

Forum

of Stakeholders of the Project

"Preparation of documentation for River Training Works on the Critical Sectors of the Danube River in Serbia"

| Date: | 06-02-2013 |
|------------------|---|
| Duration: | 10:00 - 15:00 |
| Venue: | Directorate for Inland Waterways, Francuska 9, 11000 Belgrade, Serbia |
| Host: | Directorate for Inland Waterways |
| Chaired by: | Ivan Mitrovic, Directorate for Inland Waterways (Plovput) |

Meeting Minutes

from the seventh meeting of the Stakeholders' Forum

| MMs prepared by: | Milica Curcic, Jasna Muskatirovic, Ivan Mitrovic (Plovput) |
|---------------------------|--|
| Photos: | Luka Krivokuca, Plovput |
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| Final version | 04-03-2013 |



Agenda

| Time | Subject |
|-------|--|
| 09:45 | Registration |
| 10:00 | Welcome speech, agenda, organizational issues |
| 10:10 | Meeting Minutes of the sixth meeting of the Forum |
| 10:20 | Transparency of the process and dissemination activities |
| 10:40 | Results of the morphological modeling of critical sectors |
| 12:00 | Pause |
| 13:00 | Results of the morphological modeling of critical sectors |
| 14:00 | EIA study |
| 14:30 | Conclusions, recommendations, next meetings timetable, closing words |
| 15:00 | Until the next meeting |



List of participants

| Ime i prezime/ Name and family name | Organizacija/ Organization | Skr. / Abbr. | Zemlja/ Country |
|--|--|-----------------|--------------------|
| Dušan Dobričić | Direkcija za vode (Nacionalni ICPDR koordinator) / Directorate of Water (National ICPDR Coordinator) | DzV | RS |
| Duška Dimović | Svetski fond za zaštitu prirode / World Wide Fund for Nature | WWF | RS |
| Duško Isaković | Međunarodna komisija za sliv reke Save / International Sava River Basin Commission | ISRBC | HR |
| Georg Rast | Svetski fond za zaštitu prirode / World Wide Fund for Nature | WWF | DE |
| Mr Gordana Karović | Aqua et Archaeologia | AetA | RS |
| Mr Ivan Mitrović | Direkcija za vodne puteve / Directorate for Inland Waterways | plovput | RS |
| Ivana Dmitrović | Energoprojekt | EP | RS |
| Dr Jasna Muškatirović | Direkcija za vodne puteve / Directorate for Inland Waterways | plovput | RS |
| Ljubiša Mihajlović | Direkcija za vodne puteve / Directorate for Inland Waterways | plovput | RS |
| Marko Tucakov | Pokrajinski zavod za zaštitu prirode / Institute for Nature Protection of Vojvodina | PZZP | RS |
| Michel Zuijderwijk | Witteveen Bos | WB | NL |
| Mićun Stanić | Ministarstvo energetike, razvoja i životne sredine, / Ministry of Energy, Development and environment | MERŽS | RS |
| Milica Ćurčić | Direkcija za vodne puteve / Directorate for Inland Waterways | plovput | RS |
| Nataša Đereg | SEKO životna sredina - Centar za ekologiju i održivi razvoj / Centre for Ecology and Sustainable Development | CEKOR | RS |
| Otto Nagy | Delegacija Evropske unije u Republici Srbiji / Delegation of the European Union to the Republic of Serbia | DEU | EU |
| Roberto Zanetti | Witteveen Bos | WB | NL |
| Slobodan Krstović | SEKO konkurentnost – Nacionalna alijansa za lokalni ekonomski razvoj / National | NALED | RS |



| | Alliance for Local Economic Development | | |
|------------------------------|--|---------|----|
| Tanja Lukić | Ministarstvo saobraćaja / Ministry of Transport | MS | RS |
| Vladan Malešev | SEKO životna sredina - Inter- institucionalna profesionalna mreža u sektoru voda Srbije / Inter-institutional Professional Network in the Serbian Water Sector | IPM | RS |
| Vladimir Pajvančić | Javno vodoprivredno preduzeće Vode Vojvodine / Public Water Management Company Vode Vojvodine | VV | RS |
| Žaneta Ostojić Barjaktarević | Direkcija za vodne puteve / Directorate for Inland Waterways | plovput | RS |

Mrs. Ostojic Barjaktarevic, the Director of the Directorate for Inland Waterways, officially opened the meeting, welcomed participants of the seventh meeting of the Stakeholders' Forum for the project "Preparation of documentation for river training works on critical sectors of the Danube River in Serbia", and gave the floor to the chairman of the Forum, Mr. Mitrovic (Directorate for Inland Waterways). Mr. Mitrovic welcomed participants of the meeting and presented the agenda for the seventh meeting of the Forum.

Mr. Mitrovic presented the **MMs from the sixth meeting of the Forum**. He said that, in accordance to the General rules on organization and work of the Forum, all comments from the participants of the meeting delivered until 31st of December 2012 have been incorporated into the text, and that this document is available to the public since 07th of January 2013, through the web site of the Directorate for Inland Waterways, at the section Stakeholders' Forum.

