



*Water Contingency Management in the Sava River Basin*

**Cluster 2 – Pilot table-top exercises  
simulating the incident and the  
response of transboundary flood event**

**Output T3.2**

*(5/5)*

*(Report from Exercises simulating the incident and the response of  
transboundary flood event in the Sava and Drina areas)*

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## 1. Introduction

On the 24 May 2022, WACOM project reached one of the key project milestones, the execution of the fifth table-top exercise, carried out in Brčko, Bosnia and Herzegovina. This document represents the summary of the main objectives, outcomes and organisational activities of the TTX. It also describes how it was performed and points out the lessons learned from it.

### 1.1. Table-top exercise objectives

The general objectives of the TTX are aimed on verification, utilisation and confirmation of existing protocols and procedures of response to emergency situation. Additional objective is related to the use and evaluation of the new WACOM tools used in the emergency situations. More specifically (as it was already explained in the preparatory elaborate of the TTX (*D.T3.3.2 - Report on the requirements and planning of table-top exercise*)), the objectives of the Table-top exercise are the following:

- to introduce the methodology of the TTX execution in the form of the explanatory – coordinated type of the table top exercise,
- to introduce the “imaginary” scenario of the floods,
- to involve all active participants to cooperate and jointly develop the strategy of the response to the accident,
- to familiarize the participants with the set of the new WACOM tools and to utilize them during the execution of the TTX,
- to assess the usability of the new WACOM tools.

The project partners have identified and capitalized the importance of the execution of the exercise for the active groups, who are participating in the realistic events of accidental pollution or other types of the any other type of hazardous events. Execution of such TTX have proved that keeping the response institutions, forces or even administration employees aware of emergency situations and letting them get to know each other and share their on-field experiences or response plans helps to build the strong response body with high level of awareness on the emergency situation response plans.

## 2. Execution of the Table-top exercise: Floods in the Sava and Drina areas (BA/SRB)

The TTX was organized by the project partner International Sava River Basin Commission and conducted on the 24 May 2022 in Brčko, Bosnia and Herzegovina, in the Hotel Jelena. The space could accommodate up to a fifty participants, for which reason some could not be accepted as exercise participants. The passive participants, observers were placed in the back of the hall.



*Figure 1: The participants of the TTX*

For the participants who were not able to join the TTX at the venue the on-line link (ZOOM) was established. However, it was not foreseen that the on-line participants cooperate in the active face-to-face communication. Nevertheless, they were able to leave the comments, ideas, etc. in the chat area of the on-line platform.

The TTX was chaired and lead by the Primož Banovec, representative of the lead partner of the WACOM project, University of Ljubljana. He introduced the scope of TTX, WACOM tools, narrated the accidental pollution scenario and encouraged the intercommunication among all participants of the TTX.

Additional support on the presenting and utilising the WACOM tools was given by other members of the partner UL, the developer of the WACOM tools.



*Figure 2: The Narrator, Promož Banovec (UL), conducting the TTX*

## **2.1. Participants of the Table-top exercise**

The TTX was attended by 25 participants in total, 13 from project partners and 12 from external institutions representing the target groups.

As shown in the table below, several headquarters were involved in the active participation at the TTX. Especially at the municipality lever, the headquarters joined several institutions that form the multiagency headquarter. Some institutions form a single-agency headquarter.

Table 1: Active Headquarters (Active participating headquarters at venue)

Headquarters	Other companies or institutions in the Headquarter
Bosnia and Herzegovina	
Port Master Office Brčko	University of Ljubljana (SI)
Federal Ministry of Agriculture, Water Management and Forestry	HESS (SI)
Civil Protection of Gradiška	AZUR
Civil Protection Administration of the Republik Srpska	Mountain Rescue Service (HR) (CP Vukovar-Srem District)
Federal Administration for Inspection, Inspectorate for water inspection	EUFOR LOT Brčko
Port of Brčko	
“NESTRO PETROL” a.d. Banja Luka	
Port Master office of Brčko District	
Department for Public Safety	
Brčko Government	
PI “Vode Srpske”	
Republic Hydrometeorological Service of Republik Srpska	
Serbia	
University of Belgrade, Department of algology, micrology, and lichenology	
Public Investment Management Office	

## 2.2. Introduction to the Table-top exercise

The introduction of the TTX began with a short presentation of the WACOM project, its main objectives and developments. Mr. Primož Banovec introduced the purpose of the TTX in relation to the WACOM project.

