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# Regional Action Plan for Sustainable Transport of Dangerous Goods along the Mekong River



Navigation Programme

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Ports and terminals represent focal nodes in the multi-modal freight transport chain where even the slightest deficiency can result in significant negative repercussion along the entire chain.

Increase in transport volumes of dangerous goods on the Mekong River require the Member Countries to adhere to a consistent and coordinated development of their policies on transport infrastructure especially with regard to the inland waterway safety and environmental protection.

The Mekong River has a fragile ecological balance; hence, a serious accident involving e.g. oil spills as well as operational spillages would

thus have irreparable consequences on these fragile environments. Therefore, this Regional Action Plan (RAP) acts as **The Guiding Document** for the Member Countries and MRC on the inland waterway safety and environmental protection.

An important purpose of the RAP is to meet international requirements on the inland waterway safety and environmental protection from ports, terminals and ships. Although individual countries are at different levels, they all have an interest in the compliance of neighbouring countries with relevant Conventions, Regulations and other Guidelines to ensure the highest level of waterborne safety and environmental protection.

## Consultations between Navigation Programme and Member Countries

In 2010 the Navigation Programme commenced Phase 1 'Risk Analysis of the Carriage, Handling and Storage of Dangerous Goods'. The objective of Phase 1 was to identify and determine the magnitude of risks associated with the storage, carriage and handling of dangerous goods along the Mekong River and determine the prevention and mitigation measures required to manage the risks.

Phase 2 began in June 2013 to **prepare the "**Regional Action Plan for Sustainable Transport of Dangerous Goods along the Mekong River" (RAP) consisting of National and Cross-Border project documents, as a basis to reduce the risks of accidents, spillages and pollution and enhance emergency response and regional coordination. The RAP also includes an Implementation Strategy for the National and Cross-Border projects. The National as well as the Cross-Border Projects are based on consolidated recommendations approved and presented in Phase 1 Recommendations". The consolidation of these recommendations into National and Cross-Border Project has been discussed and reviewed by each Member Country through national consultations with national working groups and line agencies.

> Phase 3 is expected to run from 2015 to 2020 with the implementation of the RAP.

Crew inspecting cargo tank incorrectly.
Improper or lack of equipment may kill people



### How to implement the Regional Action Plan

A number of Projects have been identified in the RAP, which require different approaches in implementation:

- National Projects, which require national implementation;
- National Projects with Cross-Border Impact, which require national implementation, but also regional coordination; and
- Cross-Border Projects, which require regional implementation and coordination (Cross-Border Projects can involve all four countries or can be at a bilateral level only).

Lack of regional coordination can easily lead to ineffective implementation. In Cross-Border Projects or National Projects with Cross-Border Impact, MRC is the relevant regional institution to undertake such coordination and with the right momentum to ensure harmonisations of e.g. regulations and standards to the extent possible between the involved countries.

It is proposed to establish a Regional Navigation Coordination Unit (RNCU) at MRC to coordinate the implementation of Cross-Border Projects and National Projects with Cross-Border Impact.

The funding of 12 projects in four countries is challenging. The following funding facilities have been identified for the implementation of the RAP:

- National funding;
- International Development Partners' funding to individual countries;
- International Development Partners' funding to MRC to implement part of RAP (crossborder activities);
- Development banks.



## Projects to be implemented

The following projects have been identified and detailed project documents prepared:

### **VESSELS**

- 1. Mekong Tanker Safety Management: To improve safety onboard inland waterway tankers through the preparation and implementation of a Vessel Safety Management System, thereby reducing the risk of accidents.
- 2. Minimum Standards for Vessel Design, Construction and Equipment: To reduce shipping accidents from structural and technical shortcomings and improve the safety onboard inland
- waterway vessels by establishing minimum standards for vessel design, ship construction and equipment, and by developing a mechanism to certify and control that these standards are complied with.
- 3. Safe Manning on Inland Waterway Vessels: To ensure that vessels are operated safely and manned with sufficient and qualified crew to prevent accidents or pollution from



the handling and transport of dangerous goods and cargo.

- 4. Implementation of the International Maritime Dangerous Goods (IMDG) Code and Provision of the Material Safety Data Sheet (MSDS) for Inland Waterway Vessels: To implement provisions of the IMDG code, the MSDS, and to ensure that crew have the necessary knowledge, information and documentation of the dangerous goods carried onboard for conducting operations in the safest possible way.
- **5. Emergency Response onboard Vessels:** To ensure that the shipmaster and the crew can manage and respond successfully to any emergency onboard a vessel.

#### **PORTS AND TERMINALS**

- 6. Standards for the Planning,
  Design and Construction of Ports and
  Terminals: To ensure that Ports and
  Terminals are planned, designed
  and constructed in a sustainable
  manner, in order to ensure that
  this provides the best achievable
  protection of public health, safety
  and the environment.
- 7. Maintenance, Inspection and Testing of Critical Equipment: *To develop*

- and implement a Maintenance, Inspection and Testing Programme (MITP) for critical equipment in ports and terminals in order to secure their functioning in a safe and efficient manner and reduce the downtime required for repair or replacement.
- 8. Port Safety, Health and Environmental Management System (PSHEMS):: To develop and implement a Port Safety, Health and Environmental management system (PSHEMS) for ports and terminals handling dangerous goods.
- 9. Emergency and Oil Spill Response in Ports and Terminals: To reduce the impact on the inland waterway environment of the Mekong River system, protect human lives and limit the damage to property by establishing and implementing an effective emergency and oil spill response plan at local, national and cross border levels.

#### **ENVIRONMENT**

**10. National Vessel and Port Waste Management:** To establish efficient vessel and port waste handling in ports and terminals on the Mekong River.

11. Cross-Border Vessel and Port Waste Management: To introduce cross-border measures to incentivise vessel waste delivery, through implementation of economic incentives, harmonised uniform measures and a strengthening of cross-border inspection and communication.

### **WATERWAYS**

12. Introducing Geographical Zones in the Mekong River and related Technical and Operational Requirements for Tankers: To assess, identify, define and approve the different Zones in the Mekong River, and ensure that the Technical and Operational Requirements for Tankers using these Zones are met.





For more information on the **Navigation Programme**, visit: www.**mrcmekong**.org

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