



Water Contingency Management in the Sava River Basin

**Stakeholder communication
workshops with pilot actions analysis**

Output Number T3.3

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|------------------|---------------------------|
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| Version | Draft |
| Date | 21.7.2022 |
| Date (version) | |

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2nd WACOM workshop in Slovenija

Water Contingency management in the Sava river basin

On Thursday, July 7, 2022, between 9:00 am and 12:00 pm, the 2nd National Workshop of the WACOM Project was held through the online platform ZOOM.

The key challenge of the WACOM project is to improve transboundary coordinated response to accidental pollution and flooding on transboundary watercourses in the Sava River basin, which includes an analysis of the response in each country.

The workshop, the second in a series of three, served as a simulation of a staff exercise in which we tested the tools and approaches developed for improved transboundary response and cooperation in the event of such disasters.

The second Slovenian WACOM national workshop was attended by 41 participants. In addition to the organizers and project partners, representatives of the following institutions were also present:

- DRAVA vodnogospodarsko podjetje Ptuj d.o.o.
- ARSO, Hidrolog
- Nuklearna elektrarna Krško
- Uprava Republike Slovenije za zaščito in reševanje
- Petrol
- Policijska postaja Krško in Brežice
- Inšpektor za plovbo po celinskih vodah, Uprava Republike Slovenije za pomorstvo
- DRAVA Vodnogospodarsko podjetje Ptuj, d.o.o. (vodja GJS varstva voda)
- Termoelektrarna Brestanica
- Občina Kamnik, poveljnik civilne zaščite
- Občina Jesenice, civilna zaščita
- Podjetje Iskratel
- Občini Brežice, civilna zaščita
- Javno podjetje VOKA SNAGA

1 Agenda of the 2. National workshop of the WACOM project, 7. 7. 2022 (online)

| | | |
|---------------|---|--|
| 08.45 - 09.00 | Testiranje povezave | |
| 09:00 - 09:10 | Dobrodošlica in predstavitev udeležencev | <i>DRSV - UL FGG</i> |
| 09:10 - 09:20 | Splošni pregled projekta WACOM in dejavnosti Savske komisije | <i>Primož Banovec, Samo Grošelj</i> |
| 09:20 - 09:30 | Predstavitev namena in koncepta štabne vaje | <i>Ambrož Božiček Primož Banovec</i> |
| 09:30 - 10:00 | Predstavitev izvedene simulacije štabne vaje - Scenarij štabne vaje - Udeleženci štabne vaje - Časovnica štabne vaje | <i>Ambrož Božiček</i> |
| 10:00 - 10:30 | Predstavitev WACOM orodij | <i>Matej Cerk</i> |
| 10.30 - 10.45 | Odmor | |
| 10:45 - 11:00 | Kaj smo se naučili iz štabne vaje - Brežice - Razlitje naftnih derivatov v Zidanem mostu. | <i>Primož Banovec</i> |
| 11:00 - 11:20 | Primerjava petih štabnih vaj, ki so bile izvedene v okviru projekta WACOM (Brežice, Slavonski Brod, Brčko) | <i>Robert Mikac</i> |
| 11:20 - 11:45 | Vprašalniki - online anketa Diskusija | <i>Stanka Koren</i> |
| 11:45 - 12:00 | Zaključki in nadaljne delo v projektu WACOM | <i>Primož Banovec</i> |

2 Introduction

After a welcome by the project leader, Primož Banovac, UL of the Faculty of Civil and Geodetic Engineering, according to the agenda, the WACOM project, the project partners and the purpose and content of the project were presented.

2.1 Overview of the WACOM project and Sava Commission activities

The WACOM project builds on the activities and protocols of the International Commission for the Sava Basin, which respects various international protocols (on transboundary pollution, ICPDR - International Commission for the Protection of the Danube River) and builds on the logic of the EU Civil Protection Mechanism and takes into account the sovereignty of interventions in various countries.

Afterwards, Samo Grošelj (ISRBC) presented the legal framework and activities of the Save Commission.

The International Commission for the Sava Basin consists of 4 member countries and Montenegro. It deals mainly with management of water-related emergencies in the Sava River Basin, as well as sustainable water management, sustainable risk management (floods, droughts, accidents, etc.), regulation of international navigation and FASRB protocols. Current activities are aimed at controlling flood risk and establishing and improving a flood forecasting and warning system in

the Sava River basin. The activities of the Sava Commission are also aimed at prevention and control of accidents, which allows early information of potentially affected riparian states (Protocol on Emergency Situations (draft) and the Emergency Accident Warning System (AEWS)). They also inform the public with the system for exchange of data and information on RBM, FRM and HMI and the database for FFWS: Sava GIS (www.savagis.org) and Sava HIS (www.savahis.org); their upgrade (APC and NAV module) is planned within the WACOM project.

