The JS system for information exchange and development at the Danube Commission

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Vienna, April 6, 2011
1. Ship waste management along the Danube

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1. Development and implementation of a sustainable and transnational coordinated approach in ship waste management along the Danube
2. Cooperation with WANDA project in common interests of DC Member-States
3. WANDA - General Information
4. Outcome of the DC Expert Working Group “Ship Waste Collection”
5. Recommendations and Conclusions of the DC expert meeting on February 24-25, 2011 and next steps
1. Development and implementation of a sustainable and transnational coordinated approach in ship waste management along the Danube

**Motivation:**

- Recognition the ship waste management along the Danube as a common navigation and ecological needs based on the general guidelines of the Joint Statement

- Protection of Danube water resource from pollution caused by IWT and implementing preventive measures as a high priority for all riparian states in Danube region

- Support the Inland Navigation as environmentally friendly and sustainable transport mode for cargo and passengers
1. Development and implementation of a sustainable and transnational coordinated approach in ship waste management along the Danube

Common objectives of the DC Waste Management Expert Group and WANDA project:

- Evaluating significant differences in Danube riparian countries regarding collection and treatment of ship waste
- Clarifying the broad political and legal framework
- Establishment of a cross-border coordinated ship waste management system along the Danube!
1. Development and implementation of a sustainable and transnational coordinated approach in ship waste management along the Danube

- Relevant legal framework regarding ship waste of int’l scale:
  - Basel Convention; EC 1013/2006 Regulation, etc.;
  - Sava Protocol
2. Cooperation with WANDA

Project WANDA is a multi-disciplinary planning process from the beginning on the general guidelines of the Joint Statement!

The project WANDA aims at establishing a sustainable, environmentally sound and trans-nationally coordinated approach in ship waste management along the Danube!

Key activities in the DC on 2010/2011/2012:

- Harmonization and coordination activities with WANDA project
- Coordinated elaboration of national ship waste management concepts
- Guidelines for national concepts
  - Non-EU-member states
  - Non-WANDA states
2. Cooperation with WANDA

Scope of DC Recommendations on collection of waste caused by vessels on the Danube and WANDA project - Classification of Ship Wastes

- Ship borne waste
  - Oily and greasy ship borne waste
    - Used Oil
    - Bilge Water
    - Other Oily and Greasy Waste (e.g., Used grease, used filters, used rags, bundles and packaging of such waste)
  - Other ship borne waste
    - Domestic Sewage
    - Domestic Refuse
    - Sewage Sludge
    - Other hazardous wastes (Paint, varnish, resolvents and the like)

- Waste caused by Inland Navigation

- Waste caused by cargo
  - Residual Charges
  - Washing Water
  - Slops

Scheme based on CCNR, 1996: edited by Via Donau
2. Cooperation with WANDA

Expected results of WANDA project:

- Ship Waste Management Concepts
- Implementation concepts and results of pilot action in the frame of WANDA on the Upper and Lower Danube focus on: ship borne waste!
- Financing Model for oily and greasy ship waste on the Danube
- Coordinated Joint Action Plan including follow up activities and possible funding sources
2. Cooperation with WANDA

Common interests of the DC Member States:

• Network of facilities & infrastructure development
  - Upper Danube Region / Schengen Area (DE, AT, SK, HU)
  - Middle Danube Region (HR, RS)
  - Lower Danube Region / new EU-member states (BG, RO)
  - Lower Danube Region / Danube Delta (RO, MD, UA)

  a) Stationary waste reception facilities (…green terminal…)
  b) Mobile collection service

• Principles for the financing-related part of national concepts:
  - Polluter pays
  - Indirect payment
2. Cooperation with WANDA

Common interests of the DC Member States:

- Involving and providing information to countries not listed among members of WANDA and Non-EU-member states.
- Discussions regarding future processes of integration.
- Adaptation of the DC Recommendation in accordance with results of WANDA project.

Option:
Legal and administrative preparation of the international treaty/convention regarding ship waste management along the Danube!
3. WANDA General Information

Basic facts

Programm:

Priority 2: Protection and Improvement of Environment

Measure 2.2: Improve prevention of environmental risks

Partner

9 Institution out 7 countries

Duration

04/2009 – 03/2012

Total budget

1.667.240 Mio. EURO

EU Funding rate: 85%

Information provided by Mr. Harald Beutl
WANDA Project manager, Via Donau
3. WANDA General Information Project Partner

WANDA Project Region

Information provided by Mr. Harald Beutl
WANDA Project manager, Via Donau
3. WANDA General Information
Project Organization

WANDA is structured in 6 working packages!

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Information provided by Mr. Harald Beutl
WANDA Project manager, Via Donau
3. WANDA General Information
Project Map

© via donau

Pilot activities  National ship waste concept  Finansing model

Information provided by Mr. Harald Beutl
WANDA Project manager, Via Donau
3. WANDA General Information

Communication and involvement of stakeholders and the public from the beginning in line to general guidelines of the JS!

www.wandaproject.eu

- Production of Flyers in all PPs languages
- Newsletters are produced periodically
- Press Releases on demand

- about 1000 visits/months
- Wanda Internet Platform
- Stakeholders Database

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Joint Statement Follow Up Meeting `11

Information provided by Mr. Harald Beutl
WANDA Project manager, Via Donau
4. Outcome of the DC Expert WG “Ship Waste Collection”

- Leaders of Wanda Project Packages – representatives of via donau, KTI and APDM from Austria, Hungary and Romania have participated on the meeting DC Expert WG “Ship Waste Collection” of on 24-25 February 2011 and presented all activities from 2010.

