



# Water Contingency Management in the Sava River Basin

# Report from the regional workshop Bosna and Herzegovina - Serbia Output T1.3

Date: 23. 9. 2021

Place: Županja

Country: Croatia

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#### **General information**

Country:	Croatia
Date & Place:	23 September 2021 City of Županja
Organizers:	University of Ljubljana (ERDF LP – UL);
organizers.	International Sava River Basin Commission (ERDF PP5 ISRBC);
	Civil Protection Administration of Republic of Srpska (IPA PP3 –
	RUCZ RS) Jaroslav Černi Water Institute (IPA PP4 – JCI)
	Association for Risk Management AZUR (IPA PP1 – AZUR)
<b>Documents</b> Please send together with	the veneral

- Scan list of participants (live)
- Agenda
- Photos
- List of target groups

# **Summary**

**Main points from the workshop / short summary** (max 2000 characters) Please prepare short summary of the workshop with main messages and outcomes

The regional workshop in Županja was part of three regional workshops and continued with workshops in Brežice and Slavonski Brod. Therefore, the first part of the workshop and presentation was identical to the workshops in Brežice and Slavonski Brod.

The regional workshop in Županja was intended to create a starting point for preparing the simulation Table-Top exercise scheduled for May 2022. These are two hypothetical scenarios:

- 1. accidental pollution in the Zenica industrial area;
- 2. flood in the confluence of the Sava, Drina, and Kolubara rivers.

The workshop participants discussed the roles of individual institutions, the roles of different systems, the reactions of the states, and the limitations and risks for the successful implementation of the planned exercise.

The workshop organizers presented the intention to plan the simulation of communication and decision-making processes in case of accidental pollution in the Zenica industrial area and floods in the confluence of the Sava, Drina, and Kolubara rivers. These complex events and responses require the involvement of numerous institutions from three countries - Bosnia and Herzegovina, Serbia and Croatia. That is why this regional workshop was organized as the first phase in the planning of the simulation Table-Top exercise.



The central presenters, organizers, and participants met in person at the venue location, while the other participants followed the meeting via a video link. The workshop and the entire WACOM project received a strong support from the ISRBC that hosted the event and provided technical and logistic support.

The workshop was organized at the City Hall of Županja. The workshop was attended by 19 different target group representatives from Bosnia and Herzegovina, Serbia, Croatia and Slovenia. From a total number of participants, 19 were present in person in Županja, while others followed the workshop via the Zoom application. All participants gave a significant contribution to the realization of the workshop.

The regional workshop was very successful thanks to a dynamic discussion between the WACOM project partners and the workshop participants. During the discussion, the participants exchanged their experiences and different views. In addition, they gave constructive proposals for preparing the Table-Top exercises and improving the overall situation through a more effective prevention and response system to accidental pollution and floods.

The regional workshop was organized in the so-called hybrid format, following strict anti-COVID-19 measures.

#### **Participants** (max 500 characters)

The workshop was attended by participants from port authorities, civil protection, state institutions, infrastructure companies, enterprises and local authorities. Among the participants, there were representatives from all levels of management.

#### 3 Outcomes

The workshop was organized in two parts. In the first part, which was more theoretical, the WACOM project partners presented the following topics:

- Presentation of the WACOM project and positioning of the regional workshop;
- Theory of planning Table-Top exercises;
- Presentation of the design of auxiliary tools for simulation of the core exercise (support for information exchange ICS 207, ICS 209 and IAP);
- Presentation of a hypothetical accidental pollution in the Zenica industrial area and floods in the confluence of the Sava, Drina and Kolubara rivers with defining the role of a WACOM project partner.

This part was essential for the presentation of the project, its activities, and expectations from the representatives of the target group institutions and their participation in the project and the Table-Top exercise.

In the second part of the workshop, all participants (project partners and representatives from the target group institutions) were divided into three groups (two in person, and the third one online) within which they discussed two central topics:



- 1. the place and role of institutions in extraordinary events;
- 2. suggestions and views regarding the organization of Table-Top exercises.

