

11th Co-operation Forum
*Co-operative Mechanism on Safety of Navigation and Environmental Protection in
the Straits of Malacca and Singapore*

24 – 25 September 2018
Grand Hyatt Hotel, Singapore

Report of the Meeting

1 Opening Session

1.1 The 11th Co-operation Forum ('the Forum') was officially opened by Mr Khaw Boon Wan, Co-ordinating Minister for Infrastructure and Minister for Transport, Singapore. Minister Khaw Boon Wan highlighted that it was important to keep the Straits of Malacca and Singapore (SOMS) open, clean and safe, for global maritime trade. He said that the Co-operative Mechanism played an important role in this aspect and highlighted the successful collaborative projects and initiatives undertaken, over the years, to improve navigational safety and environmental protection in the SOMS. He emphasised the need to anticipate future challenges for the SOMS, and encouraged the littoral States and other stakeholders of the SOMS to harness technology to enhance safety of navigation and eliminate navigational accidents.

1.2 Mr Koji Sekimizu, Secretary-General Emeritus, International Maritime Organisation (IMO) shared his views on the progress of the Co-operative Mechanism since its establishment in 2007 and the inaugural meeting in 2008, his personal anecdotes and aspirations on the future directions for the collaboration on enhancing navigational safety and marine environmental protection in the SOMS.

2 Plenary Session

2.1 The Forum was chaired by Mr Andrew Tan, Chief Executive, Maritime and Port Authority of Singapore (MPA), and attended by about 180 people from over 80 countries and organisations. Also present were Mr Agus Purnomo, Director General, Directorate General of Sea Transportation (DGST), Republic of Indonesia, and Dato' Hj Baharin Bin Dato' Abdul Hamid, Director General, Marine Department, Malaysia. Their remarks can be found at **Annex I**.

3 Adoption of the Agenda

3.1 The provisional agenda of the Forum was adopted. The agenda can be found at **Annex II**. The list of participants to the Forum can be found at **Annex III**.

4 Navigational Safety in the SOMS

Agenda Item 4.1 Navigational Safety – E-Navigation

4.1 The following presentations were made:

CF 4/1/1 The Requirements for Future Shipping – IALA's Work on e-Navigation
(by Mr Francis Zachariae, Secretary-General, IALA)

CF 4/1/2 Challenges and Opportunities in e-Navigation Development (by Mr John Erik Hagen, Regional Director, Norwegian Coastal Administration, Norway)

4.2 The Chair acknowledged the contributions of IALA and Norway and stressed the importance of international collaboration for e-navigation development, especially in a busy waterway like the SOMS. The Chair asked for Norway's and IALA's views on promoting e-navigation.

4.3 Norway said that e-navigation was an international, IMO concept and welcomed cooperation on the Norwegian projects that were introduced during the presentation. Norway said that training was important and highlighted that developing user-friendly systems was an important aspect to pay attention to.

4.4 IALA reiterated that e-navigation is not a project but a journey without a defined end state. E-navigation is about automating decision support to reduce human errors and the intention is to come up with a solution that benefits the maritime community.

4.5 EMSA suggested standardisation of equipment and management systems for maritime use as a way forward for the maritime industry, citing the aviation industry as an example in which equipment and manufacturing processes were mostly standardised. This was agreed by IALA although IALA felt that the aviation industry was particularly successful at automation and gave the example of a pilot who monitored instruments on board a plane as compared to a navigator who was guided by alarms and echosounders to sail his ship. EMSA said that the current International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, which sets the minimum qualification standards for masters, officers and watch personnel on seagoing merchant ships and large yachts, will not be sufficient to keep up with the rapid pace of change, and demand for training and capability building for seafarers will increase.

Agenda Item 4.2 Navigational Safety – Applications of Technology in Navigational Safety

4.6 The following presentations were made:

CF 4/2/1 Next Generation Vessel Traffic Management Services (by Mr Tang Wey Lin, Deputy Director (Port Systems), MPA)

CF 4/2/2 Modernisation and Maintenance of Aids to Navigation (by Mr Hairizam, Marine Officer, Marine Department, Malaysia)

CF 4/2/3 Contributions from The Nippon Foundation in the Past and Potential Collaborations in the Future for the Safety of Malacca and Singapore Straits (by Mr Mitsuyuki Unno, Executive Director, The Nippon Foundation)

CF4/2/4 EMSA's Role to Enhance Maritime Safety, Maritime Security and Environmental Protection (by Mr Markku Mylly, Executive Director, European Maritime Safety Agency)

4.7 The Chair noted the above topics and thanked the speakers for their insightful and detailed presentations.

4.8 The Chair asked EMSA how it encouraged its member states to share information. EMSA said that its member states had to comply with EU Directives on maritime safety, security and environmental protection. The Directives make it obligatory for member states to share information. EMSA also conducts training with member states, where member states can pick up best practices and understand the need for good information exchange.

