18th PEG GIS Meeting
Draft **Report**
Sarajevo, July 25-26, 2018

Venue: Sava River Watershed Agency, Hamdije Ćemerlića 39a Sarajevo, Bosnia and Herzegovina

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I. ATTENDANCE

The PEG members from Slovenia, Croatia, Bosnia and Herzegovina and Serbia attended the meeting. The Consultant representative from EPTISA engaged within the Sava FRMP project also participated at the respective agenda item.

The list of participants is annexed to this report.

II. CHAIRMANSHIP

Mirza Sarač, Chairman of the PEG GIS, chaired the meeting.

III. ADOPTED AGENDA

1. **Opening of the meeting**
   - Welcome and opening remarks
   - Adoption of the agenda

2. **Overview of the activities between the two meetings**
   - Presentation on the ISRBC activities
   - Tasks and duties regarding conclusions from the previous PEG meetings

3. **Sava GIS**
   - Current status
   - Proposal of the data identifiers

4. **Sava GIS Data Policy**
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   - Draft document overview

5. **Data and metadata collection**
   - Delivery of data via WFS service
   - RBM and FRM related metadata

6. **Design and implementation of the Sava FRMP database in Sava GIS**
   - Overview of the current status
   - Review of the draft Sava FRMP database
   - Proposal of implementation in Sava GIS

7. **External projects and activities**
   - Project proposal: Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience - SHELTER

8. **Other issues**

IV.   MINUTES OF THE MEETING

AD 1. OPENING OF THE MEETING

Welcome and opening remarks

M. Sarač opened the meeting and welcomed the PEG GIS members, as well as the Sava FRMP project experts. Hajrudin Mičivoda, the PEG GIS member from Bosnia and Herzegovina, as the host of the meeting, informed the participants on some logistical issues.

Adoption of the Agenda

PEG GIS adopted the agenda of the 18th PEG GIS meeting (*Ad.1_PEG GIS 18th_meeting_Adopted Agenda, Doc. Ref. No.: 3-18-10/2-2*).

AD 2. OVERVIEW OF THE ACTIVITIES BETWEEN THE TWO MEETINGS

Presentation on the ISRBC activities

M. Sarač on behalf of the Secretary, Dragan Zeljko, informed the PEG GIS on the most important activities and events since the last 17th PEG GIS meeting held in March 2018, as well as on the upcoming meetings and events.

Several priority activities in 2018 were pointed out, and informed the PEG on the 7th Meeting of the Parties to the FASRB held in Slovenia on June 07, 2018. The key objective of the 7th Meeting was to consider the status of implementation of the FASRB, as well as key challenges ahead, particularly those related to the cooperation in the river basin management, flood risk management, rehabilitation of navigation and exchange of information relevant to the basin. Particular attention was given to issues of sustainable development along with the guidance provided for further cooperation within the framework of ISRBC.

Parties to the FASRB also adopted a joint Declaration, as the final act of the Meeting, which can be reached at the following link: Declaration. With respect to the exchange of information and activities of the PEG GIS, the Parties have declared as follows:

> ➢ *Express satisfaction* with the extraordinary progress made in regard to information exchange in the basin through further enhancement and upgrade of the geographic information system for the Sava River Basin (Sava GIS), as well as the hydrological information system (Sava HIS) especially related to the river basin management and flood management, and commit ourselves to undertaking all activities necessary to secure the proper functioning and maintenance of the systems as well as their further upgrade in line with all other objectives and areas of cooperation of the FASRB.

More information can be found in presentation (*Ad.2_Presentation on ISRBC activities_PEG GIS 18*).

Tasks and duties regarding conclusions from the previous PEG meetings

M. Sarač briefly presented an overview of the tasks and duties regarding conclusions from the previous PEG meetings. It was stressed that the previously agreed and remaining tasks and duties, especially those related to the preparation of the Sava GIS Data Policy, should be implemented as soon as possible.

- ➢ PEG GIS, until next meeting, will review and check data in the central RBMP SavaGIS database used for the 2nd SRB Analysis and import all missing attribute data for which the spatial data are already uploaded (see the excel overview tables of missing data delivered for the PEG GIS 16)
- ➢ PEG GIS, until August 03, will deliver all relevant regulation, including national for the preparation of the draft Sava GIS Data Policy.

AD 3. SAVA GIS

Current status

M. Sarač informed the PEG that the Sava Geoportal, along with the related SavaGIS database and the connecting web-applications, is fully operational. Activities on integration of the existing navigation management applications within the SavaGIS platform are still ongoing, with the ultimate goal of incorporating the data related to navigation in SavaGIS Geoportal, by establishing the navigation module. Preparatory activities for development of the sediment management and accident prevention modules are also ongoing, together with further upgrade of the system in the part related to exchange of hydrometeorological data. Upgrade of Sava GIS will be also used for the development and implementation of: advanced tools for mapping and reporting services and advanced decision support system (DSS).