- Outputs 2010 of different WANDA WP are completely adopted as a good base for activities 2011/2012 in common interests of all DC Member States.

- Legal framework regarding oily and greasy ship waste disposal system has detailed discussed and interpreted from national authorities and experts; staying some open legal questions-”transport” of waste beyond borders!
4. Outcome of the DC Expert WG “Ship Waste Collection”

- Principals for a Financing Model have been identified:
  - encourage the prevention of ship waste
  - split the disposal costs according to the Polluter Pay Principle
  - follow the principle of Indirect Financing

- Progress on the elaboration of the financial models: final solution has to be applicable for the all Danube on the context of the own national condition

- Representative of Germany has presented the Financing Model of CCNR regarding CDNI Convention( Charge on gas oil)) which came into force on 1.January 2011 and already has implemented along the German part of the Danube!
4. Outcome of the DC Expert WG “Ship Waste Collection”

- Adoption of the **Marking System for some kind of the ship borne waste** as a first step for future international waste symbolic along the Danube!

**WASTE PAPER, PLASTIC PACKAGING, METAL PACKAGING, CLEAR GLASS, COLOURED GLASS AND REZIDUALS (non hazardous):**

- Altpapier
  - Макулатура
  - Maculature

- Kunststoffverpackungen
  - Упаковки из синтетических материалов
  - Emballages en matières synthétiques

- Metallverpackungen
  - Металлические упаковки
  - Emballages métalliques

- Weissglas
  - Белое стекло
  - Verrre blanc

- Buntglas
  - Цветное стекло
  - Verrre coloré

- Restmüll
  - Новые отходы
  - Autres déchets
5. Recommendations and Conclusions of the DC expert meeting on February 24-25, 2011 and next steps

- Strong support to WANDA project on 2011/2012

- Preparation and development of different financing models for the Danube - WANDA Financing Model:

  Study must describe essential aspects: evaluation of the legal framework, calculation method for determining the size of payments, modality of indirect payment and control mechanisms, administrative bodies, implementation concept for the financing models; Focus on: collection, storage and disposal of oily and greasy ship waste!
5. Recommendations and Conclusions of the DC expert meeting on February 24-25, 2011 and next steps

- Discussions regarding future processes of ship waste management integration on the Danube

Aim: Legal and administrative preparation of the international treaty/ convention regarding ship waste management in the Danube!

- Adaptation of the DC Recommendation in accordance with the concrete results of WANDA project, as a bases of a possible treaty!
5. Recommendations and Conclusions of the DC expert meeting on February 24-25, 2011 and next steps

Follow-up tasks and time frame:

- **September 2011 (responsible: Germany and DC)**
  Preparation of similarity and difference of CDNI – CCNR Strasbourg Waste Convention and DC Recommendation on collection of waste caused by vessels on the Danube

- **October 2011 (responsible: WANDA)**
  Presentation of the different financing models of collection, storage and disposal of oily and greasy ship waste applicable for the Danube on the next Technical WG of the DC

- **February 2012 (responsible: DC)**
  Proposal for disposal of waste caused by cargo (Residual charges, Washing Water and Slops)

- **2012**: Identify the follow-up projects related to the WANDA!
Thank you for your attention!

All presentations relating to the Ship Waste Management along the Danube: www.danubecommission.org
2. Infrastructure - Fairwayparameters

Horst Schindler
Danube Commission, Budapest
Decisions of the DC:

- CD/SES 18/22-1 (1960)
- CD/SES 20/27 (1962)
- CD/SES 20/54 (1962)
Minimum Fairway depth

freeflowing sections

CD/SES 20/54 (1962)

backwater sections

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some possible interests of 1962

- Navigation
- Floodprotection
- Energy production
- drinking water, irrigation
Today’s Interests

- Navigation
- Floodprotection
- Energy Production
- Drinking Water
- Irrigation

- Ecology
- Pleasureboats
- Recreation
- Fishing
- Residents
- Tourism
- Culture
- Politics, …
Future Parameters

Recommendations of the DC

AGN

EUSDR

Navigation Sector

Ecology

other calls

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Excursus

Physical laws

*Why a ship made of steel is floating?*
Archimedes’ principle

- Buoyancy is equal to the weight of the displaced water (Displacement)
- Displacement = Length x Width x Draught x Solidity
- Displacement – Vessel’s Mass = Load Capacity
additional physical laws

- Drag of a vessel is proportional to the square of velocity
double speed = fourfold drag

- Power needed is equal to the cube of velocity
double speed = eightfold power
Consequences due to Physics

- preferably large measurements (dimensions) (Length and Width modular variable – Vessel Formations)
- preferably low velocities
- Today’s vessels are already adapted to our rivers
- nostrums like „lightships“, „shallowships“ or „speedboats“ are against Nature
End of Excursus
Minimum Fairwaydepth

Gauging station Bezdan
km1425+590
survey performed 2008.

Muskatirovic, Schindler, 2011
some Definitions

- **Draught** (v. vessel = 0)
- **Squat** (v. vessel > 0)
- **Underkeel clearance**
- **Vessel width**
- **Dive-depth**
- **Fairway width**
- **Fairway depth**
Minimum Fairway depth

Gauging station Bezdan
km 1425 + 590
survey performed 2008.

Muskatirovich, Schindler, 2011
possible Solution?

Recommendations of the DC

common effort

Navigation Sector

AGN

Ecology

EUSDR

other calls
Thank you for your attention

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