

# Moldova - 2014





## WASTE TYPES ACCORDING TO MARPOL 73/78

MARPOL Annex	Type of Substance	Requirements
I	Oil	RF required
II	Nox. Liquid Substances	Procedures
III	Harmful Packed Substances	Procedures
IV	Sewage	RF required
V	Garbage	RF required
VI	Emissions	Procedures

# LEGAL FRAMEWORK

- MARPOL 73/78
- National Legislation/Regulations
- Port Regulations

# PORT WASTE MANAGEMENT

- Management of waste generated onboard ships and cargo residues
- Avoiding daily illegal operational spillages/discharges (not accidental spillages)
- Making your ports modern and competitive

# PORT WASTE MANAGEMENT

WIN WIN - situation:

- Protection of the Marine Environment
- Strengthen your tourist and fishing industry
- Compliance with international obligations (MARPOL)
- Modern and competitive ports

# PORT WASTE MANAGEMENT



# EXTERNAL REQUIREMENTS

- International conventions
- Regional commitment
- National legislation
- Port Regulations
- Ship requests for service
- Public image





# TRAFFIC AND WASTE ANALYSIS



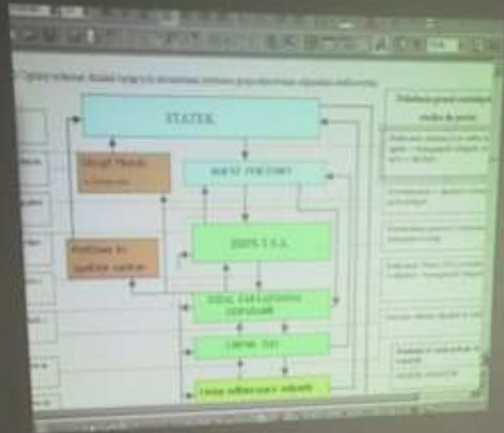
- Traffic statistics
- Port operations
- Assumptions
- Adjustments of traffic
- Waste calculations
- Future estimates

➡ Waste types and volume

➡ Design platform for reception facilities

# PORT POLICY AND STRATEGY

External requirements
Traffic and Waste
<b>Port Policy and Strategy</b>
Information and Communication
Reception Facilities
Economy
Implementation Plan



- Ownership of facilities
- Operation by own staff or contractor
- Cost Recovery principles
- Service level (waste type/volume acceptance)



# Ownership and Operation

A port owned and operated system

A port owned and privately operated system

A private owned and privately operated system



Operator/ Owner	Port	Port + Private operator	Private operator
Port	+	+	+
Port + Private operator	-	+	+
Private operator	-	-	+

# Cost Recovery principle



Indirect Fee:

Fee paid by all ships dependent of the size of the ship, regardless of delivery of waste.

Direct Fee:

Real costs of individual collection service provided in the Port only paid when used

# SERVICE LEVEL

External requirements
Traffic and Waste
<b>Port Policy and Strategy</b>
Information and Communication
Reception Facilities
Economy
Implementation Plan

**Volume and types of waste**

**Service hours**

**Collection system**



## Major constraints

**Difficult for the Port Management to define policies and strategies**

**Ports afraid of being less competitive and therefore a tendency to choose “easy solutions”**



## Solutions

**Involve stakeholders in the port in the PWM process through workshops and working meetings**

**Port Management readiness to change policy and strategy during the planning process**





# INFORMATION AND COMMUNICATION

- Information to ships/agents
- Information to authorities/public
- Waste declaration/notification  
(effective operation)
- Communication during operation
- Data registration

# RECEPTION FACILITIES



**Based on Traffic & Waste Analysis and the logistics of the port**

1. Collection
  2. Treatment
  3. Final disposal
- Collection
    - By truck or barge
    - Collection by waste type/operator
  - Treatment and Disposal
    - Selection of concept
    - Optimisation of costs
    - Design – tender - implementation

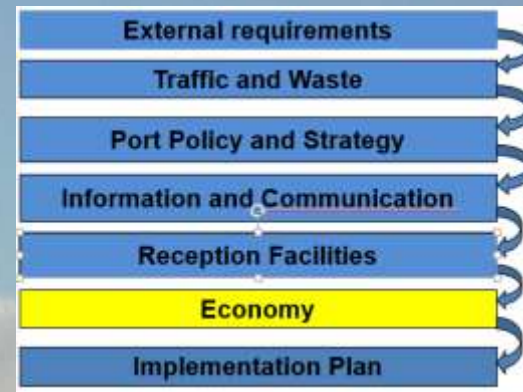


# Oily Water Treatment Plant Szczecin, Poland



# ECONOMY

## Financial feasibility



### **COSTS:**

**Financing & Capital Costs**

**Operational costs**

### **COST RECOVERY (revenues):**

**Waste fee**

**Revenue of recovered oil**

## USERS ACCEPTANCE

Ships prefer that ports have an organised Waste Management System  
They prefer to deliver waste in ports instead of dumping



The "Good Guys" already pay

The "Bad Guys" dumping today often prefer to join the "Good Guys" club

Sharing the costs makes it cheaper for the "Good Guys and reasonable for the "Bad Guys"

## MAJOR CONSTRAINS

Ports sees a waste fee as a new cost for the ships. In reality they often already pay, but often to the operators without Port Authority's knowledge



## Solutions

With indirect fees  
a reasonable fee level is achieved.  
Ships operate on equal conditions.  
Promote waste collection services as  
part of your being a modern port

# IMPLEMENTATION PLAN



**Actions to be implemented**

**Resources required**

**Responsibilities**

**Time schedule**

## SO - WHAT IS NEEDED IN THE PORT:

Annex 1: Adequate reception facilities for

oily bilges/sludges from machinery space

oily ballast/wash water (depending on type of port operations)

oily sludge collection from dry dock (if present)

Annex 4: Sewage collection if requested (not likely, but procedure should be in place)

Annex 5: Garbage collection (probably existing today)

- Efficient waste notification system
- Transparent cost recovery system
- Clear ship waste handling procedures (port waste management manual)
- Contractual framework if external operators are used



# Roadmap to compliance and efficient ship waste handling

1. Assessment of port waste reception facilities  
(questionnaire, analysis and recommendations)
1. Port strategic decisions  
(management (port/gov.), clarifications, scenarios, recommendations and conclusions)
3. Preparation of a PWM Operational Manual  
(uniform template for Operational Manual for the whole region)
4. Port Waste Management implementation plan  
(Prepare plan for implementation with key milestones)
5. Contractual framework (private sector involvement/BOOT)  
(if PS is involved, prepare contractual framework – service contract along with manual. Exclusivity to operate and long concession period is needed if BOOT model is used)



# Thanks for your attention

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# BALTIC

