritime capabilities and to ensure sustainable growth in line with the Maritime India Vision 2030 (MIV 2030) and Maritime Amrit Kaal Vision 2047 (MAKV 2047), the Indian Maritime University (IMU) has established initiatives to create Maritime Knowledge Clusters (MKC). These clusters are intended to address real-life challenges faced by maritime stakeholders, integrating academia, industry, and other maritime entities to solve complex problems.

C-PRiMeS has proactively reached out to leading institutions, port authorities, and maritime organisations to participate in these clusters. In alignment with this goal, the R&D Conclave was convened on October 1, 2024, at the IIT-M Alumni Centre in Chennai.

The conclave served as a dynamic platform for interaction among industry leaders, maritime professionals, port authorities, policymakers, and academia, fostering collaboration and synergy across various sectors.

The primary objective of the conclave was to bring together diverse stakeholders to share critical challenges, technical issues, and potential solutions. By creating a cohesive network, IMU aims to position itself as a conduit and custodian for academic-industry synergies. The event facilitated an open discussion on maritime innovations, technological advancements, and the future of seaport operations.

The conclave was attended by a diverse group of 32 participants from various domains within the maritime sector. Among the attendees, representatives from notable ports like V. O. Chidambaranar Port, Visakhapatnam Port, and Deendayal Port,

Institutions such as IIT-Madras, IMU, Tolani, and other organisations including NIOT, NCPOR, IWAI, CSL and IoV contributed to the discussions. This broad participation ensured that the conclave offered a rich and varied perspective on the challenges and opportunities faced by the maritime sector.

The Steering Committee played a pivotal role in guiding the conclave towards its objectives. The committee was comprised of Dr. Lekha Ravi, Dr. Deepak Mishra, and Dr. Avinash Godey, all of whom serve as Assistant Professors at IMU. Their leadership ensured the event was structured effectively and fostered productive discussions among stakeholders. The committee's strategic direction helped identify key research areas that could address the pressing challenges of the maritime industry.

The R&D Conclave was structured around four key sessions, each focusing on vital aspects of maritime operations and innovation. These sessions aimed to engage participants in discussions that would lead to actionable research projects and solutions to address the challenges faced by the industry.

Session I: Digitalisation and Automation in Ports

Moderated by Mr. Soumitra Neogi (POP), this session addressed the key barriers to adopting digital platforms for port management, the integration of automation in cargo handling, and challenges related to the implementation of IoT for real-time tracking and fleet management. Among the critical topics discussed were the use of drones for SBM (Single Buoy Mooring) and surrounding waters, as well as exploring acoustics for safety intrusion detection. The session also explored the EDI (Electronic Data Interchange) system as a potential solution to transaction cost issues and examined the automation of cargo handling at ports, focusing on opportunities for improvement. Specific remarks highlighted the involvement of Deendayal Port, the NLP Portal, and port performance improvement at VOCPA.

Session II: Challenges in Shipbuilding

Moderated by Mr. Soumitra Neogi (POP) and Mr. Avinash Godey, this session focused on challenges in shipbuilding, with particular attention given to the adoption of advanced materials like composites and lightweight metals. The integration of automation and robotics in shipyards, alongside ensuring regulatory compliance and safety standards in new ship designs, were key areas of focus. The session also delved into challenges related to modular ship construction methods. Topics discussed included the development of sensors and alarms to measure toxic gases in enclosed spaces (such as tanks), standardisation of vessels for inland waterways, and addressing supply-chain issues in shipyards. Additional studies on propulsion efficiencies in support crafts like tugs and offshore vessels were explored, with significant contributions from CSL, IWAI, NCPOR, and IOV.

Session III: Environmental Sustainability in Maritime Operations

Moderated by Capt. S. Kishore (POP) and Dr. Deepak Mishra, this session highlighted the importance of environmental sustainability in maritime operations. Key areas of focus included efforts to reduce carbon emissions, the adoption of alternative fuels such as LNG, hydrogen, and the electrification of ports. Other important topics were the challenges of waste management, ballast water treatment, and the need for better compliance with environmental regulations. Notable discussions included the study of OTEC (Offshore Thermal Energy Conversion) systems, the development of shipboard schematics and training frameworks for alternative fuels, and the implementation of zero-discharge technologies for inland waterways. The session also addressed shore power facilities for Indian ports and explored battery swapping technologies for solar power storage, with remarks from NIOT, TMI, IWAI, and VOCPA.

