MARINE ELECTRONIC HIGHWAY (MEH) IT SYSTEM

5th CO-OPERATION FORUM

Co-operative Mechanism on the Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore Singapore, 24-25 September 2012

BACKGROUND

- The Straits of Malacca and Singapore (SOMS) are shallow, with narrow channels, irregular tides and hence are hazardous to navigation for large ship
- Although the current maritime safety infrastructures and regulatory mechanism in place, in the Straits of Malacca and Singapore have reduced the frequency of ship collision, grounding and oil spills. However, occasional incidents have occurred in recent years and some of these incidents have caused
- oil spills.
- An innovative approach to improve the management of maritime traffic and marine environment protection in the Straits could ameliorate these impacts and enhance the carrying capacity of the Straits for various uses and activities

THE BENEFIT OF MEH PROJECT

- The Marine Electronic Highway project aims to establish a regional mechanism in the SOMS for enhanced maritime safety and marine environment protection with a sustainable financial component in a co-operative arrangement with the three littoral States of Indonesia, Malaysia and Singapore and partnership with the Republic of Korea, the International Hydrographic Organization (IHO), the International Association of Independent Tanker Owners (INTERTANKO) and the International Chamber of Shipping (ICS).
- The MEH system with its environmental modules can be used in marine pollution response and control such as to predict the direction and speed of oil spill and aid in response and clean-up. It is also possible to use identifying and track ships that illegally discharge their bilges water or dump other oily wastes.

HAND OVER

- Agreement between IMO and GMT Cybernetics of Korea to provide Marine Electronic Highway (MEH) IT System was setup in the Project Management Office (PMO) in Batam and the operation of the system started in June 2012.
- Hand over of MEH IT System from the IMO to Indonesian Government held by the Secretary General of IMO on August 3, 2012 in Batam. The handover was attended by Vocal point from each littoral States, World Bank, Republic of Korea, ICS, INTERTANKO and the representatives of the concerned and interested parties.
- This handover of the MEH IT System to DGST is a great opportunity for three littoral States in the establishment of regional MEH System.



Operation and maintenance of MEH IT System :

- Operate by 3 (three) DGST's personals as operators and assisted by two 2 (two) persons from IMO : IT specialist and Administration Assistant
- Main and backup electricity power
- Renew electrical connection for main and backup power system

A. Development Program:

- Installation of Automatic Transfer Switch (ATS)
- Installation lightning protection
- Improve storage capacity of data server (12 Tera Bytes)
- Improve of cooling system of server room
- Upgrade internet network
- Upgrade AIS coverage area of MEH IT System
- Installation of Oil Spill Modeling (HIMOD and AQUASAFE)

B. Planning Program:

- Upgrade bandwidth of the Internet from 3 Mbps to 10 Mbps
- Room renvation included design interior and furnitures

SUSTAINABLE AND FINANCE SUPPORT OF MEH DATA CENTER

- 1. MEH Demonstration Project will be ended in December 2012. The Project Steering Committee (PSC), who is the decision maker of MEH Project consists of the three littoral States, IMO, World Bank, the State Observer Users and Stakeholders has a yearly meeting, will also ended. Referring to the last PSC meeting held in Jakarta, we propose the role of the PSC should be take over by a permanent working group under the Tripartite Technical Expert Groups (TTEG).
- 2. Financial support from various parties (IMO, Littoral States and MEH User) for sustainable operation and management MEH IT System of the MEH Data Centre is highly required. Such as high grade IT Expert is needed for management can only be fulfill through outsourcing.
- 3. The operational and maintenance costs consists of:
 - IT Expert (outsourcing) and Administrative Assistant (outsourcing) about US\$ 6.000/month
 - Operation (electricity, internet fee, etc) and maintenance (spare part, etc) about US\$ 500.000/year
- 4. We propose the above matters for the sustainability and scale up of MEH Data Center, which is not solely Indonesia responsibility but the responsibility of Costal States and Users of SOMS.

THANK YOU