



INTERNATIONAL SAVA RIVER BASIN COMMISSION

Nova Ves 11, 10000 Zagreb, Hrvatska, Tel.: +385 1 488 6960, Fax: +385 1 488 6986

Ref. No.: 3-08-11/3-2-PEG.3  
Zagreb, October 9, 2008

**7th Sava PEG FP Meeting  
REPORT<sup>1</sup>  
Zagreb, Croatia – July 1-2, 2008**

---

<sup>1</sup> PEG FP final – subject to adoption of the Sava Commission

---

## Table of contents

---

### **1. Opening of the meeting**

### **2. Adoption of the Agenda**

### **3. Adoption of the report on the 6<sup>th</sup> PEG FP meeting**

### **4. Information on activities between 6<sup>th</sup> and 7<sup>th</sup> PEG FP meeting**

### **5. Protocols**

5.1. Protocol on flood protection

5.2. Protocol on sediment management

- Presentation of current status of activity and nomination of the task group members

5.3. Other protocols-short information

### **6. Data collection activities**

6.1. 2<sup>nd</sup> assessment of collected data

6.2. Next steps and timeline

### **7. Sava River Basin Analysis**

7.1. Information on hydrology report for the SRBA

7.2. Flood management part of the SRBA

### **8. Flood mapping study preparation**

8.1. Introduction (Secretariat and the USACE representative)

8.2. Status of flood related activities in the Sava countries

- Presentations by the PEG FP members

8.3. Review of available data for the flood mapping study

8.4. Discussion on the project scope

8.5. Conclusions, further steps and timeline

### **9. Any other issues**

9.1. Short information on flood related activities on DRB level

### **List of annexes:**

#### **Annex I.: List of participants**

#### **Annex II.: List of meeting documents and presentations**

---

## Minutes of the meeting

---

### **AD.1 Opening of the meeting**

Mr. Zeljko opened the meeting and welcomed all the participants. He noted that all the Sava countries are represented at the meeting.

Full list of participants is attached to this report as Annex I.

### **AD.2 Adoption of the Agenda**

✚ The PEG FP adopted the agenda of the 7<sup>th</sup> PEG FP meeting as proposed.

(Meeting doc: AD.2 PEG FP7-adopted AGENDA)

### **AD.3 Adoption of the report on the 6<sup>th</sup> PEG FP meeting**

✚ The report on the 6<sup>th</sup> PEG FP meeting has been reviewed and adopted.

(Meeting doc.: PEG FP6 Meeting Report (3-08-1/3-2-PEG.3))

### **AD.4 Information on activities between the 6<sup>th</sup> and the 7<sup>th</sup> PEG FP meeting**

Mr. Zeljko reported on the activities of the Secretariat since the last meeting. He informed the Group that the 10<sup>th</sup> Special Session of the ISRBC was held on the ship on the Sava River in frames of the Sava Day celebration on June 5, 2008. (Meeting doc: AD.4 Excerpts from Draft Report\_X Special Session\_20-06-2008).

He also briefed the group on the course of events concerning the preparation of applications for the South East Europe Transnational Programme. He especially emphasised that the "HMS Sava project" has not been proposed in spite of the fact that the Sava Commission informed the HMSs of the Sava countries on time about the Programme and the submission deadline of 13.06.08.

Mr. Zeljko also informed the Group that the MoU between the ICPDR and the ISRBC was signed as well as about results of the workshop held on June 06 in Belgrade where the Strategy on Implementation of the FASRB and the Sava GIS Strategy were presented to the invited institutions from the Sava countries.

The Group was also informed on the status of nominations of the deputy members to the PEG FP. It was noted that PEG FP deputy member from Slovenia has not yet been nominated.

The nominations are still open for the Ad-hoc HM EG. Each country should nominate two experts: preferably one from the hydro meteorological institute (HMZ) and another from a water authority.