Session IV: Maritime Logistics and Supply Chain Optimization

Moderated by Capt. S. Kishore (POP) and Dr. Lekha Ravi, this final session of the conclave addressed critical issues in maritime logistics and supply chain optimisation. The session focused on the challenges of multimodal logistics coordination, particularly between maritime and land transport, as well as addressing bottlenecks caused by port congestion and outdated infrastructure. The implementation of real-time cargo tracking systems was discussed, with a focus on improving efficiency within the supply chain. Key topics included the development of valuation models for ships' assets, vessel designs tailored for shallow inland waterways, and the creation of a cargo security manual alongside an ISPS manual for improved safety protocols.

The conclave provided a valuable platform for consolidating the key discussion points, resulting in the finalisation of 27 research topics that directly address the challenges discussed:

- How to improve operations- from Manual to automation in Cargo handling at VoCPA
- A study on Inland waterways: Developing technologies for complying with zero discharge Act
- Evaluation of the NLP Portal: Applications, Limitations, and Recommendations
- Transaction Cost Challenges in the EDI Systems of DPA and VOCPA: A Strategic Analysis
- Design of Spars and Semi-Submersibles for OTEC Systems
- Large Ocean Energy Devices and Offshore Structures for OTEC
- Shipboard Schematics and Training Framework for Alternate Fuels
- Coastal Infrastructure Development for CNG
- Zero Discharge Technologies for Inland Waterways
- Shore Power Facilities in Indian Ports: Capabilities and Needs

- Condition Monitoring of Engines and Alternators on Marine Vessels
- Battery Swapping Technologies for Solar Power Storage
- Policy Framework for Sustainable Disposal of Dredged Material
- Automated Dredging Systems for Reservoirs
- VTS Applications in Tuticorin Port (VOC Port)
- Automation & Robotics in dry dock practices: painting and hull maintenance
- Study on the variability in the east India coastal current and associated trends in the sediment transport mechanism at selected locations of east coast of India
- Prediction of rip current formation along Visakhapatnam coast using RS and video capturing data
- An evaluation of the performance of Deendayal Port Authority and Enhancement Strategies
- The development of economic and environmental KPIs for enhancing port performance at VoCPA.
- A Study on the Supply-chain issues faced by shipyards
- Development of Sensors and alarms to measure presence of toxic gases in enclosed spaces (tanks etc.)
- Study on standardization of the vessels for inland waterways
- Study on Propulsion efficiencies of typical support crafts (tugs, offshore vessels etc.)
- Study on optimal use and disposal of waste from copper slag
- Hydrodynamics: Study of cavitation in propellers and pumping systems
- Exploring Pusher Barge Train Solution with Green Tug Designs for Bulk Cargo Transport in Shallow Waterways

The R&D Conclave served as a significant milestone in fostering collaboration between academia and the maritime industry. With the consolidation of the key challenges faced by maritime stakeholders, the conclave has paved the way for the initiation of targeted research and development initiatives.

The research topics finalised will be taken forward by various experts, ensuring that solutions to critical challenges such as automation, environmental sustainability, and supply chain optimisation are developed. Further engagement between industry and academic experts is essential to bridging the gap and implementing these solutions effectively.

IMU's role as the custodian and conduit for the MKC model will be pivotal in driving the integration of cutting-edge research into actionable solutions for the maritime sector.

Workshop on 'Investigating Maritime Accidents: Techniques & Best Practices'

Under the Maritime India Vision 2030 (MIV 2030) and the Maritime Amrit Kaal Vision 2047 (MAKV 2047), the maritime sector is undergoing significant efforts to improve its global competitiveness and effectiveness. A key component of this transformation is enhancing the safety and operational standards within the sector. To achieve these objectives, there is a critical need for skilled professionals who can examine the root causes of maritime accidents and incidents.