Mr. Mitrovic informed participants about activities which are being performed in realization of the Article 8 of the General rules on organization and work of the Forum (**Transparency of the work of the Forum**). He informed participants of the meeting about meetings and conferences on which the project and the work of the Stakeholders' Forum have been presented:

- Danubeparks Step 2.0 , The Danube River Morphology, Bratislava, 23.01.2013
- World Wetlands Day, Novi Sad, 01.02.2013

Mr. Tucakov (PZZP) presented the agenda and participants of the World Wetlands Day Conference held on 01st of February 2013 in Novi Sad. He thanked the representative of Plovput for attending the conference and presenting the project "Preparation of documentation for river training works on critical sectors of the Danube River in Serbia" and the work of the Stakeholders' Forum. Mr. Mitrovic thanked Mr. Tucakov for the invitation and promised that Plovput will respond to such invitations in the future.

Mr. Mitrovic (Plovput) reported that the article about the work of the Stakeholders' Forum has been published within the last edition of the Danube Watch III/2012 (ICPDR Magazine).





He also distributed the Magazine to the participants of the Forum which have been delivered by ICPDR. Mr. Mitrovic also informed participants of the meeting that the article about the Forum will be published in the next edition of the Magazine about birds Detlic (Woodpecker) in March 2013.

Ms. Muskatirovic (Plovput) informed participants of the meeting that three articles related to the project and the Forum have been prepared by the representatives of the consortium and Plovput and submitted for the Smart Rivers 2013 Conference which will be held in September 2013 in Netherlands and Belgium.

After that, Mr. Mitrovic repeated that all presentations from conferences, all published articles, as well as a short movie about the Forum, are available to the public at the Plovput web site, in the section Stakeholders' Forum.

Mr. Zanetti (WB), who joined the meeting from Netherlands using the Skype conference call tool, made a brief introduction about the six critical sectors on the Danube River in Serbia which are in the focus of the project. He explained that the modeling process in being performed in iterations in order to achieve optimized options for all critical sectors. After that, he gave the floor to Mr. Zuijderwijku (WB) who presented results of the morphological modeling for six critical sectors. Mr. Zuijderwijku (WB) emphasized that morphological models have been tested for a period of selected three years (combining minimum, average and maximum discharges for the period of 30 years measured at gauging stations at the stretch of the Danube River which is the subject of the project).

Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector Preliv. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. This is very dynamic sector, and is a critical one through the history, and the option which is proposed includes application of two detached structures (chevrons) in order to prevent sedimentation in the fairway. Mr. Rast (WWF) asked what the planned height of chevrons is. Mr. Zuijderwijku (WB) responded that chevrons at this sector are planned at the height of ENR+1m. He said that it is expected that sedimentation occur behind these chevrons, at places showed in the presentation, which is available at the Plovput web site, in the section Stakeholders' Forum. Mr. Rast (WWF) asked about the expected height of sandbars behind chevrons (in relation to ENR) and what is the volume of the sediment at this location. Mr. Zuijderwijku (WB) answered that sandbars would have height slightly above ENR, and that calculations about the volume of sediment are being performed at the time. He said that application of higher chevrons would in time generate occurrence of islands, and if chevrons are lower, as planned at this location, sandbars occurring behind chevrons would not be above the water level through the whole year. Mr. Stanic (MERŽS) asked which discharges are used for the model and was the influence of the Iron Gate accumulation taken into account. Mr. Zuijderwijk (WB) responded that Discharges Q_{Bogojevo}+Q_{Tisa}, have been used, and that the influence of the Iron Gate acumulation is taken into account through the downstream boundary condition (water levels at the Zemun gauging station). Mr. Mitrovic said that sediment balance principle has been taken into account during the modeling phase, and that all results about volume of sediment will be available in the EIA study. Mr. Stanic (MERŽS) asked who will do the monitoring after the construction of structures. Mr. Mitrovic responded that open tender for the technical supervision and monitoring will be launched, and that monitoring will be performed by the winner of the tender. Mr. Rast (WWF) asked





about the availability of funds for monitoring. Mr. Mitrovic responded that funds for monitoring are planned in the overall funds for the technical supervision and monitoring.

Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector Beska. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. Based on these data, there are currently two locations which are not fulfilling conditions for safe navigation during the low water periods and are critical at this sector. Mr. Zuijderwijk (WB) said that this is a very dynamic sector, with the number of smaller islands. He repeated that during the second phase of the project two chevrons and one guiding bund have been planned at this location. However, results of the morphological model indicated drastic changes in the river morphology which would occur. Based on those results, the proposed solution was tested. This solution consists of two sills at the downstream part of the sector, together with the dredging at the upstream part of the sector (presentation of the critical sector Beska is available at the Plovput web site, in the section Stakeholders' Forum). Mr. Stanic (MERŽS) asked what the quality of the sediment at this part of the Danube River is, and if some primary tests of the sediment have been performed. Mr. Zuijderwijk (WB) answered that primary tests of the samples of sediment have been performed at all six critical sectors, and that no pollution of sediment has been identified at none of the six critical sectors, by which the first part of the meeting have been finished.

