



platform for the implementation of NAIADES

# Report about the first Training Workshop on integrated IWT Planning (9-10 June 2009 in Zagreb)

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## PART A INTRODUCTION

### A.1 Background of the training workshop

Work Package 5 of the PLATINA deals with the **infrastructure** of the trans-European waterway networks. Within this work package, ICPDR (in cooperation with via donau, Boku University Vienna and INE) is coordinating in **Sub-work Package 5.3 Interdisciplinary dialogue on sustainable waterway development** three tasks:

- A *study on the hydro-morphological alterations* on the Danube (currently being finalised by BOKU; preliminary result presented in this workshop);
- A *contribution to a Manual on integrated waterway project planning* (a draft document was presented and discussed at the Zagreb workshop);
- *Three training workshops* for relevant IWT stakeholders about good practise examples that can illustrate and explain the Principles and Criteria of the *Joint Statement* (the first workshops to be executed on 9-10 June in Zagreb; the 2nd in September 2009, the 3rd in 2011 to assess progress and experience made).

These tasks are a follow up of the process that led to the **Joint Statement on planning principles for IWT and environmental protection** (2007). Through the PLATINA activities, the SWP 5.3 project partners aim to illustrate and discuss good practise in integrated planning of IWT infrastructure projects by involving from the Danube basin the following types of participants:

- experts from the national *transport* authority (waterway development section);
- experts from the national *environment* authority (section dealing with the environment assessment of waterway development and maintenance projects);
- experts from the national waterway institution which deal with maintenance and new development projects on waterways.
- representatives from *international governmental and non-governmental institutions* from both the navigation and environmental sectors, including ICPDR, ISRBC (Sava Commission), Danube Commission and the European Commission.

### A.2 Organisation and objectives of the workshop

The workshop was organised by ICPDR together with the ISRBC as a very supportive local host of the workshop and promoter of a waterway project. Venue was a hotel in Zagreb which also provided accommodation and catering.

As can be seen from the programme ([Annex 1](#)), the workshop focused on presenting and discussing international examples of **good practice in IWT project planning** (integrated planning and innovative measures to benefit both waterway use and ecology) as well as on the planned IWT development on the Sava.

Two Working Groups were asked to assess and technically comment on the first draft PLATINA Manual structure which was circulated to participants prior to the workshop.

The results of the workshop will be disseminated amongst all participants and used for the preparation of the 2nd workshop in September.

## PART B WORKSHOP RESULTS

### B.1 Main results of the workshop

The workshop was executed as planned and chaired by Philip Weller, Executive Secretary of the ICPDR. The workshop was started with a series of key notes and technical presentations, introducing and illustrating the framework conditions and practical experiences with integrated planning of waterway projects:

Welcome words were given by Mr **Dejan Komatina**, Executive Secretary of the ISRBC. He reminded that the Sava is part of the European inland waterway network and has a high environmental value and flood retention potential. Consequently, the *Framework Agreement on the Sava River Basin* has an integrative nature and makes the Sava Commission responsible for both the establishment of the international regime of navigation on the Sava river and the establishment of sustainable water management in the Sava river basin. The ISRBC cooperation is focusing also on the PLATINA Project itself, as a follow-up to their efforts to support the implementation of the *Joint Statement*. This Workshop is also considered an important opportunity to present and discuss the planned Sava Inland Waterway Development Project.

In his introductory statement, Mr **Philip Weller** provided some information about the PLATINA project, the Joint Statement and the workshop objectives.

Mr **Cesare Bernabei** (DG TREN) underlined that the *Joint Statement* is a useful guidance on how to reconcile inland waterway development and environmental protection. The EC supports the JS which does not add, by its nature and content, any further legal requirements to the existing EU environmental legal framework. It rather suggests certain useful principles on how to apply the existing legal framework on river planning and river engineering with the view to facilitate inland waterway transport in the Danube area taking into account the protection of the riverine environment. Similarly, the works of PLATINA are of an advisory nature. A prerequisite for EU funding includes the full respect of the EU environmental Community acquis.