2.2 Presentation of the purpose and concept of the table-top exercise

The purpose of the staff exercise is primarily that successful management of major disasters (e.g., transboundary flooding, accidental pollution) requires effective and coordinated action by institutions in all countries.

Knowledge of the disaster management mechanism in upstream countries improves the efficiency and effectiveness of the response in downstream countries (floods, extreme pollution)

It links both countries and sectors: disaster management, water management and navigation

It involves target groups, creating a broad platform needed for better prevention and response to floods and emergencies.

Objectives of conducting table-top exercises:

- 1) Test and verify the usability and adequacy of the proposed WACOM tools for coordination and communication during incidents in an international environment (headquarters in different countries in the Sava River basin). WACOM tools: Transnational Modeling Tool, Incident Coordination Tool, Situational Awareness Tool
- 2) Conduct several international staff exercises in the manner of table-top drills 3) Interactive staff exercise
- 4) Involve as many international target participants as possible (become critical
- 5) Evaluate existing and new proposals for disaster management approaches
- 6) Assess the acceptability of introducing new tools into international practice
- 7) Promote the conduct of staff exercises, create examples of best practices.

2.3 Presentation of conducted simulation of the table top exercises

The WACOM project objectives include execution of five table top exercises which simulate several emergency situations of accidental pollutions and floods:

•3x simulation of accidental pollution to Sava river

–SLO-HR – accidental pollution Zidani Most

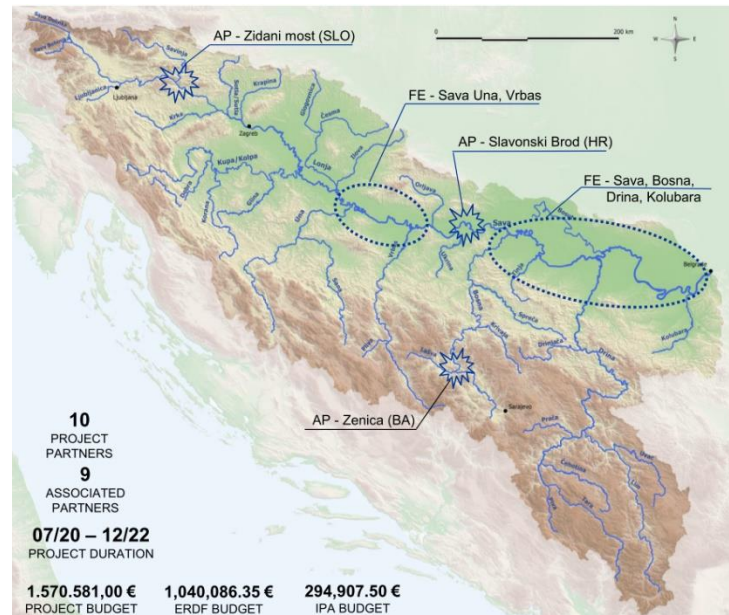
–HR-BIH – accidental pollution Slavonski Brod

–BIH-SRB – accidental pollution Zvornik(Drina)

•2x simulation of floods

–HR-BIH (river area: Una, Vrbas)

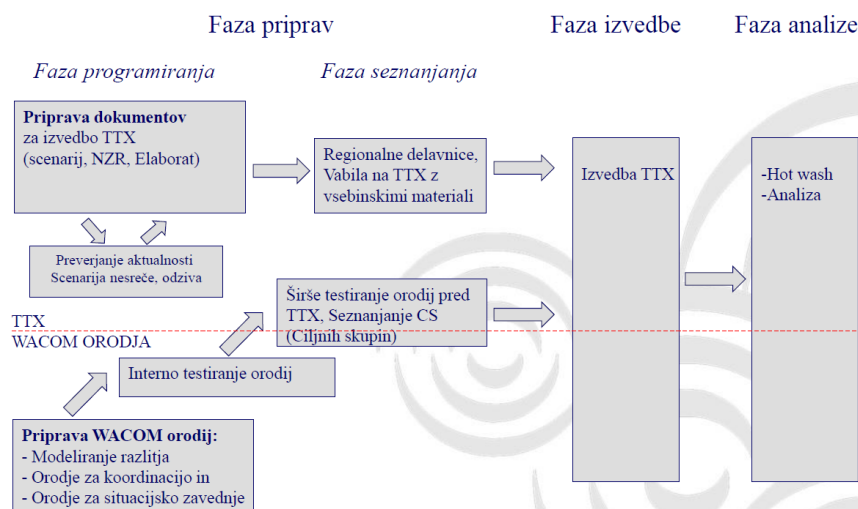
–BIH-SRB (river area: Drina, Sava)



