Task 5.3.2: Contribution to a Manual on Good Practices in Sustainable Waterway Planning



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### Manual objectives

Illustrate the Joint Statement with its principles & criteria Inform about river ecology and waterway management Present new legal framework conditions for river management Present new approaches in integrated planning Provide a general guidance for integrated planning

Examples ecology-oriented waterway and river bed engineering



#### **Preparation of the Manual**



#### <u>Steps</u>

Assessment of the status quo in IWT planning Identification of examples of best practise planning Identification of the concrete needs for better planning Drafting the Manual in 2009

**Commenting**: Discussion of the draft Manual at 2 stakeholder workshops and interdisciplinary dialogue on concrete examples

Autumn 2009: Finalisation and dissemination of the Manual <u>2011</u>: Update of the Manual: experience with application.

Preparation of the Manual -Zagreb Working Groups results

#### 1. Target groups

+ IWT Planners

+ Beneficiaries (various relevant government bodies, competent national and international stakeholders, experts and the EC)

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#### 2. Manual contents

+ Suggested structure and subjects meet expectations & needs
+ Tool to find a well coordinated and balanced project result
+ Follow the JS and a "red line" of process and main themes
+ Add an exclusive list of "good practise" examples
+ A lean and living document (practical annex) to be translated
+ Links, contacts.

## Draft structure of the Manual

- Basics on river ecology and legal requirements
- The *Joint Statement* and similar planning concepts
- Organisational needs framework conditions
- Practical steps to approach and achieve integrated planning
- Practical examples experiences gained in IWT projects





### Good practice examples



EU-WFD - CIS Guidance on Hydro-morphology 2006: Good practise in managing ecological impacts ... – Case Studies. New EU guidances on estuaries and soon on rivers. **Rhine** (CCR/ICPR): Introduction of new best practice measures to improve the water body structure (side-arms, banks, fairway structures, fish passages etc.). **German** guidance docs. for coordinated *EIA processes in IWT*. Ecological re-orientation of federal waterway management. PIANC guidelines (2003-2008: e.g. Working with Nature) **USA** (US ACE): New structures to reduce or eliminate dredging maintenance requirements. Innovative dredging equipment and processes. etc.

# New inputs to IWT plans from environmental side



## WWF Danube waterway study (2002)

JS – NGO list of important Danube sites (2007)

ICPDR, BOKU, IAD 2008: Visionary reference conditions for the Lower Danube (ISPA II project) Table 1: Important Bird Areas potentially affected by the TINA transport network in EU accession countries. (compiled from BirdLife International 2001)

TINA	Country	IBA	IBA	Inner	Outer	Compare WWF
Corridor	,	Important Bird Area	Code	Water	Water	Waterw ay
*		(English Name)		-way	-way	Transport study
		()		**	**	chapter no.
	Czech	Confluence of Morava	12	x	x	A 3 4 1
1	Republic			~	â	
VI	rispastie	Poodri	14	(x)	(x)	A.3.4.1.
	Hungary	Moson Plain	1	(x)	(x)	A.3.5.
	,	Danube between Gönyü	16	x	X	A.3.6.
		and Szob				
		Danube bend	17	х	х	A.3.6.
VII/V		Gemenc	10	х	х	A.3.7.
VII/V		Béda-Karapancsa	9	х	х	A.3.7.
VII	Bulgaria	Orsoya fish ponds	6		Х	
VII		Ibisha island	7		х	
VII		Island near Gomi Tzibar	8	х	Х	
VII		Belene island complex	17	х	х	A.3.9.
VII		Mechka fish ponds	24		х	
VII		Stenata	31		х	
VII		Pozharevo island	32		х	
VII		Srebarna lake	33		х	A.1.3.
VII	Romania	Iron Gate reservoir	32	х	х	
VII		Mehedinti fish ponds -	34	х	х	
		Gruia				
VII		Ciocanesti fish farm	39		х	
VII		Little Braila island	43	х	х	
VII		Parches-Somova wetland	2	х	х	
VII		Danube delta	1	х	х	A.1.3., A.2.1.1.2.4.
IV	Romania	Lake Tasaul	6	х	х	