#### B.1.1 Workshop presentations

Mr **Helmut Habersack** from BOKU university in Vienna presented the first results of their PLATINA SWP 5.3 **Study on hydromorphological alterations on the Danube**. He explained that – after flood protection and hydropower generation – navigation is one of the key drivers exerting – often combined - ecological pressures on the river. Their assessment of alterations was using available literature and done on 3 scales (Danube basin, river section, river location). Results include a “Danube Catalogue” (Access database), info sheets presenting key illustrations and key findings at the 3 scales. The ICPDR’s *Joint Danube Survey 2* has shown that the upper Danube is heavily altered and the lower Danube largely intact. Both sections and the delta, however, are subject to river bed degradation processes. Impacts of navigation at the Upper Danube are significant, those at the Middle Danube are quite moderate to considerable while impacts at the Lower Danube are marginal but this situation might



change within several years depending on the selected measures to improve navigation. Habersack underlines that hydromorphology is not only an ecological issue but also an essential aspect for navigation. He concluded i.a. that in the upper and middle reaches river restoration and the improvement of navigation should be aimed, while at the Lower Danube preservation of morphodynamics in combination with the improvement of navigation are recommended. This can be achieved when applying the integrated planning approach, as stressed in the Joint Statement.

Mrs **Jan Brooke** presented the new PIANC position paper “**Working with Nature**” (2008) which aims to be a practical framework for sustainable navigation infrastructure development. This requires a shift in philosophy from ‘control’ to ‘management: In the current approach design exists first; then the EIA is necessarily about mitigation or damage limitation and the whole process is thus not sustainable. The new concept aims at achieving the project objectives in an ecosystem context (win-win solutions) rather than assessing consequences of a pre-defined design that is simply minimising ecological harm. On a practical level this means to revise the order (first understand the environment and engage other stakeholders before doing the design. The PIANC position is that **Working with Nature** is essential and rewarding to future, sustainable port and navigation development.

**Marieke van Nood** from DG Environment illustrated the EU legal obligations (Water Framework Directive, Habitat Directive) and related guidances (on the designation of Heavily Modified Water Bodies, the conditions to apply exemptions for certain river uses; impact assessment steps). The EC will check if the new measures are consistent with the RBM Plans 2009 and with WFD Art. 4.7. Planners should early look at suggestions for supplementary measures (application of the “no net loss principle”, introduction of sedimentary transport management approach, identification of obsolete infrastructures). Existing good examples of restoration measures should be used for new waterway projects. Similar to the existing *European expert group on Estuaries* a new *European expert group on rivers* started to work in February 2009 and will produce a new guidance in 2010.

**Markus Simoner** (via donau) presented the **Austrian inland navigation policy**: The new *Austrian Action Plan Danube Navigation* implements the NAIADES policy and aims at integrated measures that maintain and restore the Danube as a natural living space and habitat as well as a European transport axis. **Robert Tögel** then informed about the **Integrated River Engineering Project on the Danube East of Vienna**: This addresses the continued river bed degradation and aims at restoring the ecological links with and the functions for the adjacent national park “Danube Floodplains”. Along the Danube transport corridor there was a huge increase in road transport but only a modest increase on the waterway. This shall be changed by increasing the navigable depth by means of the Integrated River Engineering Project. Tögel explained the comprehensive integrated planning process where multi-disciplinary expert groups developed over more than 2 years a jointly agreed result (improving river ecology and the fairway) that replaced the need for measures to minimize the impacts on nature. Pilot projects are already executed, the EIA procedure is expected to soon end. The planning process and the designed restoration measures were already honored by the EU and in the *Joint Statement* as best practice example.

**Jan Brooke** (Environmental Advisor on behalf of **Katherine Harris**, Environment Manager at the PLA Port of London Authority) presented **Maintenance Dredging on**

**the Thames: a decision support framework.** Brooke explained that in the past ports did not care about environment and stakeholder communication which raised suspicions. This was changed in order to meet the PLA's environmental responsibilities and achieve operating the Port of London in a safe, efficient and cost-effective way. Since 2001, the *Dredging Liaison Group* with its diverse membership became an open forum to discuss ongoing and proposed maintenance and dredging operations on the tidal Thames. An electronic *Dredging Spatial Information System* (DSIS) allows sharing information and easing decision-making. A new *Conservation Management Framework* (CMF) supports a similar process on nature conservation issues.

**Mr Gerd Karreis** presented the first German example, the **Fairway management in view of ecology by the Main waterway authority**. He first explained that since 1979 the development of waterways became more and more „ecological“. The Main river waterway with its 20 mio. tons of freight per year has fairway requirements that must be compatible with environmental law. Through the integrated planning process, ecology-supportive fairway structures (mainly nature-orientated banks and restored floodplains) were successfully developed and are regularly monitored. Waterway management became easier to communicate in the public, after ecological aspects were included.