### **AD.5 Protocols**

#### ***5.1 Protocol on flood protection***

Mr. Zeljko distributed the last corrected version of the Protocol on flood protection. The Group analysed thoroughly the comments on the protocol that came from the Slovenian side after the last meeting. Some remarks could have origin in translation.

The chairwoman of the ad hoc Legal expert group Ms. Melita Žižanović-Dakić joined the meeting and briefed the Group on the legislative process of bringing this protocol into force. She also provided the Group a legal view on the proposal and the comments from Slovenia.

- ✚ The comments on the protocol from Slovenia are going to be revised by Mr. Kepa and the responsible ministry until the next PEG FP meeting, taking into account the explanations and comments provided on the Group meeting,
- ✚ No other comments on the protocol came from the Group, so it was concluded that the protocol may, after the revision of Slovenian comments, be put into further procedure,
- ✚ Ms. Žižanović-Dakić will inform the Ad-hoc Legal Expert Group on the development of the protocol and discuss all raised issues on the next L EG meeting to be held on July 03-04
- ✚ The L EG shall also adjust final clause of the Protocol to be in line with other protocols in preparation already reviewed by the L EG.

### ***5.2 Protocol on sediment management – presentation of the current status of activity and nomination of the task group members***

Mr. Zeljko briefed the Group on the status of the preparation of Protocol on sustainable sediment management. He informed that the nomination of the members of the TG on sediment management is in progress.

There were no conclusions on the issue.

### ***5.3 Other protocols – short information***

Mr. Zeljko informed the group about development status of other protocols currently being prepared:

- Protocol on Transboundary Impacts
- Protocol on Emergency Situations
- Protocol on Prevention of Water Pollution caused by Navigation

There were no conclusions on the issue.

## **AD.6 Data collection activities**

### ***6.1 2<sup>nd</sup> assessment of collected data***

The data collected by means of the templates prepared and distributed by the Secretariat have been reviewed. The Chairman expressed his satisfaction by the work already done. Nevertheless, certain deficiencies have been notified. A deep analysis could not be performed due to fact that the most data are submitted at the meeting.

### ***6.2 Next steps and timeline***

- ✚ Slovenia will additionally fill out its data by the 1<sup>st</sup> September,
- ✚ The Secretariat will thereafter prepare a summary information on the collected data and distribute it to the Group,
- ✚ Next assessment of the data shall be performed on the 8th Group meeting

## **AD.7 Sava River Basin Analysis**

### ***7.1 Information on hydrology report for the SRBA***

The Chairman informed the Group on the current status of the proposed project as well as on the procurement procedure requested by the Sava Commission (request for quotations).

The Group took note on the information.

## **7.2 Flood management part of the SRBA**

There were no conclusions or newly agreed steps on the issue.

### **AD. 8 Flood mapping study preparation**

#### **8.1 Introduction (Secretariat and the USACE representative)**

At the beginning of the 2<sup>nd</sup> day session Mr. Zeljko expressed his appreciation with presence of the US representatives (Ms. Litke –Us Embassy and Ms. White-USACE). Thereafter he presented an overview of flood related activities on the Sava river basin level. He also informed the guests about main requirements of the European Flood directive as well as about the initiatives on the Danube river basin level which have a direct impact on the Sava. He also informed the meeting on status of work on collecting available data needed for flood mapping exercise. Findings on data collection status were:

Hydrology

- Collected information on recently prepared hydrologic analyses – synthesis needed

Current status of flood maps in the Sava countries

- Mostly old paper maps – a very few new digital maps

Hydraulics

- Mostly 1-D models used (HEC-RAS and Mike 11)
- Few experiences with automated Flood mapping (GeoRAS)

Basic topographic inputs:

- Collected information on XS on Sava river
- DMR- not clear yet what is available – discussion on appropriate scale needed

At the end of the presentation he mentioned the issues expected to be discussed at the meeting

Ms. Kathleen White from US Army Corps of Engineers, Engineer Research and Development Centre, Cold Regions Research and Engineering Laboratory gave a comprehensive presentation with following main points:

