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Zagreb, 15 May 2014

**24<sup>th</sup> Meeting of the Permanent Expert Group for Flood Protection  
REPORT FROM THE MEETING**

Ljubljana, 24-25 April 2014

Venue: Institute for Hydraulic Research, Hajdrihova 28, Ljubljana

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## **I. ATTENDANCE**

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Experts from Slovenia, Croatia and Serbia attended the meeting. Additionally, Mr. Mitja Bricelj, member of the Sava Commission, and Mr. Jure Mlačnik, director of the host institution, also participated at the meeting at specific agenda items.

The list of participants is annexed to this report.

## **II. CHAIRMANSHIP**

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Mr. Dragan Zeljko chaired the meeting.

## **III. ADOPTED AGENDA**

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

- 1.1. *Welcome and opening remarks by the PEG FP Chairman*
- 1.2. *Welcome address by the SI host*
- 1.3. *Adoption of the Agenda*
- 1.4. *Introductory presentation – Opportunities for the FASRB Parties in implementation of the EU Strategy for the Danube Region (M. Bricelj)*

### **2. ISRBC activities between the two PEG FP meetings**

- 2.1. *General presentation on the ISRBC activities*
- 2.2. *Status of projects and activities relevant for work of the PEG FP*
  - Hydrometeorological issues
  - Projects & project proposals

### **3. Overview of the activities related to implementation of the Floods Directive in the Parties to the FASRB**

- 3.1. *Slovenia*
- 3.2. *Croatia*
- 3.3. *Bosnia and Herzegovina*
- 3.4. *Serbia*

### **Special session: Presentation of the host institution - “Hidroinštitut” (J. Mlačnik)**

### **4. Preliminary Flood Risk Assessment for the Sava River Basin**

- Review of the final draft
- Agreement on the closing activities and deadlines

### **5. Development of Flood Risk Management Plan in the Sava River Basin**

- Presentation of the 1<sup>st</sup> draft Program for development of the FRMP in the Sava River Basin
- Detailed discussion on the modes of implementing activities planned by the Program
- Supporting activities and projects (WBIF, USACE support etc.)

### **6. Information on subbasin activities**

- World Bank Drina projects etc.

## 7. Other issues

# IV. DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

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## AD.1. OPENING OF THE MEETING

### 1.1. Welcome and opening remarks by the PEG FP Chairman

Mr. Dragan Zeljko opened the meeting and welcomed the participants. He informed the PEG that members from Bosnia and Herzegovina could not participate at the meeting.

### 1.2. Welcome address by the SI host

Mr. Jure Mlačnik welcomed the participants in the name of the Hidroinštitut, and the PEG FP Chairman, Mr. Dragan Zeljko, thanked the SI host for organising the meeting.

Mr. Luka Štravs welcomed the Group in Ljubljana in the name of the Ministry of Agriculture and the Environment.

### 1.3. Adoption of the Agenda

The Group adopted the proposed agenda of the 24<sup>th</sup> meeting (*Doc.Ref.No: 3-14-7/2-2*), with agenda items presented in Part III of this report.

### 1.4. Introductory presentation – Opportunities for the FASRB Parties in implementation of the EU Strategy for the Danube Region (M. Bricelj)

Mr. Mitja Bricelj, member to the Sava Commission from Republic of Slovenia, emphasized the fact that the Sava Commission is the only international subbasin organisation in Danube region that has the international agreement, and it is the most distinguished project-oriented among similar organisations, where all projects are regional and agreed by the 4 Parties. He stressed that this is an advantage that should be used when applying for international funds.

Mr. Bricelj suggested that PEG FP experts consider preparation of a project proposal in which the EU Member States (SI and HR) would assist non-member (BA and RS) in implementation of the EU legislation. The Group welcomed Mr. Bricelj's proposal and, after discussion, concluded following:

- The PEG FP supports the idea of development of a project proposal aimed to assist Bosnia & Herzegovina and Serbia in preparation of their national flood risk management plans, with support of Croatia and Slovenia (Twinning);
- This proposal will be, in an appropriate form, submitted to the Sava Commission for consideration at its 35<sup>th</sup> session (Ljubljana 1-2 July 2014)
- SI and HR members will check mechanisms of launching the twinning projects before submitting the above initiative.