4.9 Nigeria shared that its current focus was on maritime security. In this context, its concerns were oil theft and sabotage attempts on its oil pipelines. Other problems were unemployment and militancy. Nigeria said that the lack of funds prevented African countries from procuring satellite systems and other sophisticated systems that could be deployed for maritime security.

4.10 The Chair acknowledged the challenges and complexity of dealing with multiple issues and highlighted the Co-operative Mechanism as a viable approach which others could model. He also said that the littoral States – Indonesia, Malaysia and Singapore had, over the years, invested immense resources to installing and maintaining aids to navigation, combating oil spills, and tackling maritime security matters in the SOMS. The Chair remarked that the littoral States worked with user States and international stakeholders to collaborate and jointly contribute to these matters.

4.11 Both Indonesia and Malaysia agreed with the Chair and expressed hope for further collaboration and cooperation between the littoral States and stakeholders through the relevant arms of the Co-operative Mechanism.

Agenda Item 4.3 Navigational Safety – Safety at Sea

4.12 The following presentations were made:

CF 4/3/1 Update on International Safety@Sea Week 2018 (by Capt. Dorothy Sim, Manager (Safety Inspectorate), MPA)

CF 4/3/2 New Ship Routes in Danish Waters and the Danish Experience Regarding Maritime Cybersecurity (by Mr Jan Thorn, Director of Safety of Navigation, National Waters, Danish Maritime Authority, Denmark)

CF 4/3/3 The Designation of Routeing Measures in Lombok and Sunda Straits (by Mr Nanditya Wardhana, Head of Section, Directorate General of Sea Transportation, Indonesia)

4.13 The Chair thanked Singapore for its presentation and emphasised the importance of inculcating a safety culture in the SOMS.

4.14 On Indonesia's presentation, ICS remarked that Indonesia had chosen sea lanes which were quite narrow to designate routing measures and asked if Indonesia had assessed the risk of a possible increase in collisions as a result of putting in place a routing measure. ICS also pointed out that Indonesia was asking for a lot of information from ships for its proposed ship reporting system for the Lombok Strait. He further asked why the automated reporting using AIS following the new guidelines by IMO in resolution 433(98) had not been adopted by Indonesia. Indonesia clarified that there would be no ship reporting system. As for the proposed routing measures, Indonesia said that it had consulted with the IMO and stakeholders, and done its own study and the assessment was that 3.08 nautical miles for the proposed routing measure was sufficient. Its risk assessment results had shown that implementing the proposed measure would reduce collision risk in the Lombok Strait.

4.15 The Chair thanked Indonesia for sharing on its proposal for the Lombok and Sunda Straits, even though it was not a proposed measure for the SOMS.

4.16 In response to Denmark's presentation, Indonesia's Head of Delegation expressed his interest to further discuss with Denmark on Traffic Separation Scheme (TSS), routing measures as well as cyber security issues. He also congratulated Singapore for the successful Safety@Sea campaign and urged for support on measures related to safety of navigation and environmental protection in the SOMS and other archipelagic sea lanes.

Agenda Item 4.4 Navigational Safety – User States and Industry Perspectives

4.17 The following presentations were made:

CF 2/2/1 Co-operation to Enhance Safety of Navigation in the SOMS (by Dr Shinichiro Otsubo, Senior Deputy Director-General, Maritime Bureau, Ministry of Land, Infrastructure and Transport [MLIT], Japan)

CF 2/2/2 Safety, Sulphur and the Straits (by Mr Matthew Williams, Senior Marine Advisor, International Chamber of Shipping [ICS])

4.18 Indonesia, Malaysia and Singapore thanked Japan for its long standing support for, and contributions to, the Co-operative Mechanism. Singapore remarked that the area of automation in shipping could be another area of further collaboration with Japan.