Since external technical support for the final deployment of the described activities within the Sava GIS Geoportal is necessary, the project proposals (Project Fiche) were prepared and applied for the funding (EC DG MOVE and Swiss Agency for Development and Cooperation SDC).

More detailed information is given in the summary sheet and related relevant documents (*Ad.3_SavaGIS_Summary Sheet*).

> ➢ PEG GIS took note on the information and supported initiative for finding finances for technical support from external sources.

Proposal of the data identifiers

With respect to the conclusion from the 17th PEG GIS meeting and the recognized need for adoption of a common framework for the unique identification of spatial objects in SavaGIS, Dragan Divjak, the engaged IT-GIS expert, presented a proposal of the unique SavaGIS identifiers. According to the proposal, identifiers defined under national systems should be easily mapped to the one required by the SavaGIS and on other hand support other benefits of spatial object identifiers:

- unambiguously trace/locate discrete spatial objects
- manage lifecycles of discrete spatial objects
- support reuse by providing access to these objects via an identifier, e.g. for linking spatial data with third party information (i.e. business data) or other spatial objects

Proposed identifiers vary according to the spatial object type, geometry and role in the SavaGIS.

More information can be found in presentation and the summary sheet and related relevant documents (*Ad.3_SavaGIS_Proposal of the data identifiers; Ad.3_SavaGIS_Summary Sheet*).

The PEG members discussed the proposal, pointed out that national codes and identifiers should be used and therefore concluded as follows:

> ➢ The PEG GIS will deliver guidelines for the data identifiers which are in use on the national level.

AD 4. SAVA GIS DATA POLICY

Introduction

M. Sarač gave a brief overview of preparation of the outline of draft Sava GIS Data Policy. The next steps were also clarified emphasizing that the final draft of document if possible should be prepared until end of the FY 2018 (March 31, 2019).

Draft document overview

The PEG GIS reviewed the outline of draft document page by page and discussed the proposals by chapters in detail. All comments and suggestion of Dragana Ninković, the PEG member from Serbia, sent before the meeting were also elaborated. Discussion was related to the quality of document, and necessity of definitive structure development given that some additional chapters should be included and elaborated.

After discussion and suggestions which were given to the Secretariat how to proceed with further preparation of the draft Sava GIS Data Policy the PEG GIS concluded the following:

➢ PEG GIS will review the outline of draft Sava GIS Data Policy and send the comments by August 03
➢ Secretariat will prepare new version of the draft Sava GIS Data Policy and deliver to PEG GIS for review by October 12.

AD 5. DATA AND METADATA COLLECTION

Delivery of data via WFS service

The PEG GIS procedures of establishment of Geo Server or/and ArcGIS server for the purposes of data uploading/import via Web Feature Service (WFS) to the Sava GIS database.

The PEG members from Bosnia and Herzegovina and Slovenia, who were supposed to test this way of the data upload into the Sava GIS database, pointed out that will need more time to prepare everything for the testing.

After a short discussion the PEG GIS concluded the following:

➢ The Secretariat will assist the PEG members from Bosnia and Herzegovina to establish necessary environment for testing of delivery of data via WFS service to the Sava GIS database.

RBM and FRM related metadata

D. Divjak informed the PEG that the metadata records available in Danube GIS related to the existing datasets of the 2nd SRB Analysis are imported in SavaGIS metadata catalogue. However, decision to import metadata related to the existing datasets of the 2nd SRB Analysis to the Sava GIS Metadata Catalogue brought new issues related to differences between SavaGIS and Danube GIS metadata profile. Most critical is level of classification that directly influence Sava GIS Data Policy.

More information can be found in presentation (*Ad.5_Data and metadata collection_RBM and FRM related metadata*).

After a short discussion the PEG GIS concluded the following:

➢ PEG GIS, until next meeting, will review, check and edit metadata in the SavaGIS Metadata Catalogue imported by the Secretariat using the metadata from Danube GIS.

AD 6. DESIGN AND IMPLEMENTATION OF THE SAVA FRMP DATABASE IN SAVA GIS

Overview of the current status

Višnja Omerbegović and Davorin Singer, the EPTISA's consultants, presented the current status of the Sava FRMP project implementation and pointed out a progress on activities important for development of the FRMP database module within Sava GIS.

Review of the draft Sava FRMP database

D. Singer presented a new version of the Sava FRMP database which is designed in accordance with the Guidance for Reporting under the Floods Directive 2017. He stressed that all previous comments and proposals of the PEG members and Secretariat have been implemented. Only doubtful is the link between the FRMP dataset and the spatial layer.

PEG GIS supported the proposal that the FRMP dataset should be linked to the AMIs layer (Areas of Mutual Interest for flood protection on the Sava River basin level) which should be also related to the APSFR and UoM datasets.

➢ PEG GIS recommended that the new FRMP database be implemented in Sava GIS after the final review and delivery of the comments, which will be sent by August 03
➢ PEG GIS recommended that the new FRMP database be used and implemented in national GIS databases.