In line with this goal, the Indian Maritime University (IMU) organized a two-day workshop titled 'Investigating Maritime Accidents: Techniques & Best Practices' on October 3 and 4, 2024, at the IIT-M Alumni Centre in Chennai. This initiative was aimed at up skilling maritime professionals in conducting thorough and fair investigations into maritime incidents, thus contributing to the sector's safety, sustainability, and operational efficiency.

The primary objective of the workshop was to provide participants with the necessary skills and methodologies to conduct maritime accident investigations. This included:

- Understanding the principles of conducting thorough and fair maritime investigations
- Learning the steps involved in the investigation process specific to maritime incidents
- Developing skills in interviewing, evidence collection, and report writing for maritime contexts
- Understanding the legal and regulatory frameworks governing maritime investigations

Given the rapidly advancing technologies and regulatory changes, it is imperative for maritime professionals to stay updated and refine their investigative practices to address evolving industry challenges.

The workshop featured prominent speakers and subject matter experts in maritime investigations:

Capt. I G Sangameswar, a distinguished maritime professional with decades of experience in marine operations and regulatory roles, led the main sessions on investigation techniques. His vast experience in seafarer training, certification, and maritime safety was crucial in imparting knowledge to the participants.

Mr. Aruna Kumar Boddepalli, Marine & Offshore Operations Manager for East Coast India, Bangladesh, and Sri Lanka at Lloyd's Register, addressed the statutory aspects of maritime investigations. His extensive expertise in marine operations, technical management, and offshore surveying provided valuable insights into the regulatory side of maritime accident investigations.

The workshop was guided by a distinguished steering committee of experts from IMU, consisting of Capt. Manohar, Associate Professor at the IMU Chennai campus, Capt. Sunil Kumar Panda, Associate Professor at the IMU Mumbai Port Campus, and

Capt. A.K. Majumder, Associate Professor at the IMU Navi Mumbai Campus. Their leadership and expertise played a crucial role in ensuring the smooth execution of the event, offering valuable insights and direction to all participants throughout the workshop.

The workshop attracted a total of 16 participants from a wide array of maritime institutions, including the Indian Maritime University, JAMS Marine College, the Gujarat Maritime Board, the Directorate General of Shipping, the Indian Register of Shipping, the Cochin Port Authority, Fleet Management Limited, and the Mercantile Marine Department. This diverse participation enriched the workshop discussions, fostering valuable exchanges of perspectives from different sectors within the maritime industry.

Key Features of the Workshop

The workshop covered a wide range of topics essential for conducting effective maritime accident investigations. These topics included planning and conducting investigations, legal and regulatory considerations, evidence collection, and report writing. The focus was not only on theory but also on practical skills through hands-on exercises and case studies.

Session 1: Introduction to Maritime Investigations: The first session provided an overview of maritime investigations, including the types of incidents, the principles of objectivity, thoroughness, and confidentiality, and the requirements outlined by the IMO's Casualty Investigations Code. Participants learned about different types of investigations, including statutory and 'no-blame' investigations.

Session 2: Planning a Maritime Investigation: The second session addressed the importance of pre-investigation planning, scope, and stakeholder identification. Participants were introduced to key international conventions such as SOLAS, MARPOL, and the ISM Code, as well as ethical considerations during the investigation process.

Session 3: Conducting the Maritime Investigation: This session focused on techniques for gathering evidence, such as the use of voyage data recorders, logbooks, and navigational charts. Participants also gained practical experience in interviewing techniques, including how to handle difficult interviewees and sensitive topics.

Session 4: Analysing Findings and Reporting: The session emphasized the importance of analysing maritime evidence, identifying inconsistencies, and using analytical tools. Additionally, participants were trained in writing clear, concise, and unbiased investigation reports, and communicating findings effectively.

Session 5: Incident Investigation Statutory Aspects: This session, presented by Mr. Aruna Kumar Boddepalli, focused on the statutory aspects of maritime investigations. Mr. Boddepalli, with his extensive experience

in marine operations and offshore surveying, covered relevant maritime laws and international conventions, including SOLAS, MARPOL, and the ISM Code. He also discussed the regulatory requirements for maritime investigations and compliance with international safety standards, emphasizing the importance of understanding legal frameworks during investigations.