4.19 In its presentation, ICS highlighted that "off-specification" or "contaminated" fuels posed a real safety issue for ships, and the provision and use of such fuels violated MARPOL and SOLAS requirements. There were several views that this problem would be "exacerbated" when more blended fuels will be used to meet the requirement for fuels with lower (0.5%) sulphur content. ICS appealed for more effective and consistent global enforcement over fuel quality, and said that some

littoral States in the SOMS had good enforcement practices. INTERTANKO intervened on the safety concerns and urged littoral States to review their enforcement approach to better regulate fuel oil suppliers.

4.20 In the discussion over the problem raised by ICS, it was acknowledged that the problem is an ongoing issue. There were also gaps in the testing regime under MARPOL and ISO. ICS and BIMCO suggested that data could be collected to identify the commonly-found “contaminants” so as to generate a list of potential egregious “contaminants” that could be tested.

Agenda Item 4.5 Navigational Safety – Discussion on Charting the Way Forward for Navigational Safety in the SOMS

4.21 With no further comments, the Chair brought Day 1 of the Forum to an end.

5 Protection of the Marine Environment in the SOMS

5.1 Agenda Item 5 on “Protection of the Marine Environment in the SOMS” was chaired by Ambassador Mary Seet-Cheng, Senior Specialist Advisor in the Ministry of Foreign Affairs, Singapore.

Agenda Item 5.1 Protection of the Marine Environment – Prevention and Preparedness for Marine Pollution

5.2 The following presentations were made:

CF 5/1/1 GISEA 2018 Activities in Supporting Oil Spill Preparedness and Response Capability in Southeast Asia (by Ms Amanda Chee, Project Manager, Global Initiative Southeast Asia (GISEA))

CF5/1/2 A Satellite Powered Solution for the Maritime Domain in the Straits of Malacca and Singapore (by Mr Mohd Fairoz Rozali, Senior Principal Assistant Director, Marine Department, Malaysia and Mr Alastair Lees, EASOS Sdn Bhd / Catapult)

CF5/1/3 An Update on the Port Reception Facilities in the SOMS (by Mr Mohd Fairoz Rozali, Senior Principal Assistant Director, Marine Department, Malaysia)

5.3 In reply to Indonesia’s query on the draft ASEAN Regional Oil Spill Contingency Plan (ROSCP), GISEA explained that GISEA and the IMO have been assisting ASEAN Member States in developing the draft ROSCP. Malaysia updated that the draft ROSCP and the roadmap were currently undergoing consideration by ASEAN Member States with a view to adoption.

5.4 EMSA asked if there were currently any conduct of drills and communications among the littoral States as part of oil spill preparedness and response. Malaysia highlighted that exercises and drills were conducted in the SOMS.

5.5 In her summary of the presentations and discussions, the Chair highlighted the importance of conducting regular drills and exercises for oil spill preparedness and response in the SOMS. She noted the on-going efforts to provide port reception facilities in the ports along the SOMS. INTERTANKO thanked Malaysia for its updates on port reception facilities and added that the release of reception facility data – such as waste management plan and fee systems – were seen as a welcome development.

Agenda Item 5.2 Protection of the Marine Environment – Practical Approaches to Protection of Marine Environment

5.6 The following presentations were made:

CF 5/2/1 Meeting the Challenges of Marine Environment Protection in the 21st Century – Lessons from the Little Red Dot (by Dr Karenne Tun, Director, Coastal and Marine Branch, National Biodiversity Centre, NParks, Singapore)

CF 5/2/2 Relevance of the London Convention and London Protocol to the SOMS (by Professor Robert Beckman, Centre for International law (CIL), NUS, Singapore)

CF 5/2/3 In Situ Laser Measurement of Skin Friction Drag of Ship Hull (by Mr Muhammad Arif Kurniawan, Indonesia Classification Bureau (BKI))

5.7 On the presentation by NParks Singapore, the Chair highlighted that one critical success factor for marine environmental protection was the involvement of the local community and non-governmental organisations e.g. community clean-up activities along beaches.

5.8 On the London Convention and London Protocol, CIL opined that one challenge to facilitating accession was the matter of “dumping”, as defined under the London Convention and London Protocol, came under the purview of different agencies and this often required extensive consultations and co-ordination.

5.9 Singapore suggested that in view of the cross-cutting and multi-faceted issues in environment protection matters, authorities and stakeholders need to understand or catch up with the issues. Singapore suggested that capacity building in marine environment protection issues was an aspect that the littoral States and stakeholders in the SOMS could pay greater attention to. The Chair suggested that CIL could organise workshops or conferences to better understand the contents, benefits and obligations of London Convention and London Protocol, and improve the accession rate to these instruments.