Picture 1: five table top exercises were executed

2.3.1. Phases of preparation for conducting the simulation of the TTX exercise

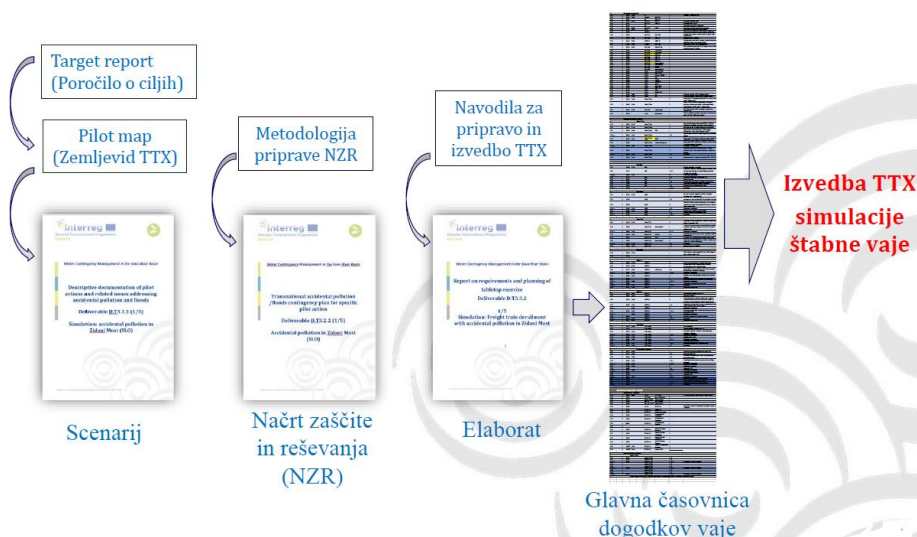
Preparation for conducting the simulation of the TTX exercise was performed in several different phases: preparation phase, execution phase, analysis phase (as shown in Picture 2).



Picture 2: Phases TTX

Documentation for the preparation and execution of a TTX exercise simulation

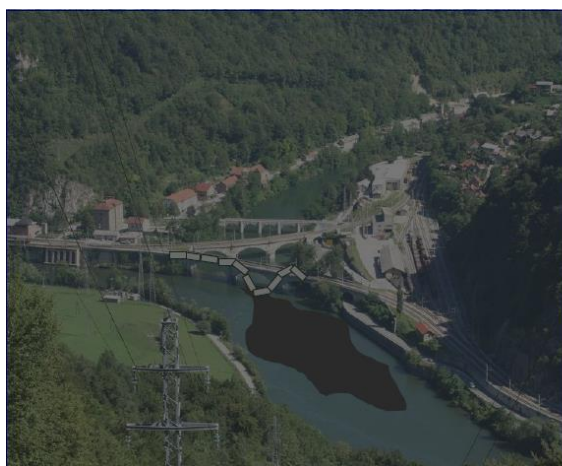
Documents prepared within the WACOM project serve as the main documents which define details on preparation and execution of the table-top exercise of simulation of accidents. The four documents were prepared for each of the five table top exercises which simulate several emergency situations. The four documents are: Scenario, Contingency plan, Elaborat and Master Scenario Event List.



Picture 3: four documents prepared for each of the five TTX

2.3.2. Execution and key steps of the TTX simulation

1) Introduction to scenario, MSEL and WACOM tools



- Derailment of a freight train on the bridge in Zidan the bridge.
- A train with 10 tanks
- Wagons overturn, damaged, some of them fall into the water.
- In a short time 250 m³ flow into the water (6 full wagons)
- Focus on fighting spills, not on recovering from a train accident!
- Sunday evening, low temperatures, rainy night, high flow of the Sava;

Picture 4: Scenario of the accident

Scenario condition:

- The risk of a cross-border impact spread spots on Croatia.
- Use of WACOM tools for international coordination of response