\* TINA Corridors:

IV (Berlin/Nümberg - Praha - Budapest - Constanta/Thessaloniki/Istanbul) V (Velence - Trieste/Koper - Ljubljana - Budapest - Ushgorod - Lvov - Kiev VI (Gdansk- Warsaw - Zilina) VII (Danube)



### **Draft Manual Structure**

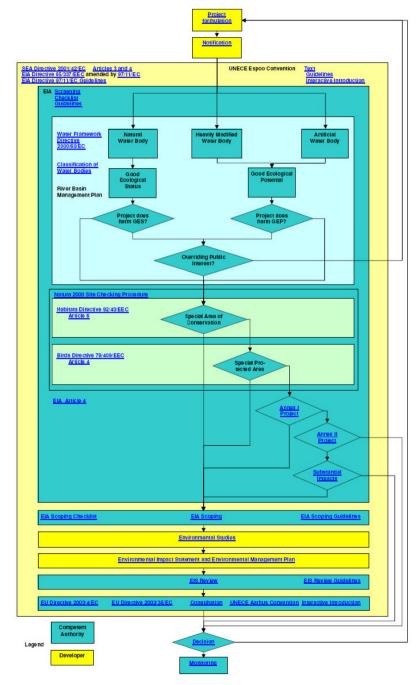
Basics of river ecology and legal requirements

Concise information on important planning guidances

Illustration of key steps securing successful planning (from IWT policy planning over expert and stakeholder involvement to post-project monitoring)

A concrete Road Map for quick overview

Illustrating examples of measures in- and outside the fairway Useful links INLAND WATERWAY DEVELOPMENT EUROPEAN ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE WITH RESPECT TO THE EUROPEAN WATER FRAMEWORK, BIRDS AND HABITATS DIRECTIVES





Environmental Impact Assessment (SEA/EIA-D) Nature Impact Assessment (BH-D)

WFD assessment - Art. 4 (7)

What is needed from IWT projects to meet these requirements? How to achieve an efficient and secure planning result?

### Preparing the practical planning



Pre-conditions:

Waterway policy

Waterway development programme (NAP)

Waterway management capacities

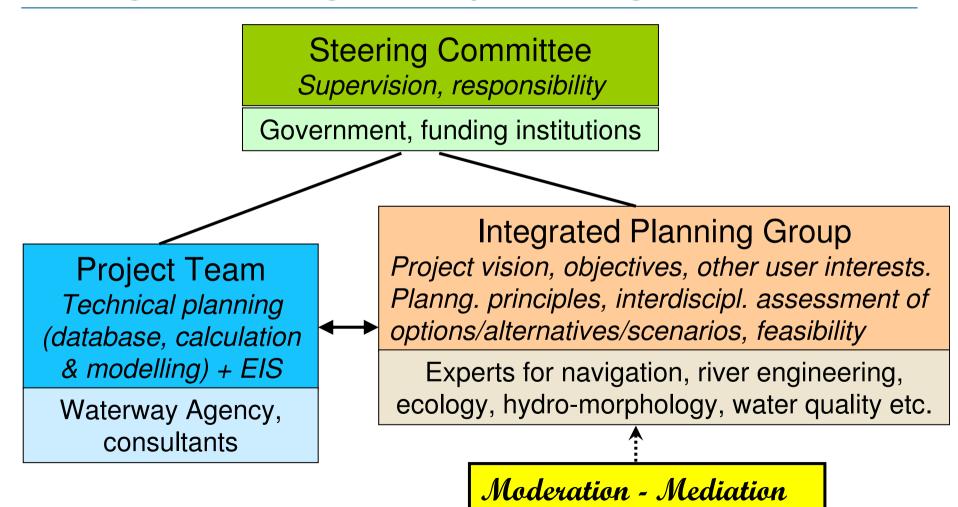
Specify integrated planning

Relevant issues – key stakeholders (local – foreign)

