Recommendation for Improving Maritime Transport Safety in the ESCAP

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Contents

1. Maritime Safety Administration
2. Maritime Safety Management System
3. Seafarer’s Training
4. Vessel Inspection and Monitoring
5. Accident Investigation
6. Welfare of Seafarers
1) Setting up Maritime Safety Administration

- There are two types of maritime safety administrations in a country.
  - Type A: Function of developing policy and enforcement belongings in the same ministry.
    - Example: Japan, China, Bangladesh, Myanmar, Vietnam etc.
  - Type B: Function of developing policy and enforcement belongings in the different ministry.
    - Example: Korea

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<thead>
<tr>
<th></th>
<th>Bangladesh</th>
<th>Cambodia</th>
<th>India</th>
<th>Korea</th>
<th>Myanmar</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
<th>Vietnam</th>
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<tr>
<td>Policy develop</td>
<td>DOS</td>
<td>NPWT</td>
<td>MOS RH</td>
<td>MOMF</td>
<td>MOTC</td>
<td>PMSA</td>
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<td>Enforcement</td>
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<td>NCMS</td>
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<td>MPSS (KCG)</td>
<td>MOTC</td>
<td>P.Navy</td>
<td>SCG</td>
<td>MOT (Vinamin)</td>
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(1) Type A
- Example: Japan (Ministry of Land, Infrastructure, Transport and Tourism – Japan Coast guard)
(2) Type B
- Example: Korea (Ministry of Oceans and Fisheries – Ministry of Public Safety and Security)
2) Unification of Disaster Management System

- Risk management consists of prevention, preparation, response, and recovery

Disaster management cycle

1. Prevention & Mitigation
2. Preparedness
3. Response
4. Recovery

Incident
Two types of disaster management organizations
- Type A: PPRR functions within one department (e.g. Bangladesh, Cambodia, Vietnam).
- Type B: PPRR functions separated in more than two departments (e.g. Korea).

<table>
<thead>
<tr>
<th>Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Type A</td>
<td>Efficient risk management</td>
<td>Huge organization</td>
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<td></td>
<td>Efficient communication</td>
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<td>Effective cooperation</td>
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<td>Type B</td>
<td>Maintaining specialty</td>
<td>Poor communication</td>
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<tr>
<th>Prevention (phase1)</th>
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<tr>
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<td>Central</td>
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<td>VMA</td>
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<td>Prepare (phase2)</td>
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<td>Response (phase3)</td>
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<td>Recover (phase4)</td>
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<td>MOT</td>
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3) Establishment of National Maritime Safety Plan

- The purpose of the National Maritime Safety Plan is to guide the national effort in managing the safety risks/hazards within Nation’s maritime transportation systems.

- Development and implementation of maritime safety plans will help to ensure that maritime transportation systems are safe nationwide.

Example:
1) Application of SMS to Coastal Ship

- SMS defines a systematic way to identify hazards and control risks while maintaining assurance that these risk controls are effective.\[1\]

- IMO’s ISM Code applies to international trading commercial ships but its implementation to domestic vessels depends on a flag state.

- Even though domestic shipping companies are poor and small, simplified SMS needs to be introduced to domestic vessels for ensuring safe navigation.
2) Constant Supervision against Ferry Vessel

- Monitoring vessel operations is divided by voluntary monitoring system controlled by own company, or continuous monitoring governed by likely e-Navigation system.

- In terms of cargo vessels, company’s voluntary supervision can be more advantageous, but continuous monitoring is more useful in ferry operation.
  - Prohibition of overloading and overcrowding, departure control, maintaining proper routeing.
3 Seafarer’s Training

1) Training of Young Seafarers

- Seafarers are getting old due to the avoidance of being onboard
  - Average age of Korean domestic seafarers has been increased from 47 years in 2005 to 57 years old in 2015.

- Every government should provide a chance of education with young people to be seafarers.
  - Supporting training expenses, providing boarding practice, etc.
2) Improving Qualification of Existing Seafarers

- The quality of seafarers has a great influence on responding disaster when an accident happens.

- Every government needs to provide a chance of education to existing seafarers for safer operation.
  - Using methods of new navigation equipment (ECDIS etc), leadership and teamwork training, amendments of international conventions.
1) Reinforcement of Vessel Inspection

- Two kinds of inspections: One is government’s inspection to fulfill international requirements; and the other is the inspection of classification society for seaworthiness.

- Almost all countries are executing their inspection right to classification societies.

- Government’s inspection capacity and supervision to Recognized Organization (RO) should be strengthened.
  - Improving quality and the number of inspectors, intensifying monitoring of recognized organizations etc..
2) Reinforcement of Vessel Traffic Monitoring

- Every government has a vessel traffic control system to monitor vessel’s entering, departure and navigation around her ports and coasts.

- Specifically, constant monitoring system for multi-using ferry boat operation is required.
  - Expansion of VTS facilities, installing AIS to passenger vessels etc.
1) Prohibition of Blame Culture

- International convention requires that each government do not use the causality information to fix or imply responsibility upon any ships or person* and that marine safety investigations do not seek to apportion blame or determine liability. **
  
* SOLAS Chapter 1 Reg.21
** Casualty investigation code

- Casualty investigation is known as the most economic counter-measure to prevent recurrence of accidents.

- Every country’s investigating function should be separated from punishment.
2) Accurate Accident Record

- Accurate casualty investigation statistics may be helpful to establish accident prevention policy.

- National investigation organization and casualty data control system should be reinforced.
  - Establishment of casualty reporting system, gathering data, categorizing accidents, etc.
6 Welfare of Seafarers

1) Wage Increase for Coastal Seafarers

- Wage is one of the motivation to sea life.

- A wage level of domestic seafarers is lower than ocean-going vessel
  - Korean domestic seafarers’ wage is about 60% compared to that of seafarers in ocean-going vessels.

- Government should establish supporting programs to compensate domestic seafarers’ low wage to motivate safer operation of domestic vessels.
  - Exemption of income tax, subsidy of training expenses, etc.
2) Introduction of Retirement Pension for Seafarers

- Seafarers feel difficulty transferring their jobs from sea to shore occupation after retirement.

- A retirement pension plan consists 3-tier structure.

- A pension system for seafarers should be introduced to secure a proper level of living after a long sea-life.

- Pension fund should be constituted by seafarers’ pension, shipowners’ share and government’s supporting fund.

The 3-tier structure of guaranteeing one's later life recommended by OECD and World Bank
Thank you

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