Agenda Item 5.3 Protection of the Marine Environment – User States and Industry Perspectives

5.10 The following presentations were made:

CF 5/3/1 The National Maritime Energy Efficiency Strategy of the Republic of Panama (by Mr Rogelio Ruiz Rivera, In-Charge for Segumar Singapore, Panama Maritime Authority)

CF 5/3/2 Industry Perspectives and Contributions to Protection of the Marine Environment in the SOMS (by Mr Tim Wilkins, Environment Director, INTERTANKO)

Agenda Item 5.4 Protection of the Marine Environment – Discussion on Sustainable Shipping in the SOMS

5.11 The Chair thanked Panama and INTERTANKO for their presentations and invited questions and comments from the floor. The Chair noted that Panama's and INTERTANKO's presentations transitioned the discussion from pollution from ships to the broader matter of sustainable shipping. The Chair asked the floor for their views on sustainable shipping.

5.12 In response to Indonesia's query on how Panama got the shipping industry to comply with its rules and regulations, Panama said that they incentivised compliant ship owners by lowering taxes and registry fees. Singapore thanked Panama for its presentation which could generate good ideas and measures to improve energy efficiency and reduce emissions at the international level such as the Marine Environment Protection Committee (MEPC) of the IMO.

5.13 Indonesia also asked INTERTANKO how INTERTANKO intended to put into action its proposal to re-establish the 3+1 (littoral States + industry) meetings which the littoral States used to convene with the industry from 2007 – 2010. Mr Wilkins emphasised that these smaller intersessional meetings would help form concrete proposals.

5.14 Malaysia and Singapore said that one of the main elements of the Co-operation Forum was inclusivity. Singapore said that while there were benefits of having smaller group meetings, these should be balanced with the inclusivity of all participants at the Co-operation Forum. Ideas and proposals tabled and discussed at the Forum would be then submitted for approval by the Tripartite Technical Experts Group (TTEG). Singapore remarked that there was always room for smaller group discussions during the Co-operation Forum itself. Malaysia remarked that one benefit of the 3+1 intersessional meetings could be to ensure sustainable implementation of projects through injection of funding and required additional resources. Malaysia added that ideas and proposals generated at the Co-operation Forum could be explored at the 3+1 if necessary and include interested parties.

5.15 On INTERTANKO's presentation, Singapore looked forward to discussing Indonesia's papers on marine plastic litter submitted to MEPC 73. In response to Singapore's query, INTERTANKO informed that the Ports of Antwerp, Gothenburg, Amsterdam and Rotterdam receive segregated plastic waste and that in Europe currently there is a no special fee system combined with a mandatory discharge, which was welcomed by INTERTANKO. INTERTANKO recognised that provision of such

waste delivery services would incur cost for the port and port state, and urged for transparency in the fee mechanism.

5.16 FASA agreed with INTERTANKO and commented that fees should only be paid if the facility to segregate waste for marine plastics is available. SSA also encouraged the littoral States to look into providing a list of certified hull cleaning services for biofouling.

5.17 On enhancing sustainable shipping, EMSA, ICS and FASA agreed that seafarers had to adapt to the future trends in shipping such as automation and review the current STCW to ensure its relevance. FASA highlighted that such broad-based skills uplifting should not be limited to seafarers but should also be extended to shore-based ship managers as well, who would then be well equipped to provide instructions and guidance on the standards and measures that needed compliance.

5.18 EMSA shared its “3 S” principles of Sustainability, Standardisation and Safety, to support the industry on sustainable shipping practices. EMSA noted that the advent of emerging trends and technology such as artificial intelligence and internet of things in the shipping industry, would require seafarers to undergo more training for the future.

6 Developments in the Co-operative Mechanism and the Straits of Malacca and Singapore (SOMS)

6.1 The following presentations were made:

CF 6/1 Updates on the 20th and 21st Aids to Navigation Fund (by Mr Hairizam, Marine Officer, Marine Department, Malaysia)

CF 6/2 MSC’s Co-operation to Enhance Safety of Navigation in the SOMS and Updates on the Joint Hydrographic Survey (by Mr Eiichi Kato, Executive Director, Malacca Straits Council (MSC))

6.2 The Chair thanked Malaysia for sharing the new 5 year Planned Maintenance Programme (PMP) of the Aids to Navigation Fund (ANF) and urged stakeholders to continue their financial and in kind contributions such as sharing of expertise on new activities for the ANF.