Following the introduction, the active participants who played important roles in the TTX accidental pollution scenario introduced themselves and briefly explained their activities and roles in the emergency situation. They were gathered in an improvised headquarters that operated as a single unit in the further TTX activities (reporting, measures, etc.).

The narrator proceeded with the initial information about the TTX and introduced the provisional methodology of TTX execution to all participants. He explained the role of participants, their tasks during TTX, and tools they will be using during the TTX, WACOM tools.

The exercise used the scenario of floods event in the Sava and Drina areas in Bosnia and Herzegovina and Serbia, and included representatives of public institutions and companies from these two countries. As part of this exercise, a simulation of the decision-making process for large floods on the Drina and Sava rivers was carried out.

### **2.3. Introduction to the WACOM tools**

During the TTX, the tools developed and prepared for the use, were presented. These include:

- The tool for improving the coordination of the activated headquarters,
- The tool for improving the situational awareness about the accidental event, and
- The tool for improving the modelling of the accidental pollution propagation.
- 

Table-top exercise participants gathered in headquarter groups utilised those tools via mobile phones and laptops.



### 3. Execution of the Table-top exercise

The TTX execution can be divided in several activities: simulations/predictions; discussions; use of existing tools (e.g. WACOM tools, AEWS, etc.). In this part, the dynamic of TTX will be briefly presented.

#### **Simulation of flood event**

The simulation of flood event started with the analysis of meteorological situation 24 hours before the event. It was assumed that the cyclone had been formed above the Geneva Bay and heavy participation started. The surface discharge was observed. The following steps were defined:

- RHMZ RS provides first forecast and the warning at 7:00 in the morning using the Aladdin and the Sava FFWS.
- The RUCZ receives the warning from the RHMZ RS and warns the civil protection units in the region for caution. They upload the warning to their website.
- Public institution “Vode Srpske” gets the information from RHMZ RS and rises the alert stage in the units and provides institutions which should be included in flood protection.
- Civil protection of Gradiška observes the high-water level at the near gauging station, activates the HDQ if the water level is raising above the threshold and starts prevention measures.
- In case of alert RHMZ RS sends messages every three hours if the regular flood defence measures take place.
- Mountain rescue service activates the operational unit at the field to implement prevention measures e.g. cleaning the ditches, gullies etc.
- The communication with the public is provided by RUCZ based on messages of RHMZ.

Representatives of hydropower (who didn't attend the TTX) were emphasized as important player in the flood management because they have tools to regulate the water levels downstream. They should empty the hydropower reservoirs if the intensive precipitations are forecasted which could cause floods. There is also the problem of overflow of the dam crest in case of floods.

It was stressed that decision makers should also take care of financial consequences of their decision.

The port authorities mentioned their role when the flood occurred. They prohibit the navigation in case when the extraordinary flood defence measures should be implemented.

In case of extraordinary measures, the RUCZ RS proclaims the extraordinary state and activate the local civil protection units, rescue units, Red Cross and order the evacuation on areas under the flood risk. The civil protection units should monitor the water levels and provide warnings to the local public. RUCZ activates the flood risk contingency plan and implement the operational measures in accordance with the plan. They civil protection units should be prepared to act, while the team with drones should monitor and control the situation. The RUCZ RS informed the media and provide all information.

PI Vode Srpske acts in accordance with their contingency plans.

RHMZ RS also monitors the situation at gauging stations, but it was stressed that the modification of the HDQ curves for selected stations should be made periodically. It happens that they don't indicate the right situation.

During the TTX the WASP DSS (link: <http://wasp-dss.apps.vokas.si>) was used.

RUCZ opened the pollution event entitled "Poplave Drina, Sava".

The following headquarters entered in the system successfully: Department for Public Safety Brcko District, PI Voda Srpska, Republic Hydrometeorological Institute of Republika Srpska, , HDQ Civil Protection of Republic Administration of Republika Srpska, Civil Protection Gradiska, Ministry of the Sea, Transport and Infrastructure HR, HDQ Civil Protection of the Republic of Croatia, ISRBC, HDQ Civil Defense of Vukovar-Srijem County, HDQ of Civil Protection of Slovenia, DRSV Ljubljana Each HDQ submitted its data (Name, Country, Level, Location on map).

It was demonstrated how the HDQ structures could be defined by commend Enter my current shift and entering information on Incident Commander, Public Information officer, Safety Officer, Liaison Officer, Operations Section, Planning Section, Logistic Section and Finance/Admin Section entering the information on the staff.