This part is vital because it was important for all participants to get to know each other, learn more about how different institutions work, and express the most common challenges in real situations that need attention in the preparation and implementation of Table-Top exercises.

# 3.1 WACOM project framework relevant to the implementation of the Table-Top exercise

The outcomes of the WACOM project framework relevant for implementing the Table-Top exercise are important for the creation of a common starting point for the WACOM project partners and the representatives of the target group institutions in the upcoming activities. The main highlights from each of the topics are briefly presented below.

#### Presentation of the WACOM project and positioning of the regional workshop

The project and purpose of the regional workshop were presented. The workshop aims to create a starting point for a successful preparation and implementation of the simulation within the Table-Top exercise in case of accidental pollution in the Zenica industrial area, and in case of floods in the confluence of the Sava, Drina, and Kolubara rivers. This introductory presentation served to introduce all the workshop participants to the topics that follow.

#### Theory of planning Table-Top exercises

The lecture provided an overview of the types of exercises where it was emphasized that exercises, emphasizing that they are the most effective way to check readiness, efficiency, procedures and business processes, review the knowledge and skills of employees, identify gaps and shortcomings, and also provide the opportunity to improve all desired values of any organization or a particular system. A special attention was paid to the presentation of the simulation-communication exercise (Table-Top exercise) that encourages participants to engage in in-depth discussion and make decisions by systematic problem solving, instead of rapid, spontaneous decision-making that happens in real or simulated extraordinary conditions. The presentation then focused on the segment related to the development of the exercise scenario, i.e. a description of adverse events, everything that leads to adverse events, circumstances in which adverse events occur and their consequences.

# Presentation of the design of auxiliary tools for simulation of the core exercise (support for information exchange ICS 207, ICS 209 and IAP)

The tools that are already developed and that are planned to be developed within the WACOM project were presented in great detail. The importance and application of Incident coordination tools were explained. These are the following tools: ICS organization chart (ICS form 207); Situational awareness tool (ICS form 209); and Components of IAP (Incident Action Plan). The already existing 31 sections of the 2D model for the Sava River were presented, and the data entered for some civil protection headquarters in ICS 207. The importance of a common database and the



knowledge that each civil protection headquarters knows with whom it can communicate at all times was explained. Regarding ICS 207, its functionalities were further explained: a) Who is managing the incident - an overview of the managing structures in the entire Sava river basin; b) Concept of the ICS - the Incident commander for an organization is responsible for maintaining the span of control; c) Incident commander (he / she) is also responsible for the structure's build-up, corresponding to the requirements imposed by the incident itself. ICS 209 is stated to serve as a platform for Incident status summary - upload from all activated area command (s) and supporting institutions. Regarding IAP, it was emphasized that its function was to provide information on key planned measures - upload from all activated area command (s) and supporting institutions.

### Presentation of a hypothetical accidental pollution in the Zenica industrial area and floods in the confluence of the Sava, Drina and Kolubara rivers with defining the role of a WACOM project partner

The project partners and participants discussed a hypothetical event of accidental pollution in the Zenica industrial area and floods in the confluence of rivers Sava, Drina, and Kolubara.

In this part, the scenario of accidental pollution in the Zenica industrial area was explained in detail. This scenario involved a transboundary accidental pollution source in Zenica-Doboj-Modriča-B.Šamac-Sava. In the Bosna river, an oily liquid flows into the river at the wastewater discharge point from industrial plants under the dam in the Zenica location - Kanal. It is assumed that more than 30,000 cubic meters of polluted water flowed into the Bosna River so far, and the problem is that the contamination of the river has been going on for more than 24 hours. The scenario further includes the following elements: Contamination of the river has been going on for more than 24 hours; Pollution is also visible on the ground; An unpleasant and irritating smell was felt on the spot where industrial waters from the former Zenica ironworks flow into the Bosna River; Due to pollution, fish stocks die.

Project partners and participants discussed a protocols for communication, decision making, and complex response in such crisis situations.

### 3.2 Suggestions and views for the organization of Table-Top exercises

The discussion about different views on the preparation and implementation of the Table-Top exercise was conducted in three smaller groups (in which the project partners and representatives of the target group of institutions were mixed together), based on two different sets of questions.