**Mr Klaus Margraf-Maué** (NABU) introduced the **Living Rhine projects** which also focused on measures outside the fairway. The Rhine is both the largest inland waterway in Europe (with up to 180 mio t/year) and an outstanding river habitat connecting rivers and wetlands between the Alps and the North Sea. Its loss of natural hydro-morphological structures and dynamics triggered two consecutive projects (2003-2010) that support the Rhine development policies: 15 local projects from the French to the Dutch border and innovative cooperations between the environment and transport interest groups (joint advisory boards of NGO and government experts) were the first milestones. Concrete results are the removal of various bank protections, the reconstruction of groins and the restoration of side-channels. They were financed and executed by federal and local administrations as well as NGOs. A communication strategy secured wide public awareness and political support.

In the last presentation, **Mr Alexander Zinke** (ICPDR) introduced the **draft PLATINA Manual on integrated planning**. This document, circulated to all participants already prior to the workshop, aims at illustrating the Joint Statement with its principles and criteria and at providing a general guidance for integrated planning. Following an assessment of existing guidances and good practise examples and of the actual needs for the manual, the draft document is to be discussed and commented during two PLATINA expert workshops in 2009. The manual shall be published in November 2009 and its application reviewed in a third workshop in spring 2011. The proposed structure includes various background information and an illustrated list of practical steps (road map) to succeed with the planning process. The document will also present good examples of measures in- and outside the fairway.

All presentations are available on internet (see <http://www.icpdr.org/icpdr-pages/navigation.htm> ).

Each presentation was followed by a short round of questions.



A longer **discussion** was about the Austrian project: The rebuilding of groins shall improve sediment dynamics and are designed as adaptive measures, notably in the pilot projects. For transboundary effects, the Espoo process is the suitable tool. On the cost side it was explained by via donau experts that the ecological measures are more expensive but also a precondition for all fairway measures.

In his **conclusion** from the Day 1 presentations, Mr Weller stressed that the review of hydro-morphology is important and the ICPDR will verify if their WFD Programme of Measures will have to be adjusted. The JS presents the legislation to the properly utilised and the new Manual will become a useful tool linking the good practises with the new IWT projects.

Further technical discussions about these subjects were held in various small groups in the evening in the restaurant.

The last presentations were about the **Rehabilitation and Development of Navigation on the Sava River**. First, **Mr Zeljko Milkovic** (ISRBC) introduced the history and current constraints of navigation on the Sava. The rehabilitation project is based on the Sava Framework Agreement and related transport policies. Starting with feasibility studies (2007-2008) and a multi-functional approach (commercial transport, nautical tourism, environment etc.), works on numerous sites along the 586 km long middle and lower Sava are needed to restore the transport class IV and upgrade the waterway to class Va. Two environmental reports were produced already as a base for the general environmental impact study. Specific environmental recommendations are expected from the upcoming EIA process. The new WFD Sava Basin Analysis (2009) includes a navigation annex. The detail designs are to be funded via IPA (480 km Croatian section) and IPF funds (Serbo-Bosnian section). RIS system will be tendered already in summer 2009 (funded by the 3 states).

**Mr Roberto Zanetti** (Witteveen & Bos consultants) provided further details about the **Sava IWT Transport, Environment and River Engineering Works**: He explained the objectives and approach of the feasibility study, the available and produced technical and environmental data, the proposed types of works (groynes, bunds, bank protection, river bend improvements), a proposed action plan and cost-benefit assessment. A new transport study forecasts 3.5 – 21 mio. tons per year (Sisak to Belgrade). More environmental data (e.g. on the degrading bed morphology, on nature) of the yet largely unregulated river are still needed.

The two presentations were followed by an extended **discussion**: Comments stressed that the JS's integrated planning approach was not met and there are yet no environmental objectives for this IWT project. Just informing stakeholders before the planning and then about the completed design during the EIA phase is insufficient. The ISRBC replied that the feasibility study had a narrow budget to include the EIA study, but it is possible to incorporate the findings of the EIA study within the upcoming detail design phase (co-funded by the EC). The new WFD data and the PLATINA Manual will allow a more balanced approach; the modern ecology-oriented waterway elements shall be considered. As in the RO/BG IWT project in 2008, international expert workshops may prove very useful. So there is still opportunity for integrating the RBMP, Natura 2000, flood protection and other aspects into the planning.

