

**THIRTEENTH CO-OPERATION FORUM
UNDER THE CO-OPERATIVE MECHANISM ON SAFETY OF NAVIGATION AND
ENVIRONMENTAL PROTECTION IN THE STRAITS OF MALACCA AND SINGAPORE**

**18 – 19 JULY 2022
THE INTERCONTINENTAL HOTEL, KUALA LUMPUR,
MALAYSIA**

REPORT OF THE FORUM

1. OPENING SESSION

1.1. The Thirteenth Co-operation Forum under the Co-operative Mechanism between the littoral States and User States on the Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore (SOMS) was held from 18 to 19 July 2022 at the InterContinental Hotel, Kuala Lumpur, Malaysia. The Forum that was held for the first time in *hybrid* mode, was attended by representatives from the three littoral States; Indonesia, Malaysia and Singapore; User States, User of the Straits, Non-Governmental Organizations (NGOs), International Governmental Organizations and stakeholders from the international maritime community.

1.2. The list of participants is attached in **Annex I**.

2. PLENARY

2.1. The Forum was chaired by Dato' Hj. Baharin bin Dato' Abdul Hamid, as the Head of Delegation (HOD) of Malaysia.

2.2. In his opening remarks, as the host, he welcomed delegates to the Forum and expressed his appreciation to the delegates for attending the Forum. He highlighted that the Forum was supposed to be convened in year 2020 but due to the unprecedented global pandemic of COVID-19 it was postponed to this year. He further stated that the success of the Co-operative Mechanism is demonstrated by various form of collaborative Straits projects and initiatives that have been derived from the Forum.

2.3. In ending his opening remark, he recapped that the Co-operative Mechanism has been established for fifteen years since its inception and the littoral States, together with the user States and users of the Straits are committed in ensuring the safety of navigation and marine environmental protection in the Straits.

2.4. The HOD of Indonesia, Mr. Hengki Angkasawan; and HOD of Singapore, Ms. Quah Ley Hoon, reiterated the importance of the Co-operation Forum in gathering all respective stakeholders to exchange views of the Straits. They respectively expressed their gratitude to Malaysian Government for hosting the Forum after two years of hiatus due to COVID-19 pandemic.

2.5. Their full remarks can be found in **Annex II**.

3. ADOPTION OF THE AGENDA

3.1. The provisional agenda of the Forum was adopted without any amendment. The agenda can be found in **Annex III**.

4. ENHANCING SAFETY OF NAVIGATION IN THE STRAITS OF MALACCA AND SINGAPORE (SOMS)

4.1. Session I of the Forum noted the presentations on enhancing safety of navigation in the SOMS made by the speakers as follows:

- 4.1.1. CF 13/4/1 – Sharing on Developments on VHF Data Exchange System (VDES) (by Tee Kim Chuan, Assistant Director of Port Systems Capability Development, Maritime and Port Authority of Singapore) ;
- 4.1.2. CF 13/4/2 – Port State Control Pattern in Malaysian Ports: in Light of Navigation Safety (by Mohd Tarmizi Osman, Senior Assistant Director, Marine Department Malaysia);
- 4.1.3. CF 13/4/3 – The Result of the Study of the Implementation of STRAITREP in SOMS and its Future Implementation (by A.A BGS. Dinariyana Dwi Putranta, Lecturer, Institut Teknologi Sepuluh Nopember, Indonesia); and
- 4.1.4. CF 13/4/4 – Japan’s Cooperation to Enhance the Safety of Navigation in the SOMS (by Satoshi Ishida, Director for International Planning and Coordination Maritime Bureau, Ministry of Land Infrastructure, Transport and Tourism, Japan).