- Lessons learned from Hurricane Katrina
- US Army Corps of Engineers Actions for Change
- Some thoughts on a comprehensive systems approach
- Concepts and issues facing ISRBC
- Positive factors for ISRBC

She stressed the need to:

- develop a framework for *adaptive management* that can be incorporated into projects to allow for flexible decision making in the face of uncertainty
- develop a comprehensive, adaptive, systems approach for *multi-objective planning* that places the highest priority on protection of public health and safety
- include climate change impacts in future analyses

Ms White noted some positive factors for ISRBC such as:

- Complex system but studies well underway
- GIS strategy developed
- Sava floodplains still in existence

She also considers that important issues for the Sava mapping study are:

- Standard and interoperable GIS databases with flexible viewing
- Standard and consistent vertical and horizontal control
- Standard and interoperable hydrologic and hydraulic models

- Processes and methodology that result in consistent, repeatable analytical results
- Nested level of detail possible with adaptive management approach
- Potential for multiple scenario approach (fully built out, climate change)
- Capacity building at agency and consultant level through preparation of models
- Academic involvement in specialized detailed areas
- Public involvement through participation and interactive viewing of model results
- Opportunity to realistically communicate residual risk (e.g., depth, velocity, inundation animation)

## **8.2 Status of flood related activities in the Sava countries -Presentations of the PEG FP members**

The representatives of all the Sava countries presented an overview of flood management in their countries: legal basis, organizational aspect, mapping experiences as well as the most difficult problems in the sector. Special attention in the presentations was given to the flood mapping experiences.

### **8.3 Review of available data for the flood mapping study**

After the presentations all participants discussed the issues:

- of available and needed data for the flood mapping study
- of the scale, resolution and the costs of the input data (DOF, LIDAR etc)
- available x-sections etc.

### **8.4 Discussion on the project scope**

✚ The Group concluded that presently scope of the flood mapping study should include the Sava River and the tributaries to the limits of the backwater influence.

### **8.5 Conclusions, further steps and timeline**

- ✚ The Secretariat will submit (or provide access to) a summary information on the available data for flood mapping to the USACE representatives as soon as it is completely collected from the countries,
- ✚ Further steps and possible assistance to the Sava Commission shall be agreed thereafter by the Secretariat and the USACE.

## **AD.9 Any other issues**

### **9.1 Short information on flood related activities on the DRB level**

The Group was informed on the issues of interest for the ISRBC in submitted document: Report of the Chair of the FP EG to the 6th ICPDR St WG meeting. It was emphasised that a special attention should be given to all actions on the ICPDR level which could have a significant influence on the actions and obligations on the Sava level  
The meeting was closed at 16:00.

The 8<sup>th</sup> PEG FP Meeting is scheduled for 08-10 October 2008.