Mr. Zeljko said that, generally, all materials should be sent to the Sava Commission 4 weeks before its session and that it should be kept in mind during formulation of the proposal.

Mr. Bricelj also stressed that in June 2014 the ISRBC presidency for the next three years shall be taken over by Slovenia.

## AD.2. ISRBC ACTIVITIES BETWEEN THE TWO PEG FP MEETINGS

### 2.1. General presentation on the ISRBC activities

On behalf of the Secretary, Mr. Dejan Komatina, who could not participate in the meeting, Mr. Dragan Zeljko informed the PEG FP on the activities of the Sava Commission since the last, 23<sup>rd</sup> PEG FP meeting. He informed the Group on the most important meetings and events, status of the projects, activities and protocols, publications, and upcoming meetings and events. He particularly emphasized that the 34<sup>th</sup> Session of the Sava Commission was held in Podgorica on 18-19 February, with following main results:

- Endorsement of the **Sava RBM Plan** agreed (at the 5<sup>th</sup> Meeting of the Parties to be held in Zagreb in November 2014);
- **Work Plan** of the Sava Commission for FY 2014 adopted.

More information on other activities and events can be found in presentation (*AD.2.1\_Presentation\_ISRBC\_PEG FP 24.ppt*).

## **2.2. Status of projects and activities relevant for work of the PEG FP**

### Hydrometeorological issues

On behalf of the Chairman of the Ah EG for HM Issues, Mr. Samo Grošelj, who could not participate in the meeting, Mr. Dragan Zeljko presented the recent developments regarding hydro-meteorological issues, as follows:

- *HM Yearbook for the Sava RB* – 2011 issue in preparation (data from FB&H missing)
- *System for exchange of meteorological and hydrological data* – available at the ISRBC web site. Certain issues related to presentation of meteorological data still to be resolved by HMI EG
- *Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin* – Policy paper drafted in the frame of the WMO project “Building Resilience to Disasters in Western Balkans and Turkey”. Representatives of the national hydrometeorological services (and water agency from Sarajevo), together with the representatives of WMO and ISRBC, met in Banja Luka (15-16 April), for the final consideration of the draft paper.
  - ~ The draft is open for comments until the end of April;
  - ~ Proposed signatories of the policy paper are national hydrometeorological services and water agencies, while signing by hydropower companies is still under consideration. Signing is planned for June or September this year.The draft was provided to the PEG FP as the meeting document (*AD.2.2\_Annex V\_Draft Policy v4.1.0.docx*).
- *Meeting with directors of the HMSs of the Sava countries* (11 February, Zagreb)
  - ~ Directors of the HMSs fully supported all related activities of the ISRBC and committed themselves to provide all necessary support in these actions.More information on the conclusions of the meeting with HMSs directors can be found in the document *D.2.2\_Sastanak sa direktorima HMZ-ova\_Nacrt zaključaka.pdf*.

The Chairman also informed the PEG that one component of the WMO project “*Building Resilience to Disasters in Western Balkans and Turkey*” deals with *Flood loss assessment tool* which might be interesting for the PEG. *He stressed that the ISRBC has not been included in this project task but it will ask for an information from the WMO on the issue. As soon as it is received the PEG will be informed.*

### Projects & project proposals

Mr. Zeljko informed the PEG FP on the status of projects and project proposals as follows:

- WATCAP – Guidance notes for different subsectors, as well as the adaptation plan are under finalization.
  - ~ Final presentation of the WATCAP is expected in May-June 2014.
  - ~ Hydrologic model of the Sava River Basin shall be distributed by the Secretariat to the relevant national organizations.
- UNECE/ENVSEC – project proposal has been rejected.
- UNECE CC – project was officially completed in December 2013 and the outcomes, together with the final report were submitted to the UNECE. However, the Secretariat asked the Consultant to make some final adjustments.