4.2. The Forum noted the above topics and highlighted the substantial matters below:

- 4.2.1. Indonesia supported the implementation of VDES and encouraged collaboration among littoral States, as the technology could be the possible solution for the congestion in the SOMS.
- 4.2.2. Indonesia and Singapore highlighted that a similar approach of determining the Port State Control (PSC) inspection pattern may be applied in both States. Indonesia suggested that the types of ship should also be included in the study analysis, and Singapore requested for research findings to be shared among littoral States. Additionally, the International Association of Independent Tanker Owners (INTERTANKO) raised up the potential of conducting the PSC inspection in remote manner.
- 4.2.3. Malaysia sought clarifications in relation to probable grounding area in Sector 5 found in the study, where the average depth in the TSS is between 20-56 meters. Singapore noted Indonesia's study on the implementation of STRAITREP in the SOMS. Singapore also noted Indonesia's proposed revision of reporting items of STRAITREP, and that this study is in line with VDES which could facilitate automatic reporting. Malaysia and Singapore noted that there were limitations to existing AIS technology and that VHF voice reporting is still needed until a mature technology is established to transform the current way of reporting.
- 4.2.4. Japan informed that for the Phase II of MASS trials, the data on communication between sea and land will certainly be taken into their consideration, and the issue of cybersecurity is also being analysed thoroughly.

5. **ENHANCING MARINE ENVIRONMENTAL PROTECTION IN THE SOMS**

5.1. Session II of the Forum noted the presentations on enhancing marine environmental protection in SOMS made by the speakers as follows:

- 5.1.1. CF 13/5/1 – Underwater Noise Pollution in The Straits of Malacca (by Assoc. Prof. Dr. Md Redzuan Zoolfakar, Head of Research and Innovation, University of Kuala Lumpur, Malaysia);
- 5.1.2. CF 13/5/2 – Latest Development on Addressing Marine Litter Pollution: The Malaysian Case (by Cheryl Rita Kaur, Fellow Researcher and Head, Centre for Straits of Malacca, Maritime Institute of Malaysia); and
- 5.1.3. CF 13/5/3 – Regional Integration in Oil Spill Preparedness and Response: Significance of Sub-regional Arrangements (by Lee Nai Ming, Project Manager, IMO–IPIECA Global Initiative for Southeast Asia).

5.2. The Forum noted the above topics and highlighted the substantial matters below:

5.2.1. The Forum noted that slow steaming is one of the means of reducing underwater noise. Singapore stated that it is important for any proposed measures to balance the impact of underwater noise vis a vis other consideration, such as the impact on navigation safety and other aspects of the environment. As a way forward to the study, the Forum further noted that the correlation between underwater noise and number of fish caught could be fully evaluated with an adequate research fund.

5.2.2. With regards to the marine litter issue emanating from fishing gears, Malaysia stressed it is timely that a wider collaboration among various inter-agencies should be initiated. Further, INTERTANKO stated the importance of having considerable port reception facilities in the SOMS to deal with the issue of marine litter.

5.2.3. Indonesia suggested that the collaboration between Global Initiative Southeast Asia (GISEA) and INTERTANKO on regional integration in oil spill preparedness and response to be carried out next year. The Forum noted that the use of advanced technology in monitoring and controlling illegal discharge from ships in the SOMS may be utilized.

5.3. With no further comments, the Forum was adjourned to the next day, 19 July 2022.

6. BIG DATA AND ARTIFICIAL INTELLIGENCE APPLICATIONS IN THE SOMS

6.1. The Forum continued its deliberation on 19 July 2022.

6.2. Session III of the Forum noted the presentations on big data and artificial intelligence in SOMS made by the speakers as follows:

6.2.1. CF 13/6/1 – Big Data Analytics for Maritime Domain Awareness (by Azri Bin Jamil, Chief Data Scientist, Greenfinder Sdn. Bhd.);

6.2.2. CF 13/6/2 – Modernization of Lighthouse in Malaysia (by Burhanudin bin Abdullah, Senior Principal Assistant Director, Marine Department Malaysia);

6.2.3. CF 13/6/3 – Implementation of an Integrated Port Service System and Data Exchange in Indonesia (by Ayu Kharizsa, Senior Officer on Sea Transport Information System, Directorate General of Sea Transportation, Ministry of Transportation Indonesia);