### B.1.2 Working Group results

Main topic of the Working Group discussions were the draft Manual on integrated planning. Objective was to gain comments from the diverse group of participants about the proposed structure and orientation of the Manual.

All participants were splitting up into two working groups which were discussing the same questions:

- Who should be the target group(s) of the Manual?
- What should be the contents of the Manual?

Results were that the **target groups** should be planners and beneficiaries i.e. various relevant government bodies, competent national and international stakeholders, experts and the EC.

As regards the **Manual contents** there was confirmation that the suggested structure and subjects meet the expectations and requirements.

The Manual shall

- help to find a well coordinated and balanced project result that avoids conflicts and meets the EU legal requirements.
- in its wording be close to the JS, it should focus on the “red line” of the planning process and its main themes (also beyond the infrastructure),
- provide information about an exclusive list of “good practise” examples and experiences (on both the planning process and the execution of works but no engineering details)
- be a lean document (with a practical annex) and a living document.
- provide links to information sources and an expert team to be consulted on certain project aspects
- soon be translated in Danube basin languages and disseminated to the target group.

The detail results of the Working Groups are provided in [Annex 3](#).

The short discussion stressed that the Manual should focus on strategic aspects. It is expected that the Manual will be very important for many river users and expert teams, also in the navigation and river commissions.

## B.2 Workshop conclusions

The workshop provided various insights into the framework conditions and practical experiences with integrated planning and the execution of IWT projects. The lively discussion reflected the wide interest that many Danube basin stakeholders have in this subject.

The Working Group results (see [Annex 3](#)) are considered very valuable and will be used for the further development of the Manual.

Mr Weller indicated that there is opportunity to still send written comments about the Manual after the workshop (until 21 August 2009).

The revised manual will be circulated prior to the next workshop on 15-16 September in Ruse/Bulgaria. The Manual will be completed by the end of 2009.



## **PART C**

## **ANNEXES**

- Annex 1    Final Workshop Programme
- Annex 2    List of Participants
- Annex 3    Results of the Workshop Working Groups 1 and 2

## C.1 Annex 1 Final Programme

### SWP 5.3.3 Training Workshop on integrated IWT Planning Final Programme

**Time:** Tuesday 9 June – Wednesday 10 June 2009

**Venue:** Zagreb (Hotel Four Points by Sheraton Panorama)

**Agenda:** **Tuesday 9 June 2009**

- 10:30 Opening by ICPDR (P. Weller) and ISRBC (D. Komatina)
- 10:45 Introduction to workshop background and objectives (P. Weller)
- 11:00 Presentation of Task 5.3.1 Danube Hydro-morphology Study (H. Habersack, BOKU)
- 11:35 The PIANC position: Working with Nature (Jan Brooke)
- 12:00 Good practise examples of IWT projects (integrated planning):
  - EU guidance for waterway project planning meeting the WFD (M. v. Nood, DG-ENV)
  - The planning of the Integrated River Engineering Project east of Vienna (R. Tögel & M. Simoner)
- 13:00 *Lunch break*
- 14:00 Good practise examples of IWT projects (ecology-oriented measures):
  - Thames maintenance dredging using a guided decision framework (J. Brooke on behalf of K. Harris, PLA)
  - Fairway management in view of ecology by the Main waterway authority (G. Karreis, WSV)
  - Measures outside the fairway: the Living Rhine experiences (K. Markgraf-Maué, NABU)
- 16:00 *Coffee break*
- 16:30 Presentation and discussion of the draft Manual on Good Practises in sustainable waterway planning (A. Zinke, ICPDR)
- 17:30 Closing remarks
- 19:00 *Workshop discussion in small groups at “Zlatni Medo” restaurant*

#### **Wednesday 10 June 2009**

- 9:00: The IWT development project of the Sava (Z. Milkovic, ISRBC & R. Zanetti, Witteveen & Bos)
- 10:15 Introduction to Working Groups
- 10:30 Working Groups on integrated planning (Manual content; local needs, benefits)
- 13:00 *Lunch break*
- 14:00 Presentation and discussion of WG results
- 15:30 Conclusions/outlook.