IN the WASP DSS it could be seen which HDQ were active, their location and the structure of the HDQ during the event.

### **Communication with the public and media**

The HDQ of civil protection units described situation at the location including the information on water levels and the flooded areas, which equipment is used, and other important information.

## **Safety measures**

The participants also discussed on safety measures during the intervention. It was stressed that the HDQ should inform the staff on safety measures (on safety equipment, use of drinking water etc.).

## 4. Analysis of the Table-top exercise

The main part of the Table-top exercise was the analysis of the performed activities, with a critical overview of the TTX execution, preparation and involvement of the participants (target groups), as well as the assessment of the new WACOM tools.

The analysis of the TTX was based on four activities:

- Analysis done by the TTX participants (anonymous questionnaire for the participants),
- Analysis done by the TTX evaluation group (questionnaire for the evaluators),
- Analysis done by the individual institutions participating in the TTX,
- Lessons learned by the project partners (which will be shown in chapter: **“Findings (lessons learned) and conclusions of the Table-top exercise” (Chapter 5).**

### 4.1. Analysis of the Table-top exercise – Hot-wash

After termination of the TTX, the hot-wash was carried out, which was based on the predefined questions, and allowed each headquarter to give their assessment of the TTX.

The main conclusion and findings of the participants were the following:

- the exercise is planned to be of a cross-border nature, like other exercises that took place in Slovenia and Croatia. Due to the situation in which the project partner from Serbia, IPA PP4 JCI Jaroslav Černi Water Institute, announced his exit from the project, for this exercise we successfully played the response of the project partners from Bosnia and Herzegovina, the two entities Republika Srpska and the Federation of Bosnia and Herzegovina. The staffs activated by colleagues from Brčko District and the staffs of colleagues from Croatia helped and greatly contributed to this.
- as it was a cross-border exercise, it included representatives of institutions from Bosnia and Herzegovina, and Serbia. It is proposed that during this TTX the platform will be used as a training resource for emergency management in accordance with the current state of knowledge in the water sector. This fully customizable tool is designed to work in crisis situations and is used to improve plans and procedures in response to emergency situations. The TTX tool is connected to relevant web pages where it is possible to enter useful information and thus create a database for achieving certain goals.
- until now, no TTX has been organized for transboundary floods, and information about such floods has not been systematically collected, stored and managed as a database or as a place for "reporting" floods;

- during the TTX, the participants concentrated on the shortcomings that appeared during the execution of the exercise, and an overview of the execution of the exercise was carried out with a free exchange of critical views and information. It was an opportunity to point out, without guilt or discomfort, the shortcomings that affected every aspect of the action. A critical review of the execution of the exercise showed professionalism and the desire to constantly improve the way of acting during a sudden event;
- the participants of the workshop were very actively involved in the discussion, creating a contribution through insight into the current situation, also observing and discussing events from the past, such as the 2014 floods in BiH. Issues that help strengthen human and material capacities were addressed;
- during the exercise, the participants identified both their own and other participants' mistakes and indicated the need to correct them. The approach used for the TTX "Flood Intervention Management" was assessed as generally giving good results. The post-implementation review relies on data collection to assess performance. The learning culture places a very high value on collaboration and the exchange of ideas based on an integrated approach.
- during the exercise, several needs were recognized: the need for a single line of command, mobilization that includes the organization's ability to respond to floods, as well as the creation of a crisis plan and related response plans of responsible parties, resource management in terms of identifying sufficient equipment for an organized response or identifying potential deficiencies was recognized in needs, identifying and determining priorities related to ecologically and economically sensitive areas, recognizing communication needs within institutions and with other entities such as the media, other offices and non-governmental organizations, etc.

The conclusions, lessons and recommendations that can be made after the exercise are: there is a need for better coordination and communication between institutions and towards local communities, and the need for training of local representatives for the needs of responding to accidents, as well as the need for a single command line that will be located in one place.

The following improvements are recognized as necessity: greater participation of the local community, planning of available resources, and communication via the Internet. The decision-making procedure needs to be made more dynamic, and at the same time simpler and more graphically acceptable.

## 4.2. Analysis of the Table-top exercise – the survey

As already mentioned, analysis was conducted on several levels. This analysis of the TTX was performed through the survey. The questionnaires were prepared both for the participants and the evaluators.