## Annex I.: List of participants

Full Name:	<b>Mr. Dragan ZELJKO</b>
Email:	<a href="mailto:dzeljko@savacommission.org">dzeljko@savacommission.org</a>
Office Phone:	+ 385 1 4886 968
Office Address:	International Sava River Basin Commission Nova Ves 11 10 000 ZAGREB
Full Name:	<b>Ms Janja ZLATIC-JUGOVIĆ</b>
Email:	<a href="mailto:jzlati@savacommission.org">jzlati@savacommission.org</a>
Office Phone:	+ 385 1 4886 972
Office Address:	International Sava River Basin Commission Nova Ves 11 10 000 ZAGREB
Full Name:	<b>Mr. Slobodan ČUBRILO</b>
Email:	<a href="mailto:info@zavodzavodoprivredu.com">info@zavodzavodoprivredu.com</a>
Office Phone:	+387 55 211 865
Office Address:	Institute for Water Management of Republic Srpska, Bijeljina Office, Milosa Obilica 51 76 300 BIJELJINA
Full Name:	<b>Ms. Vesna TUSIĆ</b>
Email:	<a href="mailto:vtusic@voda.hr">vtusic@voda.hr</a>
Office Phone:	+ 385 1 6307 522
Office Address:	Croatian Waters Ulica grada Vukovara 220 10 000 ZAGREB
Full Name:	<b>Ms. Radovanka PAVLOVIĆ</b>
Email:	<a href="mailto:radovanka.pavlovic@minpolj.sr.gov.yu">radovanka.pavlovic@minpolj.sr.gov.yu</a>
Office Phone:	+381 11 201 33 47
Office Address:	Ministry of Agriculture, Forestry and Water Management of Republic of Serbia, Republic Water Directorate, 2a Bulevar umetnosti 11070 BEOGRAD
Full Name:	<b>Mr. Robert KEPA</b>
Email:	<a href="mailto:robert.kepa@gov.si">robert.kepa@gov.si</a>
Office Phone:	+386 7 391 7628
Office Address:	Ministry of Environment and Spatial Planning Environmental Agency fo the Republic of Slovenia Novi Trg 9 8 000 NOVO MESTO
Full Name:	<b>Ms. Marina BABIĆ-MLADENOVIĆ</b>
Email:	<a href="mailto:marina.babic-mladenovic@jcerni.co.yu">marina.babic-mladenovic@jcerni.co.yu</a>
Office Phone:	+ 381 11 3906 477

Office Address:	Institute for Water Management "Jaroslav Černi" Ul. Jaroslava Černog 80 11226 BEOGRAD, Pinosava
Full Name:	<b>Ms. Kathleen WHITE</b>
Email:	<a href="mailto:Kathleen.D.White@usace.army.mil">Kathleen.D.White@usace.army.mil</a>
Office Phone:	(603) 646-4187
Office Address:	U.S. Army Corps of Engineers Engineer Research and Development Centre Cold Regions Research and Engineering Laboratory 72 Lyme Road, HANOVER, NH, 03755 - 1290
Full Name:	<b>Ms. Sara LITKE</b>
Email:	
Office Phone:	+385 1 661 2200
Office Address:	U.S. Embassy Thomas Jefferson Street 10010 ZAGREB

## Annex II.: List of meeting documents and presentations

### A: Documents

Agenda item	Title (Ref. Nr.)	ENG	HRV	SLO	BIH-BOS	BIH-HRV	BIH-SRP	SRP
AD.1	PEG FP7_invitation_28-05-2008 (3-08-8/1-2-PEG.3)	↓						
AD.2	PEG FP-adopted Agenda-7th meeting (3-08-8/2-2-PEG.3)	↓						
AD.3	PEG FP6 Meeting Report (3-08-1/3-2-PEG.3)	↓						
AD.4	Excerpts from Draft Report_X Special Session_20-06-2008	↓						
AD.5	Draft PROTOKOL o zastiti pred poplavami -22-05-2008-PEG FP6_SLO comments							↓
AD.5	Draft PROTOKOL o zastiti pred poplavami -22-05-2008-PEG FP6- SLO comments_Legalcomments							↓
AD.9.1	Report of the Chair of the FP EG to the 6th ICPDR St WG meeting	↓						

### B: Presentations

Agenda item	Title (Ref. Nr.)	ENG	HRV	SLO	BIH-BOS	BIH-HRV	BIH-SRP	SRP
AD.8	<b>Dragan Zeljko – SC Secretariat</b> Flood mapping study preparation	↓						
	<b>Kathleen D. White - USACE</b> Sava River Flood Risk Management – Considerations	↓						
	<b>Robert Kepa – SLO</b> Predstavitev_bazen_Krško-primer uporabe pravilnika			↓				
	<b>Babić-Mladenović –Pavlović - SER</b> FLOOD_MANAGEMENT_IN_SERBIA	↓						
	<b>Slobodan Čubrilo BiH</b> Flood risk management	↓						
	<b>Vesna Tusić – CRO</b> FLOOD PROTECTION ON THE TERRITORY OF THE REPUBLIC OF CROATIA	↓						