- 2) The beginning of the event (spill).
- 3) Communication, reporting,...
- 4) Use of WACOM tools 5) Preparation of report and reporting of planned activities (ICS 209).
- 6) AEWS reporting 7) Completing, supplementing ICS 207 reports (organising staff).
- 8) Design of press releases for the public
- 9) Completion of activities and transition to "rehabilitation phase".
- 10) Questionnaires for the participants
- 11) Analysis and HOT WASH

2.3.3. Table top exercises analyses

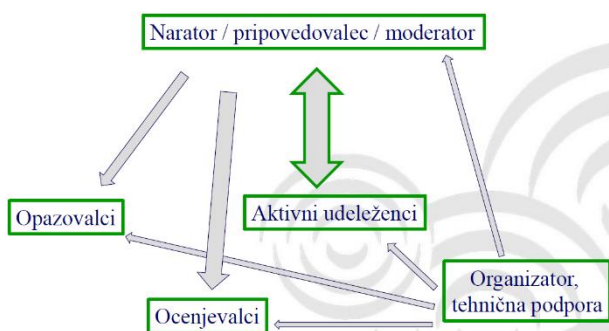
Participants were invited to actively participate in the interactive story of the accident and to participate in describing the expected sequence of events and activities that their facility's team would perform during the actual rescue.

The exercise is conducted in such a way that all participants follow the main narrative of the story by the narrator of the exercise, even if they would not be familiar with it in the real case. Participants also observe the activities or reactions of all other participants. This is the only way that each participant can better understand and evaluate new approaches and the use of assistive devices in conducting the exercise.

Each participant responded in accordance with best practices and in accordance with any innovations resulting from the use of WACOM tools as part of the protection and recovery plan.

During the exercise, participants will become familiar with and use WACOM tools, and evaluation of the usefulness of these tools will be an important element in the final evaluation of the exercise.

Some participants were not actively involved and had the role of monitoring and overseeing the implementation of the TTX, they provided ongoing analysis of activities, and identify deviations from the planned implementation plan or existing procedures.



Slika 5: Key actors of TTX

HOT WASH analyses

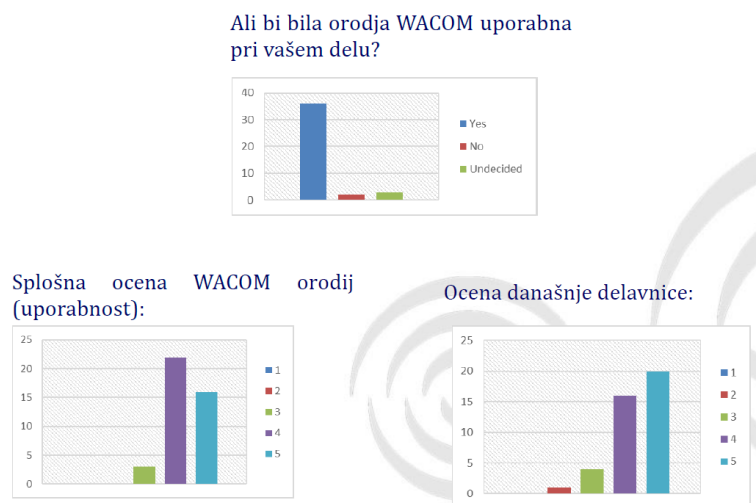
Immediately following the completion of the exercise, a "hot wash" analysis must be conducted, allowing all participants to provide comments that will be discussed in the "After Action" report. The following questions will be answered as part of the analysis:

1. Individual active headquarters participate and reflect on the questions:

- Was it done well?
- What was not done well and what is the reason?
- Were there any surprises? Which ones?
- Were the goals and objectives of the exercise met? If not, why were they not achieved?
- What can be included in the "after action" report?

2. individual questionnaires for all participants - expectations from TTX, experiences with similar instruments, data availability during the exercise, information and communication between headquarters, evaluation of WACOM instruments

3. questionnaires for the evaluators.



Slika 6: Presentation of questionnaire analysis

2.4 Comparison of five table-top exercises carried out within the WACOM project (Brežice, Slavonski Brod, Brčko)

Main conclusions and hot wash

- Excellently organized workshop
- All participants actively participated in the implementation of the exercises
- The discussion was of high quality and showed situations that need to be resolved within each country, as well as across borders
- The technical solutions developed within the WACOM project can be very in real situations