Session 6: Case Study and Practical Exercise: In the final session, participants analysed a real-world case study relevant to maritime incidents. They also participated in a practical exercise to plan and conduct a mock maritime investigation, further reinforcing the lessons learned throughout the workshop.

The workshop received positive feedback from the participants, who appreciated the depth of content and practical exercises. Some key takeaways and suggestions from the participants include:

- The most significant takeaway for several participants was the focus on statutory aspects of maritime investigations, including international regulations and legal frameworks
- Participants suggested incorporating the use of AI technologies in the process of report creation to enhance efficiency and accuracy
- The attendees expressed interest in more detailed case studies to better understand the intricacies of real-life investigations
- Some participants mentioned that the advertisement of the workshop could have been more extensive, reaching a wider audience

The two-day workshop proved to be a valuable and informative event, enhancing the participants' skills and knowledge of maritime accident investigations. By focusing on practical methodologies and legal frameworks, the workshop contributed significantly to the capacity building initiatives. The insights gained through expert-led sessions, case studies, and hands-on exercises will undoubtedly help participants conduct objective, thorough, and fair investigations, ultimately improving maritime safety and operational standards.

Panel Discussion on Protection & Indemnity Insurance

The concept of an Indian Protection and Indemnity (P&I) Club has been a subject of discussion among maritime experts, industry stakeholders, and ship-owners for several years. The need for an indigenous P&I insurance platform has gained attention due to the growing challenges faced by Indian shipping, both domestically and internationally. The discussion explored various facets of the potential creation of a national P&I Club, considering the challenges, current market conditions, and a proposed way forward for India to establish its own P&I insurance platform.

The core goals of the panel discussion were:

- To explore the possibility of an India-based P&I Club by leveraging existing models from other countries
- To propose a workable model that would serve both the Indian and global maritime sectors
- To recommend a feasibility study to examine the scope and terms of reference for establishing such a club
- The panel deliberated on several key factors, including:
- Challenges and opportunities in the shipping and insurance markets
- The impact of international regulations on P&I
- Local capacity building and global partnerships in India's P&I sector
- Adapting P&I insurance to new shipping technologies and environmental regulations

Key Inputs from Subject Matter Experts

Capt. Pankaj Kapoor (Maritime Lawyer)

Capt. Kapoor began by challenging the notion that India requires external assistance to create its own P&I club. He asserted that, if India can successfully build aircraft carriers, land on the moon, and develop satellites, there is no reason why it cannot establish its own P&I club. According to him, the self-perceived challenges such as insufficient tonnage, expertise, and funds are not insurmountable. He proposed that India could create a broader "Indian Ocean Region Club," which would include member states from India, surrounding countries, and the African continent. He also highlighted the availability of funds through contributions from oil Public Sector Undertakings (PSUs) and private companies, such as ONGC and fertilizer importers, that would be sufficient to start the venture. He recommended starting with a fixed premium model for 7 to 10 years before transitioning to a mutual club.

Sanjiv Singh (Director, PIB Ltd.)

Singh emphasised the need for self-reliance, citing the current outflow of forex for P&I premiums (approximately USD 14 million) and proposing the establishment of an Indian P&I club to reduce this expenditure. He suggested that the club should initially offer P&I coverage for coastal vessels and gradually expand to include larger vessels. He also recommended that the Indian government provide financial support and collaborate with international P&I clubs for global acceptance.

Capt. Manish Kumar (Nautical Surveyor, Directorate General of Shipping)

Capt. Kumar highlighted the strategic importance of reducing dependency on foreign P&I clubs, especially in light of geopolitical issues. He suggested that a feasibility study be conducted, focusing on expanding Indian tonnage and ensuring that Indian P&I entities could meet international standards, particularly with regard to reinsurance and global acceptability.

Rakesh Singh (Master Mariner, Hon. Secretary, ICCSA)

Rakesh Singh reviewed the existing system of liability underwriting in India and suggested that the country take advantage of the provisions of the 1992 LLMC convention, which covers civil liability for oil pollution damage. He stressed the importance of creating a comprehensive risk coverage package to boost confidence among Indian ship-owners and encouraged India to adopt global best practices in the maritime insurance sector.