6.2.4. CF 13/6/4 – Future of Navigation Through a Cyber-Secured Platform (by Antoine Gatinaud, Smart Port Solution Expert, Wärtsilä) and

-
- 6.2.5. CF 13/6/5 – Better Design Through Behavioural Analytics (by Ter Chin Huan, Chief Data Scientist, Spartan Maritime (M) Sdn. Bhd.).
- 6.3. The Forum noted the above topics and highlighted the substantial matters below:
- 6.3.1. INTERTANKO and the Maritime Institute of Malaysia (MIMA) raised their concern on the emerging issue of some tankers that are using fake identities to defraud coastal States authorities. The Forum noted that big data analytics in the maritime domain has the ability to detect MMSI spoofing, and it is also capable to alert the stakeholders through the Malaysian E-nav System.
- 6.3.2. MIMA stated that cybersecurity threats in relation to the integrated e-navigation platform is a major concern presently. The Forum noted that the International Electrotechnical Commission (IEC) has issued a new series of standards that address cybersecurity for operational technology in automation and control systems. Wärtsilä emphasized that the cybersecurity issue needed to be addressed from both sides i.e., ship-ship and ship-shore, and all data transformation technology should involve "PPT concept" (personal, process and technology). Singapore highlighted the need to ensure inter-operability between different systems of the e-navigation and that the cost involved should not overly burden the shipping companies. The Forum noted that the International Maritime Organization (IMO) has taken the effort of coordinating and aligning the e-navigation towards the same standard. Additionally, the Forum were also made understood that the cost involved for data transfer onboard ships would be very minimal since the recent system developed by Wärtsilä is using satellite and also compatible with VDES.
- 6.3.3. The Forum noted that although Marine Spatial Planning (MSP) is a main process of analysing human activities in marine areas, it is a useful method as a pilot project in relation to wider maritime behavioural analytic. Further, big data overlays could be beneficial for authorities in making decisions.

7. DEVELOPMENT AND PROJECT STATUS IN THE CO-OPERATIVE MECHANISM

7.1 Session IV of the Forum noted the presentations on the development and status of the project in the Co-operative Mechanism made by the speakers from littoral States as follows:

- 7.1.1. CF 13/7/1 – Report of the 26th Aids to Navigation Fund (ANF) Committee (by Lalu Rano Agiansyah, International Cooperation Officer, Directorate General of Sea Transportation, Ministry of Transportation, Indonesia) and
- 7.1.2. CF 13/7/2 – An Updates on the Straits Project 11: Development on the Joint Guidelines of the Places of Refuge for Ships in Needs of Assistance in the Straits

of Malacca and Singapore (SOMS) (by Dr. Yasmin Mohd Hasni, Principal Assistant Director, Marine Department Malaysia).

8. CLOSING SESSION

8.1. The consideration and adoption of the 13th Co-operation Forum report was chaired by Dato' Hj. Baharin bin Dato' Abdul Hamid, Director General of Marine, Marine Department Malaysia.

8.2. The meeting considered and adopted the 13th Co-operation Forum report.

8.3. The Chair thanked all delegations for their positive commitments for making the 13th Co-operation Forum a success. The positive indication and commitment from the other two littoral States, User States and Users of the Straits, Non-Governmental Organizations (NGOs), International Governmental Organizations and stakeholders from the international maritime community to the Co-operation Forum have distinctly demonstrated the success of the Co-operative Mechanism.

8.4. The Chair lauded the progress of the Straits Projects and acknowledged the contributions from the user States and industry. Further, the Chair also expressed gratitude to the contributors for their continued support on behalf of littoral States, and encouraged similar contributions and in-kind co-operation from other States and stakeholders present.

8.5. The 14th Co-operation Forum will be held in Singapore in 2023, with the details on the date and venue to be communicated at a later date.

8.6. The Report of the Forum and presentation materials will be temporarily available in the cloud folder, <https://tinyurl.com/bdhn2uev> from 18 to 22 July 2022.