### 4.2.1 Analysis of completed anonymous questionnaires from participants

The questionnaire had a total of 15 questions, from which some questions had sub-questions. A total of 12 exercise participants completed a questionnaire. The questions and short observation on answers are presented below.

To the question under number 1. *Is the material presented at today's workshop as you expected? If not, what did you expect differently?*, all participants responded positively. That means that the materials prepared for the workshop were beneficial.

To the question under number 2. *Do you think that emergency response protocols and the development of IT tools need to be tested in such exercises involving actual participants in interventions?*, all participants responded positively.

To the question under number 3. *Should other significant headquarters participate in such exercises? If so, which ones?*, four participants responded positively (with most common answers: Competent institutions for events, and Media), seven participants answered “No”, and one participant did not provide answer. The challenge in implementing this workshop was that there was no full response from Serbia, so this is probably the reason why not all institutions that could have been here were not represented.

To the question under the number 4. *What grade would you give today's exercise? (1-poor... 5-excellent)*, eight participants rated the exercise with the highest grade, and four participants with a very good grade.

To the question under number 5. *Do you estimate that the topic of the exercise is sufficiently elaborated for quality pilot testing of new IT tools? If not, please suggest, which in your opinion is not sufficiently elaborated.* All participants answered positively.

To the question under number 6. *Do you have access to data on the headquarters and management structures of various institutions in the event of an emergency and intervention?*, six participants answered “Yes”, five participants answered “No”, and one participant did not write any answer.

To the question under number 7. *Assess the quality of information on the functioning of individual headquarters during interventions? (1-poor... 5-excellent)*, distribution of responses is very wide:

seven participants responded “4”; two participants answered “5”; and three participants answered “3”.

To the next question 8. *How do you assess the availability of data on the operation of individual headquarters during the interventions? (1-poor... 5-excellent)*, six participants responded “4”; one participant answered “5”; four participants answered “3”.

To the question under number 9. *Do you often communicate with other headquarters during interventions?*, eight answers was “Yes”, three participants answered “No”, while one participant did not answer.

To the question under number 10. *Has there been a situation in which you found it difficult to establish communication with other headquarters or found it difficult to find contacts with other headquarters?*, five participants answered “Yes”, and seven participants answered “No”.

Answer the following three questions (11. *Would a platform, which would offer information on the activities, organization and contacts of individual headquarters, be useful for you?*; 12. *Would such a platform make it easier for you to operate during interventions?*; 13. *What is your assessment of the presented WACOM platform?*) were very high scoring what confirms that most of participants think that the presented tools / platform would be useful for their work and enable them to work more easily during the intervention.

To the question under number 14. *What is your assessment of today's workshop? (1-poor... 5-excellent)*, all participants gave very high or high grades to the conducted workshop.

Unfortunately on the last question 15. *Please provide additional comments, remarks and/or suggestions*, there are no contribution.

#### **4.2.2 Analysis of completed questionnaires from evaluators**

The questionnaire had a total of 19 questions, of which some questions had sub-questions. A total of three evaluators completed a questionnaire. The questions and short observation on answers are presented below.

To the question under number 1. *Have you read the documents for TTX preparation (scenario, contingency plan, master scenario list, elaborat)?*, one evaluator answered “Yes, all”; second evaluator answered “Yes, but only few of them”; and a third evaluator answered “No”.

To the question under number 2. *Are purpose and goals of simulation of TTX understandable? (1-not understandable...5-fully understandable)*, two evaluators gave a score of “5”, and third evaluator gave a score of “3”.

To the question under number 3. *Do you find the structure of master scenario event list understandable and adequate? (1-not understandable...5-fully understandable)*, two evaluators gave a score of “5”, and third evaluator did not answered.

To the question under number 4. *How do you estimate the participants' understanding of their tasks and TTX objectives? (1-not understandable...5-fully understandable)*, one evaluator gave a score of “5”, second evaluator gave a score of “4”, and a third evaluator did not answered.

To the question under number 5. *Other comments relative to the preparedness of the TTX*, all evaluators answered very affirmatively.

To the question under number 6. *How do you evaluate the introduction to the TTX? (1-poor...5-understandable and well done)*, two evaluators gave a score of “5”, and third evaluator gave a score of “4”.

To the question under number 7. *Assess the narrators role during the TTX and provide the suggestions for improvement. (1-poor...5-understandable and well done)*, two evaluators gave a score of “5”, and third evaluator gave a score of “4”.

To the question under number 8. *Assess the role of active participants (participating headquarters) – all and individually (1-poor...5-well done)*, all evaluators gave a score “4”.

