

### **7<sup>th</sup> Technical Committee Meeting Summary**

The 7<sup>th</sup> Technical Committee Meeting commenced at 3:00 PM, chaired by Ms. Cristina. The meeting brought together industry stakeholders to discuss regulatory updates, technical insights, and collaborative initiatives, particularly focusing on decarbonization, fuel standards, and compliance challenges. Key presentations were delivered by experts from DNV, Veritas Petroleum Services, and NTU's Maritime Energy and Sustainable Development (MESD) Centre.

The session opened with a timely presentation by Mr. Girish Sreeraman from DNV, who shared insights on pooling mechanisms as part of compliance strategies under the FuelEU Maritime regulation. Now applicable to vessels above 5,000 DWT, FuelEU Maritime targets a 2% reduction in GHG intensity and mandates annual reporting on emissions, including CO<sub>2</sub>, methane, and nitrous oxide. Pooling – where efficient vessels offset the emissions of less efficient ones – was highlighted as a particularly cost-effective compliance option.

Members were encouraged to review charter party clauses and initiate pooling discussions well ahead of the April 2026 decision deadline. The presentation also explored other compliance paths, such as the use of synthetic and alternative fuels, shore power readiness, and surplus credit banking. During the Q&A, it was noted that biofuels like B30 can achieve up to 92% GHG savings, though proper documentation remains essential for credit eligibility. Mr. Girish concluded by underscoring the importance of clear contractual responsibilities, especially as compliance obligations fall on ship managers rather than owners.

Captain Rahul Choudhuri of Veritas Petroleum Services next provided an update on Singapore's marine fuel standards, with a focus on upcoming changes to SS648 and the introduction of SS709. The revised SS648, which takes effect from 1 April 2025, introduces key enhancements such as new acceptance protocols, digitalisation requirements, and a minimum measured quantity to ensure greater measurement accuracy. Complementing this, SS709 sets out a standard for secure and tamper-proof electronic Bunker Delivery Notes (e-BDNs), which will modernise data handling in bunkering operations.

The discussion also extended to the alignment of Singapore's standards with international ISO frameworks, reflecting Singapore's global leadership in mass flow meter (MFM) bunkering. Looking ahead, plans are in place to revise TR80, develop a consolidated bunker sampling standard, and expand biofuel specifications to cover blends up to B100. On alternative fuels, the development of new standards for methanol and ammonia is progressing, with SSA support deemed crucial in pushing for broader industry adoption. The importance of robust standards in fraud prevention and regulatory compliance was a recurring theme throughout the session.

The meeting then continued with Dr. Imran Halimi's, from NTU's Maritime Energy and Sustainable Development (MESD) Centre of Excellence, presentation on key research findings on B100 biodiesel, methanol, and ammonia. As a translational research centre funded by the MPA, MESD focuses on piloting and validating low-carbon technologies in real-world vessel conditions. B100 biodiesel was tested through both land-based and onboard trials, revealing manageable operational impacts such as higher fuel consumption, power loss, and

increased maintenance, including more frequent filter replacements. Despite these challenges, B100 showed comparable CO<sub>2</sub> performance to fossil diesel.

Dr. Imran also introduced a novel fingerprinting approach to verify methanol's biogenic content, supporting clearer differentiation between fossil and bio-based origins. For ammonia, MESD conducted rare open-air and water release trials in the U.S. to study dispersion and validate hazard models – marking an important step in closing knowledge gaps for ammonia bunkering safety. The session underscored the value of localised, vessel-based research in guiding the industry's decarbonisation roadmap.

The Committee then reviewed a recent symposium on North Korea's illicit maritime activities, attended by the SSA Secretariat in December 2024. Speakers from the U.S., Korea, and Japan shared intelligence on ongoing sanctions evasion, including oil smuggling and arms transfers via ship-to-ship operations - often with AIS turned off and false flags displayed. Notable case studies such as the seizure of MT Courageous were shared, highlighting the risks to global shipping.

To counter these threats, the symposium promoted cross-border enforcement efforts, improved AIS tracking, satellite-based surveillance, and rigorous Know Your Customer (KYC) practices. Challenges persist, including jurisdictional limits and increasingly sophisticated evasion tactics. Maritime stakeholders were urged to remain vigilant and support stricter compliance protocols to mitigate legal, reputational, and operational risks. The session reinforced the critical role the shipping industry plays in upholding international sanctions and maritime security.

Wrapping up the agenda, members were briefed on SSA's support for the International Windship Association (IWSA)'s Wind Propulsion Conference, to be held in Singapore on 25–26 March 2025. SSA will co-host the opening session and called for members to nominate female moderators to promote gender diversity in the event. The conference, jointly organised with the Global Centre for Maritime Decarbonisation (GCMD), aims to advance discussions on wind propulsion adoption across the maritime sector.

The Committee also revisited proposed amendments to the Maritime Labour Convention (MLC), particularly concerning the prevention of harassment and violence, including sexual harassment. Members acknowledged a growing culture of accountability, driven by stronger reporting mechanisms and preventive training. Still, operational challenges remain, particularly in handling serious complaints at sea or within foreign jurisdictions. The discussion highlighted the need for clear SOPs, flag state guidance, and company-level frameworks that balance confidentiality with swift, effective intervention.

Singapore, 18<sup>th</sup> February 2025

---

### **Singapore Shipping Association**

The Association was first formed as Singapore National Shipping Association (SNSA) on 29 January 1985 to represent its Members, who are basically shipowners and operators, shipmanagers, ship agents and shipbrokers. The Association will take the view of the shipping industry as a whole. It will play its due role to promote the interests of shipping in Singapore, ASEAN, Asia and the world. The Association will cooperate with governmental and non-governmental organisations to promote freedom of the sea, safety at sea and to protect the marine environment.