- ~ The final, amended reports, input data and the results shall be provided to the PEG FP through FTP site shortly.
- Sustainable Sediment Management – Estimation of a sediment balance for the Sava river basin “BALSES” report prepared (draft was provided as the meeting document – *AD.2.2\_Balses-DraftReport-ver-final draft\_modified.docx*)
  - ~ Report will be available at the ISRBC web site soon;
  - ~ Booklet in all official languages of the ISRBC shall be published in May.
- WBIF – project proposal consisting of two components (1. Flood Risk Management Plan for the Sava River Basin, including Programme of Measures; 2. Flood forecasting and warning system for the Sava River Basin)
  - ~ Submitted in March (11th call for proposals).
  - ~ Proposal got support from the World Bank as the International Financial Institution, as well as from the NIPACs of Bosnia and Herzegovina, Serbia and MontenegroApplication was provided as the meeting document (*AD.5\_ISRBC\_SavaFRMP+FFWS\_WBIF\_round\_11\_2014\_03\_11.xml*).
- USACE – 2<sup>nd</sup> phase of support encompasses continuation of hydrologic and hydraulic modelling, flood forecasting and common H&H modelling platform development, and flood impacts analysis. More information is available in documents (*AD.5\_Sava ToR - March 03 2014.docx*, and *AD.5\_USACE\_support\_2nd\_phase\_Sava ToR\_signed.pdf*).
  - ~ Project proposal is in the final stage of the approval by the US authorities;
  - ~ If the project is approved as expected, the implementation plan of the project will be fine-tuned in cooperation with the USACE experts;
  - ~ There is possibility for project extension towards structural investments. It is still unclear what the propositions for nomination of the activities are. The Secretariat shall inform the countries as soon as a new information is available. *HR expert suggested that USACE may supply methodology for rapid assessment of geotechnical conditions of levees.*

### **AD.3. OVERVIEW OF THE ACTIVITIES RELATED TO IMPLEMENTATION OF THE FLOODS DIRECTIVE IN THE PARTIES TO THE FASRB**

#### **3.1. Slovenia**

Mr. Blažo Đurović presented the activities in the implementation of the EU Floods Directive in Slovenia. PFRA has been completed and APSFR have been identified. Flood maps have been prepared for 38 APSFR. 17 FRM plans shall be prepared at the sub-basin level and later possibly joined into two FRM plans – for the Danube River Basin and for the Adriatic Sea Basin. More information is available in presentation (*AD.3.1\_FD\_Slovenia\_Graz\_mar 2014\_Stravs.ppt*).

#### **3.2. Croatia**

Mr. Darko Barbačić presented the activities in the implementation of the EU Floods Directive in Croatia. PFRA has been completed and APSFR have been identified at the level of settlements. Flood maps are available for some APSFR – provided through recently completed TWINNING project or originating from earlier studies. Flood risk management plan shall be integrated into River Basin Management Plan and it should be completed by the end of 2014. More information is available in presentation (*AD.3.2\_savska\_komisija\_HR.pptx*).

#### **3.3. Bosnia and Herzegovina**

In absence of experts from BA, the Chairman of the PEG FP, Mr. Zeljko presented the activities in the implementation of the EU Floods Directive in Bosnia and Herzegovina. In Federation of B&H, the PFRA and identification of the APSFR have been completed. Flood maps shall be prepared by 2015, and so far maps have been completed for the Una (3 APSFR), Sana (2 APSFR) and the whole main courses of the Bosna and Neretva rivers (Adriatic Sea Basin). FRMP shall be prepared by 2017. In the Republika Srpska it is expected that the PFRA shall be finalized this year. More information is available in presentation (*AD.3.3\_FRMP-BA-Ljubljana.ppt*).

### 3.4. Serbia

Ms Marina Babić Mladenović presented the activities in the implementation of the EU Floods Directive in Serbia. PFRA and identification of the APSFR have been completed. Unless funding (EU IPA or budget of PWMCs) is provided, an alternative solution is to use indicative flood maps/historical data for flood mapping. Flood Risk Management Plan shall be prepared for Serbia and for river basin districts by 2017. More information is available in presentation (*AD.3.4\_24 meeting ISRBC PEG FP RS.pptx*).