After the break, Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector **Cortanovci**. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. He said that this is a very dynamic sector, which created a lot of obstacles for navigation in the past. The preferred option from the hydraulic modeling phase, consisting of 3 sills at the downstream part and dredging at the upstream part of the sector, has been tested and confirmed by the morphological model (presentation of the critical sector Cortanovci is available at the Plovput web site, in the section Stakeholders' Forum). Planned sills are not located in the fairway. Mr. Zuijderwijk (WB) stated that application of sill with opening have been tested at morphological model for this sector, as it was recommended by the Forum. The recommendations of the Forum have been treated accordingly, so one sill is planned with opening.

Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector **Arankina Ada**. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. Based on the data from 2012, it can be observed that fairway dimensions for safe navigation are not fulfilled at the left side of the fairway at the whole sector. He said that in the hydraulic modeling phase solution with 4 sills at the left side has been planned (fairway is located at the right side). However, this solution has not been confirmed by the results of the morphological model. Mr. Zuijderwijku (WB) said that favorable option for this sector is dredging (presentation of the critical sector Arankina Ada is available at the Plovput web site, in the section Stakeholders' Forum). After presentation, there were no questions from the Forum members.





Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector Futog. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. He said that this is a very dynamic sector in which navigation during the low water periods is not safe. He said that during the second phase of the project a solution consisting of application of 4 sills and 2 chevrons was tested. After the detailed morphological modeling, it was concluded that the dredging option at the upstream part of the sector is the best solution, while for the downstream part of the sector one detached groin and one chevron is recommended, in order to prevent spreading of the sandbar into the fairway (presentation of the critical sector Futog is available at the Plovput web site, in the section Stakeholders' Forum). Mr. Tucakov (PZZP) asked if the volume of the sediment for the dredging is going to be determined the next phase of the project, together with the back-filling rate calculation, and where the dredged material is going to be deposited. Mr. Mitrovic said that primary analysis of the samples of sediment showed no pollution, and for that there are no limitations for the dredged material to be deposited back in the river. Mr. Rast (WWF) said that a careful approach is needed in determining the location for depositing the dredged material (list of criteria, e.g. that it should not be deposited in the part of the river with high flow velocities). Mr. Nagy (DEU) made a remark that before any works it is very important to make a clear specification of quantities (for the dredging and for the structures) and to make a precise timeframe for the works.

Mr. Zuijderwijku (WB) presented the results of the morphological modeling of the critical sector **Susek**. He presented the 3-D animation of this sector, showing morphological conditions according to the last hydrographic measurements from August 2012. He said that option consisting of one guiding bund, three sills and two chevrons have been tested in the second phase of the project. However, detailed morphological model showed that impact of such a solution on navigation conditions would be very limited, while morphological conditions on this sector would be drastically changed. Mr. Zuijderwijk (WB) stated that the dredging option is selected as the best one for this critical sector (presentation of the critical sector Susek is available at the Plovput web site, in the section Stakeholders' Forum). After the presentation, Forum members didn't have any questions.

After presentations of all six critical sectors, Mr. Mitrovic invited all Forum members to express their opinion about the work of the Forum and options which have been presented. All Forum members had the positive impressions about the work of the Forum, and confirmed that recommendations of the Forum are being incorporated in the selected options.

EIA topic has been shifted for the next Stakeholders' Forum meeting.

At the end, a timeframe for the next meetings have been discussed. It was agreed that the eight meeting of the Forum will be held on 15th of March 2013 (alternatively on 22nd of March 2013). Venue and the exact timing of the meeting will be defined in due time, in accordance to the timeframe set within the General rules on organization and work of the Forum. After expressed willingness of the participants to continue activities within the Forum, Mr. Mitrovic thanked everybody for their active role in the Forum, with which the seventh meeting of the Forum was officially ended.





Next steps

| Activity | Responsible | Deadline |
|---|--------------|----------------------------|
| Uploading of the documentation from the sixth meeting of the Forum to the web site of Plovput (agenda, list of participants, presentations, fairway dimensions, photos) | Chair person | 13-02-2013 |
| Delivering comments on the draft version of the MMs from the sixth meeting of the Forum to the chair person | All | 25-02-2013 |
| Distribution of the final version of the MMs to participants of the sixth meeting of the Forum | Chair person | 04-03-2013 |
| Uploading the final version of the MMs from the sixth meeting of the Forum to the web site of Plovput | Chair person | 04-03-2013 |
| Distribution of the draft agenda for the seventh meeting of the Forum | Chair person | 04-03-2013 |
| Delivering comments to the draft agenda for the seventh meeting of the Forum to the chair person | All | 10-03-2013 |
| Distribution of the final version of the agenda for the seventh meeting of the Forum | Chair person | 13-03-2013 |
| The seventh meeting of the Forum | All | 15-03-2013 (22-03-2013) |

































