

INTERNATIONAL NAVIGATION  
ASSOCIATION



ASSOCIATION INTERNATIONALE  
DE NAVIGATION

## Environmental management framework for ports and related industries



PEC

Report of Working Group 4  
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INTERNATIONAL NAVIGATION ASSOCIATION

- 1. INTRODUCTION**
  - 1.1 Aims and objectives
  - 1.2 Potential value of an environmental management framework
  - 1.3 Report structure
- 2. BACKGROUND**
- 3. ENVIRONMENTAL MANAGEMENT FRAMEWORK**
  - 3.1 Policy
  - 3.2 Plan
  - 3.3 Act
  - 3.4 Continual improvement
- 4. POLICY DEVELOPMENT SYSTEM**
  - 4.1 International and national level identification process
    - 4.1.1 Legislation and Conventions
    - 4.1.2 Consultation with Relevant NGOs and other Stakeholders

- 4.2 Identification of operation type and related environmental concerns
- 4.2.1 Operation Type
- 4.2.2 Areas of General Environmental Concern
- 4.2.3 Other Issues of Environmental Concern
- 4.3 Prioritised environmental concerns
- 4.4 Policy statement

## **5. GENERAL MANAGEMENT SYSTEM**

- 5.1 The role of management
- 5.1.1 Strategy Development
- 5.1.2 Development of Goals and Priorities
- 5.1.3 Evaluation and Review of the Goals and the Strategy
- 5.2 Strategy, goals and priorities
- 5.3 Database (information system)

## **6. IMPLEMENTATION SYSTEM**

- 6.1 Preparation
- 6.2 Procedure documentation
- 6.3 Training and communication

## **7. AUDIT AND REVIEW SYSTEM**

- 7.1 Environmental audit
- 7.1.1 Internal Audit
- 7.1.2 External Audit
- 7.2 Corrective actions
- 7.3 General environmental review by management

## **8. FINAL REMARKS**

## **9. USEFUL SOURCES OF INFORMATION**

### **Text Boxes**

- 2.1 Some important international legislation and conventions
- 2.2 Precautionary principle and life cycle approach
- 4.1 List of typical operations and infrastructure developments occurring in ports and waterborne transport industry which can cause general environmental concerns
- 4.2 An example of complexities in port administration
- 4.3 Main types of habitats in the neighbourhood of ports and waterways
- 4.4 Definition - mitigation and compensation
- 4.5 Visual concerns and methods of remediation
- 4.6 Sources of contamination of water and sediment
- 4.7 Origins of contaminated soil
- 4.8 MARPOL 73/78 Annexes
- 4.9 Areas of waste management problems in ports
- 5.1 Possible areas of environmental consideration caused by operations and responsibilities of ports and associated industries
- 5.2 Environment impact assessment (EIA), Procedure and site specific preparatory environmental review (PER)
- 7.1 Environmental management system audit - ISO 14001 definition
- 7.2 Advantages and disadvantages of internal and external audits
- 7.3 Auditors qualifications