#### **SPECIAL SESSION: PRESENTATION OF THE HOST INSTITUTION - “HIDROINŠTITUT”**

Mr. Jure Mlačnik presented the history, activities and projects of the Hidroinštitut, the host of the meeting. He showed the Group scale models available in the yard and premises of the Hidroinštitut.

#### **AD.4. PRELIMINARY FLOOD RISK ASSESSMENT FOR THE SAVA RIVER BASIN**

Ms. Vasiljka Kolarov from the ISRBC Secretariat firstly reminded the PEG of the related conclusions from the 23<sup>rd</sup> meeting and pointed out that all agreed changes are incorporated in the PFRA report after the meeting (*AD.4\_PFRA\_SRB\_3.1\_PEG FP 24.ppt*). The draft report, amended by incorporating remarks of experts from Croatia and Federation of Bosnia and Herzegovina, was sent to the PEG FP for review prior to the meeting (*AD.4\_Preliminary Flood Risk Assessment in the Sava River Basin\_DRAFT\_3.1\_2014.04.14.doc*).

After presentation the PEG discussed on the activities for completion of the report, with special focus on the “*APSFR shared by two or more Parties, identified by the Parties as the areas of mutual interest for flood protection*”, as stated in the Protocol, Article 6(6) and understanding of possible definition of such areas. It was noted that at the time of preparation of the Protocol (2008-2010), this expression was meant to describe a case where APSFRs are designated at both banks at the transboundary section of the river (for example at the bordering section of the Sava River between HR and BA). Considering the use of different methodologies, including different geometry, and lack of data from the Republika Srpska, the Group agreed to consider issues related to possible harmonisation of the APSFR (*identified by the Parties as the areas of mutual interest for flood protection*) within the further stages of the EU Floods Directive implementation, i.e. during preparation of flood maps and the Sava FRM Plan and to proceed towards finalisation of the PFRA report.

The PEG FP agreed that:

- the Secretariat shall prepare the final draft PFRA report on the basis of the discussion held at the 24<sup>th</sup> meeting and submit it to the PEG for final short review;
- finalized report shall be submitted to the ISRBC for approval of its publishing at the ISRBC web site.

#### **AD.5. DEVELOPMENT OF FLOOD RISK MANAGEMENT PLAN IN THE SAVA RIVER BASIN**

Ms. Kolarov presented the main issues related to preparation of the *Program for development of the FRMP in the Sava River Basin*, including the issues related to the APSFR (harmonisation), preparation of flood maps (whether a joint methodology and flood maps on the SRB level should be prepared) and FRMP (objectives of flood risk management and measures to meet the objectives).

After the introductory presentation the PEG discussed all issues relevant for preparation of the common Sava FRMP that should be elaborated in more detail in the Program, including preparation of flood maps, setting the common objectives for flood management in the Sava River Basin, etc.

In respect to the Protocol, Article 7, the Parties have started preparation of flood maps for the APSFR identified at their territories (paragraph 1) and the Parties have been informed on the maps preparation through the Sava Commission (paragraph 2). Considering that the Protocol has not entered into force, the Parties have not worked towards the development of a joint methodology for preparation of flood maps for the entire Sava basin (paragraph 4) so they are using national methodologies.

The Group decided to submit national flood hazard maps to the Sava Commission, and that flood risk should be mapped at the basin level by using a simplified methodology, i.e. using Corine Land Cover and showing information on population and IPPC facilities.

Since the ICPDR has defined strategic goals of flood risk management, they may be used as the starting point for consideration at the Sava RB level, while having in mind that they could be differently designated in the Sava FRM Plan.