- The workshop served as a model for following workshops

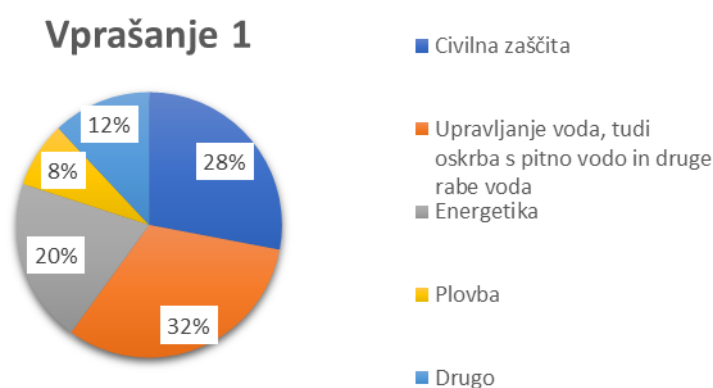
3 Analysis of the questionnaire results

Since the discussion took place online, we prepared a questionnaire in advance that participants completed via polls (ZOOM survey) in the hope of getting a greater response and better results. 25 workshop participants took the survey and answered 10 questions. The questions and analysis of the responses are presented below:

Questionnaire for the 2. national workshop WACOM in Slovenia

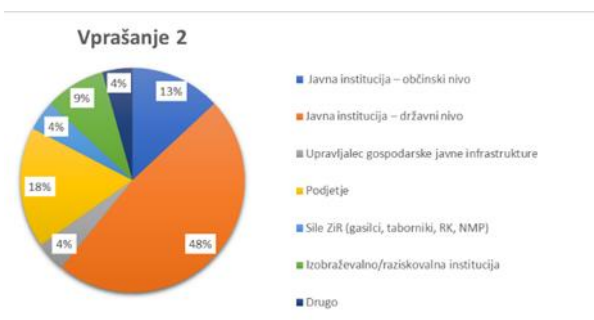
1. Navedite strokovno področje vašega dela: (Multiple Choice)

- Civilna zaščita
- Upravljanje voda (tudi oskrba s pitno vodo in druge rabe voda)
- Energetika
- Plovba
- Drugo



2. Iz katere vrste institucije prihajate: (Multiple Choice)

- Javna institucija – državni nivo
- Javna institucija – občinski nivo
- Izobraževalno/raziskovalna institucija
- Upravljalca gospodarske javne infrastrukture
- Sile ZiR (gasilci, taborniki, RK, NMP)
- Podjetje
- Drugo

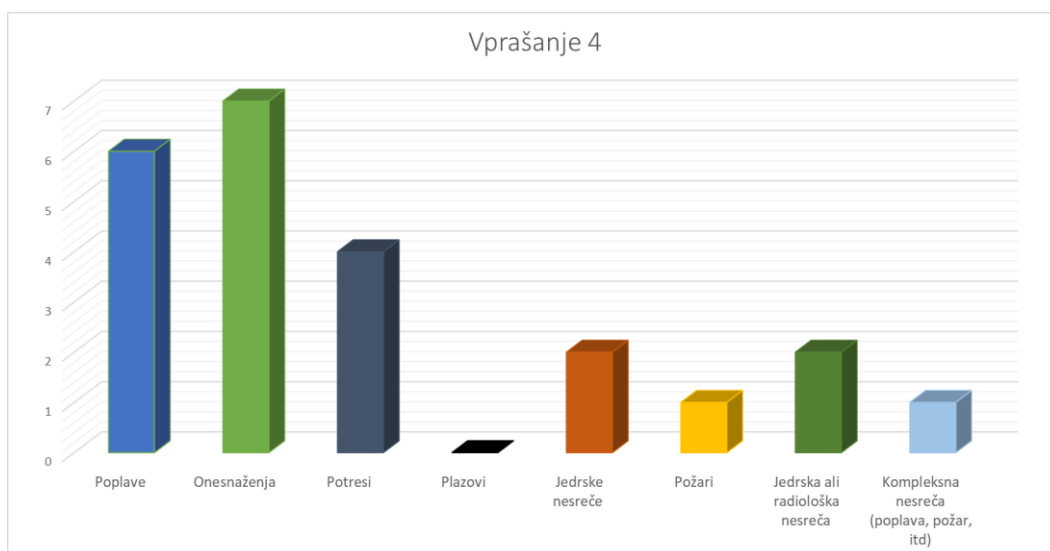


3. Ali ste že kdaj sodelovali pri kakšni štabni vaji? (Single Choice)

- Da
- Ne
- Niti da - niti ne

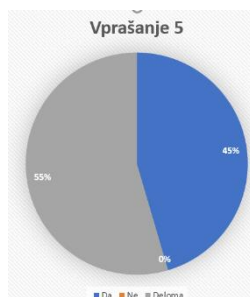


4. Če ste že sodelovali pri kakšni štabni vaji, prosim napišite v katerem postopku oziroma simulaciji katere nevarnosti? (v primeru, da niste sodelovali napišite NE) (Short Answer)



