

Working Group on Rivers

Lenka Tajmrová
Pavel Obrdlík

An outline of a proposal
of a guidance document for the WG



Working Group on Rivers (1)

- Initiative of EC - DG TREN and DG ENV
 - Mr. Hodovsky (WELL Consulting) delegated by Czech MoT – expert support – solving conflicts of IWT and ENV
- 1st meeting – 19.2.2009 in Brussels
- Objective: elaboration of a guidance (2010)
 - Explaining relevant law and guidance documents with attention to IWT
 - How to integrate the environmental aspects in the planning process
 - Specific guidance regarding mitigatory and compensatory measures
 - Achieving WIN-WIN solutions

Working Group on Rivers (2)

- 2nd meeting – 2.10.2009 in Brussels
 - Discussion about concrete solutions
- Workshops „in situ“ were planned – with local stakeholders, experts and authorities related to a specific river basin
- 1st workshop (Elbe bottlenecks) – 06/2009 was NOT held due to conflicts between MoT and MoENV



WG Rivers x PLATINA

- WG is **not competing** with PLATINA
- Incorporate work of others at EU level, i. g.:
 - Joint Statement (Danube)
 - PLATINA Project
 - PIANC: Working With Nature
 - Principles and goals on relevant DIR
- A proposal how to approach the guidance...

Outline of a proposal of the guidance document for the WG

The presented outline of the guidance

- was **drawn up by WELL Consulting** for The Czech Ministry of Transport
- was drafted with a **special regard to the Elbe River** and problems in the Czech Republic
- has **not** been **approved** by the WG on rivers
- is **not** quite **finished** (only thesis at present)

-> Any comments to the outline are welcome

(you can influence the document before it is presented to the WG)

by mail: guidance@wellcon.cz

Outline of a proposal of the guidance document for the WG

Contents of the outline

- **classification of navigable watercourses**
- **list of actions** (i.e. possible projects of IWT infrastructure maintenance or development)
- assessment of **feasibility (suitability and effectiveness) of the actions** on individual types of watercourses
- **list of habitats and species** potentially affected by individual actions
- **list of measures** to help nature
- assessment of **suitability of the measures** for individual combinations of action vs. affected habitat

Outline of a proposal of the guidance document for the WG

classification of navigable rivers with regard to IWT needs

- particular river reaches are suitable for ships of a certain size (i.e. for a certain waterway class)
- different actions are needed/are suitable for maintenance or development of IWT in different river reaches
- the effects of individual actions differ in different river reaches (the reaches differ both in abiotic and biotic conditions)

classification needed to make any general recommendations
(!BUT: Every river reach is different – case by case approach!)

classification should be **based on abiotic parameters**
(channel dimensions, flow regime, valley shape, slope, substrate character, ...)

Outline of a proposal of the guidance document for the WG

list of actions (projects of IWT infras. maintenance/development)

dredging, stabilization structures, concentration structures (groynes),
weirs with locks, canals



assessment of feasibility of the actions on types of watercourses

tables showing **what types of action are feasible**

(practicable, suitable, effective)

- from the point of view of **navigation**
- from the point of view of **nature protection**

next slide

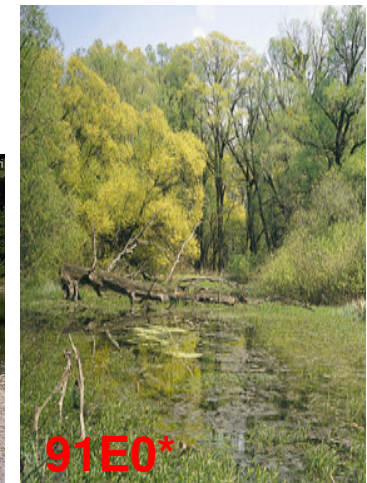
Action		Type of watercourse							
	Bottom substrate	coarse-grain				fine-grain			
	Slope	2-0.5 %		<0.5 %		2-0.5 %		<0.5 %	
	Depth	<1.8	1.8-2.4	<1.8	1.8-2.4	<1.8	1.8-2.4	<1.8	1.8-2.4
Maintenance of waterways	Cleaning river-beds (regular dredging)	•	•	•	•	•	•	•	•
Modification of fairway	Bottom dredging			○	○			•	•
	Fairway widening	•	•	•	•	•	•	•	•
Structures not classed as lateral barriers	Concentration structures			•	•			•	•
	Stabilisation structures	•	•	•	•	•	•	•	•
	Increasing bridge underpass height	•	•	•	•	•	•	•	•
Lateral structures	Weirs with locks	•	•	○	○	•	•	○	○
Ship canals	Canal outside the river network	•	•	•	•	•	•	•	•
	Canal in the existing river network			•	•			•	•
Organisational operative modifications		•	•	•	•	•	•	•	•

action not feasible
 action inappropriate
 action appropriate to nature protection
 ○ action not effective
• action effective for IWT

Outline of a proposal of the guidance document for the WG

list of habitats and species potentially affected by actions

- decide which habitats and species (Habitat Directive, Birds Directive) can be affected by the actions
- what are the concrete risks
- habitats
 - aquatic
 - transitional
 - terrestrial



Salmo salar



Castor fiber



Unio crassus



Alcedo atthis

Outline of a proposal of the guidance document for the WG

list of measures to help nature (proactive, mitigation, compensatory)

- Plantings of tree and shrub floodplain vegetation
- Beach forming (use of autochthonous material from dredging)
- Articulation of the bank line with shallow inlets
- Modification of groynes (by-passes, ...)
- Improving bottom stability by changing grain size
- Development of (regularly flooded) side branches
- Development of blind branches or pools in the floodplain
- Development of waterlogged areas
- Artificial flooding
- ...

Outline of a proposal of the guidance document for the WG

assessment of suitability of the measures for ind. combinations of action vs. affected habitat

Action	Habitat code	3150	3130	3270	91E0 *	6410	91F0
Maintenance of waterways	Cleaning river-beds (regular dredging done from a boat)	5,6					
Modification of fairway	Bottom dredging	5,6	2,5,6	2,3-7		11	11
	Fairway widening		2,5,6	2, 3,5-7,10			
Structures not classed as lateral barriers	Concentration structures	3,4	2,3,4	2, 3,5-7,10			
	Fortification and stabilisation structures	1,10	2,10	3,5-7,10	11	11	11
Lateral structures	Weirs with locks	1,2,5-9	2,5	2, 3,5-7,10	1,11	1,11	1,11
Ship canals	Canal outside river network		5,6	5,6			
	Canal in existing river network	1,5-9	3,5	3,5,6	1,11	1,11	1,11
Construction of ports and development of port infrastructure		5,6,8	5,6	3	1,11	1,11	

1 - Plantings, 2 - Bank management, 3 - Articulation of the bank line with shallow inlets, 4 - Modification of groynes, 5 - Development of blind branches, 6 - Development of side branches, 7 - Development of regularly flooded side branches, 8 - Development of small lakes in the river flood-plain, 9 - Development of waterlogged areas, 10 - Improving bottom stability by changing grain size, 11 - Artificial flooding

Thank you for your attention



www.wellcon.cz