6.3 Malaysia informed that the ANF had a current balance of US\$7 million and might encounter a shortfall in funds based on the 5 year PMP which required US\$9.1 million. Therefore, Malaysia would encourage regular contributions to the ANF to sustain the maintenance works planned for in the 5 year PMP.

6.4 IALA proposed possible collaboration between IALA and MSC, and offered to share its expertise such as the IALA risk assessment toolbox. While MSC currently did not have the capacity to pursue further collaboration with IALA, MSC said that it was open to and looked forward to, future collaborations. The Chair noted IALA’s offer

and on this note, encouraged associations and stakeholders to have more of such conversations on co-operation and collaboration.

6.5 In relation to MSC's presentation on the Joint Hydrographic Survey, the littoral States expressed their appreciation to contributions by MSC.

7 Progress Report on the Straits Projects

7.1 The following presentations were made:

CF 7/1 Straits Project 1 – Removal of Wrecks in the Traffic Separation Scheme in the SOMS (by Mr Mohd Fairoz Rozali, Senior Principal Assistant Director, Marine Department, Malaysia)

CF 7/2 Straits Project 5 – Replacement and Maintenance of Aids to Navigation in the SOMS (by Mr Nanditya Wardhana, Head of Section, Directorate General of Sea Transportation, Indonesia)

CF 7/3 Straits Project 10 – Study of the Blueprint for the Future Development of Safety of Navigation and Marine Environment Protection in the SOMS (by Mr Nanditya Wardhana, Head of Section, Directorate General of Sea Transportation, Indonesia)

CF 7/4 Straits Project 11 – Development of Guidelines on the Places of Refuge (PoRs) for Ships in Need of Assistance in the SOMS (by Mr Mohd Fairoz Rozali, Senior Principal Assistant Director, Marine Department, Malaysia)

CF 7/5 Straits Project 12 – Marine Oil Spill Monitoring System (MOSMS) in the SOMS (by Mr Mohd Fairoz Rozali, Senior Principal Assistant Director, Marine Department, Malaysia and Mr Wang Huan, Principal Staff, Maritime Safety Administration, the People's Republic of China)

CF 7/6 Straits Project 13 – New Study for the Safety of Navigation in the SOMS (by Mr Eichii Kato, Executive Director, MSC)

7.2 On Straits Project 10, the three littoral States noted that discussion on the progress, development and conclusion of Straits Project will be discussed at the 11th PCC meeting and that Indonesia's presentation served as an information update to the Forum.

7.3 Indonesia informed that there is a need to have a more in depth and comprehensive follow up study on the proposed initiatives of preliminary study on Straits Project 10 and further invited stakeholders to participate in the follow up study.

7.4 On Straits Project 11, BIMCO informed that the European States together with the industry would be submitting a paper to MSC 100 on IMO's guidelines on Places of Refuge (PoR). Singapore noted that the outcome of the project should be in line with the IMO's guidelines on PoR and will be further discussed at TTEG and PCC. BIMCO expressed interest to co-operate with the littoral States.

7.5 On Straits Project 12, Malaysia and China informed the Forum of the outcomes of the two workshops on oil spill risk assessment and monitoring, with the contribution of China. The meeting recognised the good efforts of the said workshops in sharing technology and experience and improving oil spill response capacity.

7.6 On Straits Project 13, IALA offered assistance with its risk assessment toolbox and Indonesia suggested that MSC could conduct further consultation with Indonesia, prior to the finalisation of the project.

7.7 The Chair commended the good progress of the Straits Projects and acknowledged the contributions from the user States and industry. The Chair also thanked the contributors for their continuous support on behalf of the littoral States and encouraged similar contributions and co-operative efforts from other States and stakeholders present.

8 Closing Session

8.1 The consideration and adoption of the 11th Co-operation Forum report was chaired by Mr Andrew Tan, Chief Executive of MPA.

8.2 The meeting considered and adopted the 11th Co-operation Forum report.

8.3 The Chair thanked all participants for their support and contribution in making the 11th Co-operation Forum a success.

8.4 The 12th Co-operation Forum will be held in Indonesia in 2019, with details on the date and venue to be communicated at a later date.

List of Annexes:

Annex I – Opening Remarks of Mr Agus Purnomo (Indonesia), Dato Haji Baharin (Malaysia) and Mr Andrew Tan (Singapore).

Annex II – 11th Co-operation Forum Agenda

Annex III – List of Participants