Proposal of implementation in Sava GIS

D. Singer pointed out that activities related to the implementation of the new database within the central Sava GIS database and within the Sava GIS Geoportal already started. He emphasized that all FRMP related data, including existing and results of the Sava FRMP project, will be migrated into the central Sava GIS database. After accomplishment of work a testing of new layers will be performed, and the PEG members will be included.

➢ PEG GIS took note on the progress of this activity.

More information can be found in presentation (*Ad.6_Design and implementation of the Sava FRMP database in Sava GIS*).

AD 7. EXTERNAL PROJECTS AND ACTIVITIES

Project proposal: Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience - SHELTER

Mr. Sarač informed the PEG about the SHELTER project proposal which has been supported by ISRBC, as one of 22 partners, for the first stage of call under the Horizon 2020 - Research and Innovation Framework Programme. He pointed out that the SHELTER was evaluated as successful and has passed to the second stage, so the proposal is currently under development. The overall objective of SHELTER is to establish a data driven and community based knowledge and operational framework for resilience enhancement and sustainable reconstruction of historic environments to cope with climate change and natural hazards.

The PEG was informed that a need for the spatial layer on cultural-historical heritage, in the format of Sava GIS, is recognized within the development of Sava FRMP and therefore the SHELTER project will aim to collect all input data on the cultural-historical heritage from the relevant national institutions within the Sava River basin. The collected data from the relevant national institutions will be checked, refined and consolidated in a properly structured way for storing in the existing Sava GIS geodatabase for the purpose of processing and managing by the Sava Geoportal and related web-based tools to be able to create and support services-based data exchange.

It was also pointed out that the PEG FP on its 34th meeting, already supported the Secretariat activities related to preparation of the second stage proposal and also supported to be actively involved in the case that project passes the second stage and get approval of the EC.

➢ PEG GIS took note on the SHELTER project proposal and supported the Secretariat activities related to preparation of the second stage proposal

➢ PEG GIS supported to be actively involved in the case that project passes the second stage and get approval of the EC.

More information can be found in presentation and the summary sheet (*Ad.7_Presentation on the SHELTER project proposal*; *Ad.7_External projects and activities_SHELTER_Summary Sheet*).

AD 9. OTHER ISSUES

The next 19th meeting of PEG GIS shall be held in late November 2018. Details and the exact date will be determined later.

ANNEX I: LIST OF PARTICIPANTS

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ANNEX II: LIST OF DOCUMENTS

Agenda item	Title	Language	Type
1	Ad.1_PEG GIS_18th meeting_AdoptedAgenda	Eng	.pdf
2	Ad.2_Presentation on ISRBC activities_PEG GIS 18	Eng	.ppt
	Ad.2_Tasks and duties regarding conclusions from the previous PEG meetings	Eng	.docx
3	Ad.3_SavaGIS_Summary Sheet ▪ *Ad.3_BD1_SavaGIS_Sava GIS further developments_Navigation_Project Fiche.pdf* ▪ *Ad.3_BD2_SavaGIS_Sava GIS further developments_Water Pollution_Project Fiche.pdf* ▪ *Ad.3_BD3_SavaGIS_Data identifiers-INSPIRE GCM_v3.4rc3.pdf* ▪ *Ad.3_BD4_SavaGIS_Data identifiers-INSPIRE Guidelines_v3.3.pdf*	Eng	.pdf
	Ad.3_ Presentation on SavaGIS_Proposal of the data identifiers	Eng	.ppt
4	Ad.4_SavaGIS_DataPolicy_draft_v0.2	Eng	.docx
5	Ad.5_Data and metadata collection _Summary Sheet ▪ *Ad.5_BD1_SAVAGIS_Metadata Specification_v3.pdf* ▪ *Ad.5_BD2_INSPIRE Metadata Implementing Rules_v1.3.pdf* ▪ *Ad.5_BD3_DANUBEGIS_MD_Guidance_v2.1.pdf*	Eng	.pdf
	Ad.5_ Presentation on Data and metadata collection_RBM and FRM related metadata	Eng	.ppt
6	Ad.6_ Presentation on Design and implementation of the Sava FRMP database in Sava GIS	Eng	.ppt
	Ad.6_SavaFRMPdatabase_SavaGIS_FRM ▪ *Ad.6_SavaFRMPdatabase_SavaGIS_FRM_v4_6_1_model.zip* ▪ *Ad.6_SavaFRMPdatabase_SavaGIS_FRM_v4_6_1_Layers_Tables.jpg* ▪ *Ad.6_SavaFRMPdatabase_SavaGIS_FRM_v4_6_1_Domains.jpg*	Eng	.rar
7	Ad.7_External projects and activities_SHELTER_Summary Sheet	Eng	.pdf
	Ad.7_ Presentation on Presentation on the SHELTER project proposal	Eng	.ppt

* Documents available at the PEG GIS ftp site.