To the question under number 9. *Assess the timeline following the master scenario event list (1-poor...5-well done)*, two evaluators answered with score “5”, while third evaluator did not answer.

The next seven questions related to the level and quality of participation in the exercise and usage of the IT tools (10. *Assess the adequate activation/deactivation of the headquarters and information exchange on activation of headquarters (ICS 207) – did all the HQ used it and how? (1-poor...5-well done)*; 11. *Assess the overall usage of the situational awareness tool (201, 209) – did all the HQ used it and how it was accepted. (1-poor...5-very usable)*; 12. *Assess the usage of forecasting tools (oil spill - forecasting model) (1-poor...5-very usable)*; 13. *Assess the quality of communication among the active headquarters during the exercise (1-poor...5-well done)*; 14. *Other comments*; 15. *Assess the de-activation progress and closure procedures of the TTX (1-poor...5-well done)*; 16. *Assess the hot-wash procedures after the TTX (1-poor...5-well done)*), evaluators gave very high scores, always between “4” and “5”.

To the question under number 17. *Overall assessment of the contribution of the WACOM project to the improved transnational response based upon the TTX (1-poor...5-important contribution)*, two evaluators answered with score “4”, and third evaluator did not provided his/her answer.



No relevant answers were provided to the next two questions (18. *Objectives of WACOM was to organize a first and basic level of TTX exercise. Please state any suggestions for the next level of TTX,* and 19. *Other comments*).

### **4.3. Analysis done by individual institution participating the TTX**

Regarding the individual experiences of the representatives of the institutions that participated in the implementation of the TTX exercise, all experiences presented during the exercise and after its completion were extremely positive and encouraging towards the continuation of such projects.

From the very beginning, Civil Protection Administration of the Republic of Srpska (RUCZ), emphasized that it was proud to be a part of such a project, because the project paid attention to both preventive action, early warning, and responses to disasters. The WACOM project also provided guidelines for capacity building and coordination, and for the development of cross-border cooperation and data exchange of all institutions and services within protection and rescue in 4 countries (Slovenia, Serbia, Croatia, and Bosnia and Herzegovina). Following the work and results of the WACOM project, RUCZ expresses great satisfaction for everything that has been done so far, and suggests that this should be the first phase of the project, and that in the second phase of the project, the focus should be on strengthening capacity and increasing coordination, i.e. focusing on cross-border cooperation in responding to natural disasters and disasters.

Projects like WACOM directly contribute to the development of capacities, the development of cooperation and the development of interpersonal relations and personal contacts, which are sometimes, in protection and rescue situations, crucial because they act much faster and more efficiently.

The attitude of project partners from the Port of Brcko about the Table-top exercise itself is positive, and a short observation was made about the exceptional need to clearly define the line of command in the event of floods of a cross-border character, first of all to identify the persons or institutions that will be involved via the WACOM tool in the room for reporting, then to clearly know the protocols which institution is responsible for which activities. For example, the Port of Brcko does not have the authority to take any steps during a flood event, except to act according to the Protection and Rescue Plan of an internal nature.

The civil protection of the municipality of Gradiška, as another participant in the Table-top exercise, concluded that this TTX was very successful, the way in which the staffs become familiar with cross-border problems during the flood wave, through reports that are an integral part of the

WACOM tool, is very significant and productive. Civil protection of Gradiška is very satisfied with the exercise, the methodology that was applied. Until now, they have had a series of similar exercises since 2014, when a large flood wave affected Bosnia and Herzegovina, but they believe that this TTX is one of the most significant. They expressed the need for more such workshops, especially due to the creation of new connections and the inclusion of new institutions from all levels in TTX.

The Department of Public Safety from Brčko emphasized the positive side of presenting different experiences from various municipalities, during crisis situations from the past. Participants repeatedly confirmed that TTX enabled them to have a better insight into what to do and in what way when a flood occurs, both on a small and large scale.

The institutions that were observers at the TTX, i.e. their representatives, expressed their satisfaction for the successfully held exercise, excellent organization and excellent work of the moderator. Through these types of exercises, preparation and preparedness are strengthened and practiced in different services, and cooperation is greatly facilitated.