The first set of questions referred to the description of the role of the agency / company / institution in the case of accidental pollution and floods. The discussion focused on the following issues:

- Existing protocols in the case of accidental pollution and floods addressing your agency (contingency planning)
- How is your institution and its functions activated in the case of accidental pollution and floods (activation pathways, internal buildup)?
- Which are the functions of the active participant (relative to the type of agency)? SOPs and crisis management.
- Which are the planned/expected activities of the active participant in the case of a large-scale accidental pollution and floods?
- With whom will the active participant communicate and coordinate its work?



- How will the active participant maintain the key ICS functions (span of control, decision making capacity, incident facilities, resources, communications, organizational structure, action plans)?

The second set of questions related to the discussion of questions that participants recognize as critical in real situations, and which need to be addressed and prepared for the simulation exercise.

### **Discussion conducted in group number 1** (moderator and rapporteur: Danijela Ždrale)

Group participants: Port Brcko, Srbija vode, Jaroslav Cernji, Ministry of Construction, Transport and Infrastructure of the Republic of Serbia, Electric Power Industry of the Republic of Serbia, AZUR.

Regarding the first group of issues related to the existing protocols and emergency planning, the representatives of the institutions stated that they have certain internal regulations, while some institutions, in addition to internal regulations, are guided by general laws on rescuing people and material goods adopted by their governments.

By discussing the activation procedure in case of sudden pollution and floods, the Port of Brčko is in the role of monitoring events in these situations, the function of the department in charge of human resources HR activates the state of caution and control, monitoring. Serbia Waters have an active role in case of sudden pollution. After receiving the information and upon the order of the Water Inspectorate, they visit the field. According to the assessment, they initiate further levels of activation of other participants. Jaroslav Cernji is in a post factum position, they are not activated in the mentioned cases but perform examinations, analyzes, studies after the event. They are often hired by other companies to do a risk assessment in a possible scenario. They have advanced models and applications (applications with 2D simulations from possible hazards). EPS is activated in the Department of Environmental Protection. The Ministry of Construction, Transport and Infrastructure, by activating its department in charge of this topic, receives information and monitors further activities, informs the Water Inspectorate, activates the department with machinery and equipment equipped with various machines and equipment for field work.

When it comes to the functions of active participants by type of institution, standard operating procedures (SOP) and crisis management, each participant in the group provided different data - these are different departments within which standard operating procedures are applied.

The following question needs to be singled out: "How do any of the participants plan their activities related to sudden pollution and large-scale flooding, with whom does the active participant communicate and coordinate their work?" On this topic, the participants in the group gave different answers. Luka Brčko activates its water protection department and IT department, Jaroslav Cerni also activates the IT communications department and HR department, EPS, through the environmental protection department, has a team of employees who go directly to the field. In Serbia, Water is a department for water protection, and in the Ministry of Construction, Traffic and Infrastructure, there is a department for monitoring the situation on waterways.

This was followed by a discussion of bottlenecks and limitations in performing a staff exercise simulation.

In the discussion about the bottleneck regarding the simulation of the staff exercise, the representatives of the institutions stated that they were interested in continuing the cooperation in connection with the preparation of the staff exercise in May 2022.



They provided us with information that within certain departments they could provide the necessary manpower to participate in this type of exercise. Jaroslav Cerni noted that there could always be some unplanned situations that make it impossible for them to get involved in the exercise. The participants pointed out that the procedures for granting permits to participate in staff exercises were very slow. The Port of Brcko stated that they have an insufficient number of employees to perform this exercise. EPS suggests devising a way to better inform employees about the importance and impact of staff exercise. Raising public awareness of participating in and contributing to the exercises. The Ministry of Construction cited slow procedures in the bureaucratic system for granting approval to participate in staff exercises.

#### **Discussion conducted in group number 2** (moderator and rapporteur: Mirza Sarač)

The participants in the discussion were experts / representatives of authorities responsible for water management, emergency management / civil protection and navigation management from Bosnia and Herzegovina and Serbia.