Project goals – planning objectives

Working rules – operational capacities

# Responsibilites and tasks during the integrated planning



## Road Map for integrated

### planning

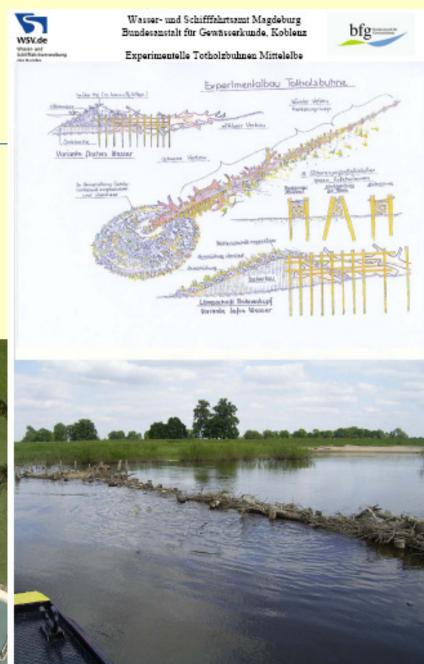
Task 0. Prepare the planning process	Agree on mandate and working rules of IPG			
Task 1. Establish interdisciplinary planning team	1.1. Secure quality and efficiency of team work			
	1.2. Review the existing problems/pressures of the project area			
Task 2. Define joint Planning Objectives	2.1. Develop and agree on Specific Planning Principles/Guidelines			
Task 3. Set-up a transparent planning process				
Task 4. Define and ensure the prerequisites and goals of IWT as well as river/floodplain	4.1. Needs and goals for navigation/IWT			
ecological integrity	4.2. Needs and goals for ecological integrity			
Task 5. Assess if the IWT project has a basin wide/transboundary impact				
Task 6. Respect the Danube RBM Plan 2009	Task 6.1. Ensure requirements of Article 4(7) WFD			
	Task 6.2. Seek to avoid or minimise the impacts of structural/ hydraulic engineering interventions			
Task 7. Use of best practice measures to improve navigation	7.1. Assure awareness of IPG members about Good Practises in managing rivers and waterwavs			
Task 8. Ensure the comparability of alternatives and assess the feasibility of a plan and/or project	8.1. Identify and examine technical options			
	8.2. Develop alternatives			
	8.3. Compare variants			
	8.4. Define the needs for further local examination and/or testing			
	<ol> <li>8.5. Carry out a priority ranking of possible measures (environment, navigation, finances)</li> <li>8.6. Assess overall feasibility (technical, ecological, financial) of agreed solutions</li> </ol>			

## **Balatina**

Ecological fairway management

#### **Best Practice – Good Practice**





#### JS Criteria for river engineering



The designers of technical measures should apply:

- Case-by-case approach
- Working with nature
- Integrated design (hydraulics, morphology and ecology)
- Adaptive form of measures
- Use of restoration potential
- Ensure no worsening of flood water levels.

JS - Annex: Examples of possible measures



# Road Map for integrated planning

taken into account
Task 10. Inform and consult the international
river commissions
Task 11. Ensure flexible funding conditions to enable
integrated planning, adaptive implementation and monitoring
Task 12. Monitor the effects of measures
and – if relevant- adapt them

Task 9. Ensure that effects of climate change are

Task 13. Conclude the process (present and adopt results)

Phase II of project preparation

Preparation and completion of required documents for the EIA process **Balatina** 

Execution of the EIA process and granting of the environmental\_permits

Project implementation

Execute the monitoring (prior, during and after execution of works)

Execution of project works

Refining of works

# Next steps in the practical planning – Road Map II



<u>Communicate</u> agreed results (e.g. formal adoption, publication) Transfer results into detail planning / submission of EIS

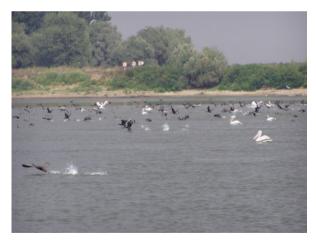
Execute EIA process incl. public hearings and information

Receive all required permits

Assure funding

Start monitoring

Execute (adaptive) works



Assure post-project activities (corrective actions, monitoring).

## Your comments on the draft Manual?



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