## 5 Findings (lessons learned) and conclusions of the Table-top exercise

### Lessons learned by the project partners

After the execution of the TTX in Brčko, the project partners of the WACOM projects gained new experiences and insights related to the preparation and execution of a table-top exercise. The main lessons learned were as follows:

- Preparatory stage:
  - It would be necessary that all preparatory documents should be prepared well before the exercise itself so that they can be checked and delivered in a timely manner to the institutions that are invited to participate in the exercise.
  - The preparatory documentation should not be too extensive, because in this case the participants who came to the exercise have not enough time or will to read all the documentation and familiarize themselves with all the details of the exercise.
  - It is necessary to ensure that the minimum number of required participants attend the implementation of the exercise in common simulation spaces (to be physically present at the implementation of the exercise).
  - It would be necessary to foresee the participation of media representatives as participants in the exercises.
  
- Execution stage:
  - It would be necessary to ensure that all participants of the exercise bring a laptop, as this was necessary for the implementation of the exercise.
  - In order to avoid a situation where individual exercise participants cannot fully participate in the implementation of the exercise because they did not bring a laptop, in the following exercises it would be necessary to provide a certain number of laptops by the organizers in order to make the exercise as functional as possible.
  - Some participants were unfamiliar with what exactly they were supposed to do and with the competences of other institutions. This caused certain delays in the implementation of the exercise. In order to avoid such situations in the future, it is suggested that in the preparatory meetings before the implementation of an exercise, the future participants get to know each other and exchange basic information about what their institutions do.

- It would be necessary to involve media representatives in the implementation of the exercise.
- After-execution stage:
  - In addition to the hot wash up analysis, it would be very useful to ask all exercise participants to submit their observations about the exercise in writing.

**In terms of exercise implementation, TTX had several initial objectives, as follows:**

- To introduce the methodology of the TTX execution in the form of the explanatory – coordinated type of the table top exercise;
- To introduce the “imaginary” scenario of the accident;
- To involve all active participants to cooperate and jointly develop the strategy of the response to the accident;
- To familiarize the participants with the new WACOM tool set and to utilize them during the execution of the TTX;
- To assess the usability of the new WACOM tools.

**All planned objectives were partially achieved due to the insufficient turnout of participants from Serbia. Therefore, in the following, the situation will be referred to the activities and achievements of representatives from Bosnia and Herzegovina.**

The exercise was carried out in several parts. In the introductory part, the project and its purpose were presented. Then a demonstration of the WACOM toolbox was made, as it was used and tested in TTX. This was followed by the presentation of the Sava GIS, Sava HIS and Sava FFWS systems. After that, the method of implementing the exercise itself and the tool was explained. This was followed by the main part of the exercise – Flood simulation, when the planned exercise was implemented with expert guidance of the project manager. During the implementation, all participants took a very active part in the exercise, providing comments, explaining situations and challenges they face in real situations, and jointly attempting to find solutions or proposals regarding a certain situation or open issue. **The exercise was conducted at a very high level because floods are natural risks and phenomena that occasionally occur in Bosnia and Herzegovina and everyone has some experience with them.**

The next part was the Hot wash up analysis of the exercise. The Hot-wash was based on the predefined questions allowing each headquarter to give the assessment of the Table-top exercise. First, the importance of this exercise was highlighted because until now, no TTX has been

organized for transboundary floods, and information about such floods and exercises has not been systematically collected, stored and managed. The participants of the workshop were very actively involved in the discussion, creating a contribution through insight into the current situation, also observing and discussing events from the past, such as the 2014 floods in BiH. All participants agreed that improvements need to be made in all areas. Examples of the above are: it is necessary to improve plans; it is necessary to establish a single line of command; it is necessary to improve resource management, communication between institutions, towards citizens and the media, as well as cooperation with non-governmental organizations. Also, there is a need for better coordination and communication between institutions and local communities, and the need for training of local representatives for the needs of responding to accidents, as well as the need for a single command line that will be located in one place. The decision-making procedure needs to be made more dynamic, and at the same time simpler and more graphically acceptable. **Hot wash up analysis pointed to already known challenges faced by all participants at different levels and countries. The above leads to the conclusion that everyone has similar, if not the same, challenges, so it is necessary to continue to cooperate and jointly solve the obstacles in front of us.**

The next part – “Analysis done by the TTX participants” (anonymous questionnaire for the participants); “Analysis done by the TTX evaluation group” (questionnaire for the evaluators); “Analysis done by individual institutions participating the TTX”; “Lessons learned by the project partners” – **confirmed everything already written about the need for greater cooperation, investment and how projects like WACOM bring numerous benefits and enable communication between different stakeholders.**