The experts briefly presented the involvement of their institutions in case of flood events and accidental pollution, as well as the existing procedures related to activities in case of flood events and accidental pollution. All of them emphasized a large room for improvements. It was mentioned that the procedures and operational plans (i.e. emergency action plans, operational flood defense plans, etc.) were mainly not available at a common repository per countries.

The representatives of navigation management authorities pointed out a lack of official procedures for actions during pollution caused by oily and greasy water discharges into the Sava River and therefore ships often use this situation. Also, an issue of damages caused by floods to the river marking facilities was stressed.

Related to the equipment for pollution remediation, it was mentioned that professional companies for it exist, but the complete process of their involvement should be improved.

All experts emphasized a need of involvement of the non-governmental and private sector in the flood defense emergency and accidental pollution management.

#### **Discussion conducted in group number 3** (online group)

Only representatives of the WACOM project remained in this group at the time allotted for discussion. The representatives of the target groups apologized for having other business commitments, so a discussion on the simulation exercise scenarios could not be conducted.



#### 3.3 Other feedback

Please describe what were other important feedback, messages and recommendations from the stakeholders:

This regional workshop, as the third in a series, justified its purpose. The expected goal of the workshop was achieved. The workshop was very successful thanks to a dynamic discussion between the WACOM project partners and workshop participants. During the workshop, the participants discussed the accidental pollution in the Zenica industrial area and floods in the confluence of the Sava, Drina, and Kolubara rivers from different positions and challenges.

In the discussion, the participants exchanged their experiences and different views. In addition, they gave constructive proposals for preparing Table-Top exercises and improving the overall situation in order to achieve a more effective prevention and response system to floods and accidental pollution.

The observations made in the workshop will be valuable material for continuing work on the planning and implementation of the simulation exercise.



### **DOCUMENTS**

# Scanned list of the participants



23 September 2021 - Županja (online participation available) First Regional Workshop of the WACOM peoject

No.	INSTITUTION / COMPANY	NAME	E-MAIL.	SIGNATURE
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# Agenda

### Dnevni red, 23.9.2021.:

09.30 - 10.00	Dolazak i registracija učesnika	
		Predstavnik opštine (TBC)
10:00 – 10:10	Dobrodošlica	Snježana Novaković, Javno preduzeće "Luka Brčko" d.o.o.
10:10 - 10:30	Prezentacija WACOM projekta i pozicioniranje regionalne radionice	Primož Banovec, UL
10:30 - 10:45	Teorija planiranja simulacije štabnih vježbi	Robert Mikac, AZUR
10:45 – 11:00	Predstavljanje dizajna pomoćnih alata za simulaciju štabne vježbe (podrška za razmjenu informacija ICS 207, ICS 209 i IAP)	Primož Banovec, Matej Cerk, UL
11:00 – 11:30	Predstavljanje hipotetičkog događaja iznenadnog izlijevanja i poplava za simulaciju štabne vježbe (sa definiranjem uloge partnera projekta WACOM)	UL, IJC, RUCZ, ISRBC
11:30 - 12:00	Pauza za kavu	
12:00 - 12:30	Rasprava o ulogama učesnika radionice u simulaciju štabne vježbe (pripovjedač, aktivni učesnik, promatrač)	Rasprava po grupama
12:30 - 13:00	Vođena rasprava u manjim grupama - uska grla i ograničenja u izvedbi simulacije štabne vježbe	Rasprava po grupama
13:00 - 13:30	Izvještavanje o rezultatima rada u grupama	Voditelji grupa
13:30 – 14:00	Zaključci radionice i dalji koraci u pripremi simulacije štabne vježbe do provođenja vježbe koja će biti u maju 2022.	Primož Banovec, UL
14:00 - 15:00	Ručak	
15:00	Tehnička posjeta	Luka Brčko (BA)



# **Photos**









# List of target groups

Local Public Authority

Local I ublic riucifority
Organization
BOSNIA AND HERZEGOVINA:
Luka Brčko

National Public Authority

Organization		
SERBIA:		
Direkcija za vodne puteve		

Infrastructure Companies
Organization
SERBIA:
JP "Elektroprivreda Srbije"
Public Water Management Company "Srbijavode"