Kapildev Bahl (Master Mariner)

Bahl proposed a phased approach to setting up a P&I club in India, starting with a fixed premium model for coastal vessels and gradually expanding to larger vessels over time. He emphasised that the venture should involve all relevant stakeholders, including insurance entities, to create a sustainable infrastructure that could support the country's growing maritime sector. He also recommended that a detailed feasibility study be undertaken, focusing on market potential and financial sustainability.

Dr. Brijendra K. Saxena (Ex-Principal, TMI)

Dr. Saxena focused on the challenges related to the acceptance of the Indian P&I club both within India and globally. He discussed the need to align with international conventions such as the Civil Liability for Oil Pollution Damage (1992) and the Athens Convention. He also pointed out the importance of ensuring that the covers provided by the Indian P&I club met international standards for acceptance in global markets.

Capt. Kapil Kekre (INSA)

Capt. Kekre raised concerns regarding the financial viability of an Indian P&I club given the current size of the Indian fleet, which represents only 0.47% of the global tonnage. He discussed the high financial and operational challenges of establishing an Indian P&I club capable of offering competitive limits of liability and suggested that initially, the focus should be on expanding the fleet and offering services to smaller vessels, such as those operating in harbours and inland waters. He advocated for a long-term approach, similar to the models followed by Japan and South Korea.

Naveen Kumar (Deputy General Manager, SCI)

Kumar echoed the sentiment that the current tonnage is insufficient to sustain a full-fledged P&I club. He proposed starting with a fixed premium model for small coastal vessels, which would allow the industry to develop the necessary expertise and financial capacity over time. He also suggested that the Indian government could play a crucial role in supporting the initial phase of this initiative.

Anthony W. J. Fernandez (Consulting Adjuster of Averages)

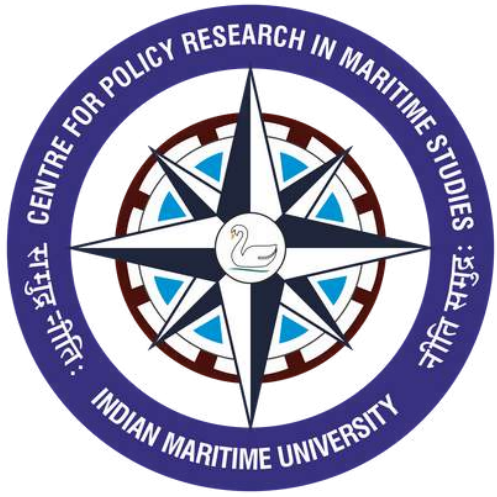
Fernandez emphasised the importance of "Make in India" in maritime liability insurance, arguing that India should develop its expertise in underwriting, claims management, and other services related to P&I insurance. He suggested empowering a shift towards mutuality, which would involve collaboration with international bodies and the formation of Indian maritime arbitration and average adjuster associations. He highlighted several challenges, including the need for standardisation in report formats and overcoming statutory challenges such as those related to the Marine Insurance Act 1963 and IRDAI regulations.

Recommendations and Way Forward

Based on the inputs from various experts, the following recommendations and steps for the future are proposed:

- A thorough feasibility study should be conducted to assess the viability of establishing an Indian P&I Club
- A fixed premium P&I insurance model could be introduced to cover smaller vessels, such as coastal vessels, barges, and inland vessels
- Collaboration with IG P&I Clubs is essential for ensuring the global recognition and commercial viability of Indian P&I insurance
- Financial support from the Government of India is necessary to support the initial stages of the club's establishment
- The Indian P&I Club should initially focus on providing insurance cover for smaller vessels, including barges, coastal vessels, and inland vessels operating in Indian waters

The discussions point towards a need for an Indian P&I platform that can support the growing maritime industry, especially in the context of global sanctions and vulnerabilities associated with international P&I Clubs. However, due to the small size of the Indian fleet and financial limitations, a phased approach is recommended.



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