The PEG FP agreed with the following:

Regarding the Program:

- Since it is uncertain when the Protocol will enter into force, and bearing in mind that the Program should be adopted six months after that, the Programme should be treated as a “living document”. Accordingly, certain definitions/ proposed actions should be considered in a flexible manner;
- Considering the abovementioned, the Program should be additionally simplified, by omitting unnecessary details, such as methodology for definition of flood hazard and risk classes;
- The objectives of FRM in the Sava River Basin need not to be listed in the Program, but setting the objectives should be named as one of the activities in preparation of the Plan.

Regarding flood hazard and flood risk maps:

- National flood hazard maps shall be collected for medium (Q100) and low probability scenarios for all APSFR, regardless the size of the catchment area;
- Risk shall then be assessed on the basin-wide level based on a simplified methodology to be defined later;
- The Group considers that preparation of flood maps for a special case scenarios would be helpful along the Sava River and that either an extreme flood event, either levee breach at different locations may be modelled, with main aim to assess the residual risk, if the resources for such exercise are to be available (i.e. within the USACE project).

Regarding the Sava FRM Plan with Program of Measures:

- Objectives of flood risk management shall be defined during the course of preparation of the joint FRMP.
- The focus should be on measures with positive transboundary impact, which encourage international cooperation.

More information can be found in presentation (*AD.5\_Program\_SFRMP\_PEG FP 24.ppt*). First draft of the Program was sent to PEG FP prior to the meeting (*AD.5\_Program\_SFRMP\_20140417.docx*).

#### **AD.6. INFORMATION ON SUB-BASIN ACTIVITIES**

Mr. Zeljko briefly informed the PEG FP on the *Drina River Basin Management Project*. ToR for services has been provided as the meeting document (*AD.6\_TOR\_Drina.docx*), however, no other publicly available information is available at the time.

#### **AD.7. OTHER ISSUES**

The next meeting of PEG FP shall be held in September 2014, tentatively. The exact date of the meeting shall be determined later.



**ANNEX I. LIST OF PARTICIPANTS**

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## ANNEX II. LIST OF DOCUMENTS

Agenda item	Document	ENG	HRV	SLO	BIH-BOS	BIH-HRV	BIH-SRP	SRP
1.3	AD.1.3_PEG FP_24th meeting_Adopted_Agenda.pdf	↓						
2.1	AD.2.1_Presentation_ISRBC_PEG FP 24.ppt	↓						
2.2	AD.2.2_Annex V_Draft Policy v4.1.0.docx	↓						
2.2	AD.2.2_Balses-DraftReport-ver-final draft_modified.docx	↓						
2.2	AD.2.2_HMI activities_24 meeting.pptx	↓						
2.2	AD.2.2_Projects.pptx	↓						
2.2	AD.2.2_Sastanak sa direktorima HMZ-ova_Nacrt zaključaka.pdf							↓
3.1	AD.3.1_FD_Slovenia_Graz_mar 2014_Stravs.ppt	↓						
3.2	AD.3.2_savska_komisija_HR.pptx		↓					
3.3	AD.3.3_FRMP-BA-Ljubljana.ppt	↓						
3.4	AD.3.4_24 meeting ISRBC PEG FP RS.pptx	↓						
4.4	AD.4_Map-04_APSFR_SRB_draft_3.1.jpg	↓						
4	AD.4_Map-04_APSFR_SRB_draft_3.1_zemlje.jpg	↓						
4	AD.4_PFRA_SRB_3.1_PEG FP 24.ppt	↓						
4	AD.4_Preliminary Flood Risk Assessment in the Sava River Basin_DRAFT_3.1_2014.04.14.doc	↓						
5	AD.5_ISRBC_SavaFRMP+FFWS_WBIF_round_11_2014_03_11.xml	↓						
5	AD.5_Program_SFRMP_20140417.docx	↓						
5	AD.5_Program_SFRMP_PEG FP 24.ppt	↓						
5	AD.5_Sava ToR - March 03 2014.docx	↓						
5	AD.5_USACE_support_2nd_phase_Sava ToR_signed.pdf	↓						
6	AD.6_TOR_Drina.docx	↓						
	SpecialSession_Hidroinštitut - predstavitev savski komisiji.pptx			↓				