5. Ali poznate proces oblikovanja/aktivacije štaba? (Single Choice)

- Da
- Ne
- Deloma



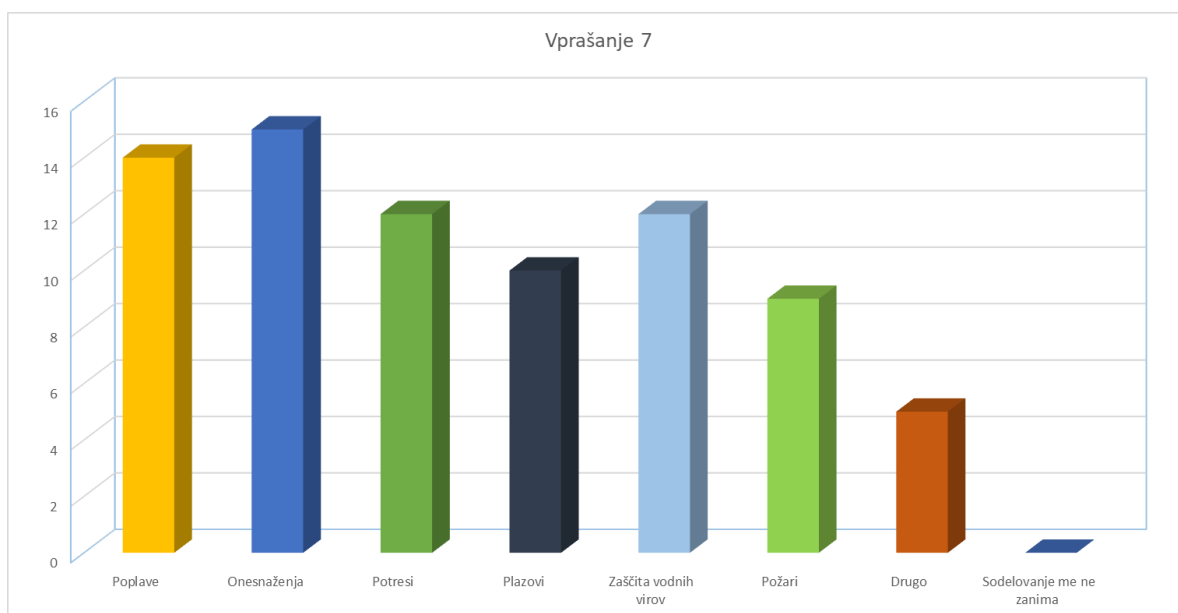
6. Kakšna je po vaših izkušnjah, komunikacija med aktiviranimi štabi v primeru kompleksnega odziva v katerem sodeluje več štabov? (Multiple Choice)

- Komunikacija je močno pomanjkljiva
- Komunikacija je dobra / zadovoljiva
- Komunikacija je odlična



7. Bi vas zanimalo sodelovanje v podobnih štabnih vajah? Za katere naravne nesreče se vam zdi, da bi bila izvedba štabnih vaj še posebej pomembna. (Multiple Choice)

- Poplave
- Onesnaženje
- Potresi
- Plazovi
- Zaščita vodnih virov
- Požari
- Drugo
- Sodelovanje me ne zanima



8. Ali prepoznate potrebo po orodju za izboljšano komunikacijo med štabi? (Single Choice)

- Da
- Deloma
- Ne



9. Ali prepoznate uporabnost spletnega orodja WACOM? (Single Choice)

- Da
- Ne



10. Vaši komentarji in predlogi: (Long Answer)

Answers:

- I welcome all communications and activities related to preparing for sudden events such as pollution and flooding.
- The need to conduct multiple staff exercises
- In practice, staff exercises will always be welcome, regardless of how they are conducted.
- I think it would be good if the WACOM tools were translated into our languages in the future.
- WACOM is a very good project. It has excellent indicators, so WACOM 2 project should be designed and set up with the activities started.
- Excellent presentation, good tool that should be used for other events as soon as possible.
- Training and education are central to good management of operations and personnel in real situations. The knowledge and experience gained can be very useful to us in events.
- Excellent organization and kudos to all for the presentations.
- The challenge of transnational cooperation in complex events is extraordinary, WACOM opens and tests the right way in this direction.