

**SUPPORT TO UKRAINE
IN APPROXIMATION OF THE EU
ENVIRONMENTAL *ACQUIS***

EuropeAid/135825/DH/SER/UA

Workshops Report

**Training on understanding the process of surface
water monitoring planning and implementation and
flood risk and flood hazard mapping**

Dnipro, 23-24 October, 2017

Kharkiv, 25-26 October, 2017

Service Contract No.: 2015/357-205



1. INFORMATION ON THE EVENT

Within the scope of APENA project and as part of the Training Programme in water sector, the Trainings on understanding the process of surface water monitoring planning and implementation and flood risk and flood hazard mapping were held in Dnipro 23-24 October, 2017 and in Kharkiv, 25-26 October 2017. The activities belong to Activity 2.2.8 Training workshops – Component 2 of the APENA project.

2. MAIN OBJECTIVES OF THE EVENT AND RELATION TO THE PROJECT ACTIVITIES

Objectives of the Workshops aimed at presenting and discussing surface water monitoring planning approach as well as flood risk and flood hazard mapping as required by WFD and FD.

Experts presented the latest draft of the CMU Resolution “On State Water Monitoring” and Order of Ministry of Interior “Methodology of Flood Risk and Flood Hazard Maps Development” with the aim to obtain comments with further their incorporation in the drafts of the legal documents.

In order to fulfil these objectives, the participants were provided with the following information (see Agenda in the Annex to this report).

- EU Water Directives transposition into UA legislation
- Amendments to UA by-laws, state water monitoring reforming
- WFD requirements for surface water monitoring
- Biological parameters selection for different water categories
- Surface water monitoring - intercalibration in Danube countries
- Hydromorphological monitoring
- Surface water bodies monitoring in EU countries
- FD implementation - state of art
- Flood risk and flood hazard maps development.

The presentations of the trainers related to the Project Activity 2.2.3 , “Legal substantiation and support in developing of 10 new legal acts”.

3. PARTICIPANTS

The workshop in Kharkiv was attended by 53 participants, including the representatives of Ukrainian hydrometeorological center, Central Geophysical Observatory, oblast hydrometeorological centres in Eastern regions (Donetsk, Kharkiv, Lugansk, Poltava, Sumy and Chernigiv), the State Emergency Service of Ukraine; State Agency of Water Resources of Ukraine (SAWR), its basin authorities and branches in the Eastern Ukraine and research institutes.

The workshop in Dnipro was attended by 46 participants, including the representatives of Ukrainian hydrometeorological center, Central Geophysical Observatory, oblast hydrometeorological centres in Central and Southern regions (Dnipro, Zaporizzhya, Mykolaiv, Kherson, and Cherkasy), the State Emergency Service of Ukraine; State Agency of Water Resources of Ukraine (SAWR), its basin authorities and branches in the Southern and Central Ukraine and research institutes.



4. MAIN INPUTS PROVIDED BY THE PROJECT

Main inputs to the event provided by the Project comprised of presentations of the Project team experts and invited speakers (representatives of beneficiary and a national ICPDR expert) during the plenary and moderation during training sessions.

The trainings were organised in interactive ways with the following sessions:

- Training session #1 : Surface water bodies (rivers, lakes) delineation,
- Training session #2 : Chemical and ecological (physico-chemical parameters) status designation,
- Training session #3 : Ecological status (biological parameters) designation,
- Training session #4: Development of proposals for reforming of national water monitoring.

Approach:

In order to ensure better efficiency the participants were split into groups for the exercises, led by trainers. The results of the trainings were used not only to assess the level of the knowledge absorption, but also for further corrections of the presentations as well as relevant legal documents discussed. All APENA experts participated not only as presenters, but also as moderators and supervisors of the participants' groups.

Training materials:

Participants were provided with following documents in Ukrainian language:

- 1 WFD CIS Guidance document No. 19 - Surface water chemical monitoring
- 2 WFD CIS Guidance document No. 32 - Biota Monitoring
- 3 WFD CIS Guidance document No. 13 - Overall Approach to the Classification of Ecological Status and Ecological Potential
- 4 WFD CIS Guidance document No. 7 - Monitoring under the Water Framework Directive

5. ASSESSMENT OF EVALUATION QUESTIONNAIRES

In order to measure the impact of knowledge transfer achieved in training workshop, the event was concluded by asking participants to fill in an evaluation questionnaire. Willingness of the participants to participate and provide answers was ensured by anonymity of the filled in questionnaires.

The evaluation questionnaires were disseminated to all participants at the both trainings. Their feedback allows APENA experts to get a better picture which questions or issues were well understood and which require further / additional training in the future..

In **Dnipro** the project team after the event collected 34 filled in evaluation questionnaires by participants. The scoring table related to 9 presentations / sessions presents an average scoring from 4,53 to 4,91 (5 score is the best) (see Table 1 and Figure 1).



Table 1. Scoring table at Dnipro training

	EU Water Directives transposition into UA legislation	Amendments to UA by-laws, state water monitoring reforming	WFD requirements for surface water monitoring	Training session #1 : Surface water bodies (rivers, lakes) delineation	Training session #2 : Chemical and ecological (physico-chemical parameters) status designation	Training session #3: Hydrobiological monitoring of surface waters	Hydromorphological monitoring	Training session #4: Development of proposals for reforming of national water monitoring (3 groups)	Flood risk and flood hazard maps development
Average	4,82	4,65	4,82	4,53	4,65	4,65	4,91	4,76	4,91

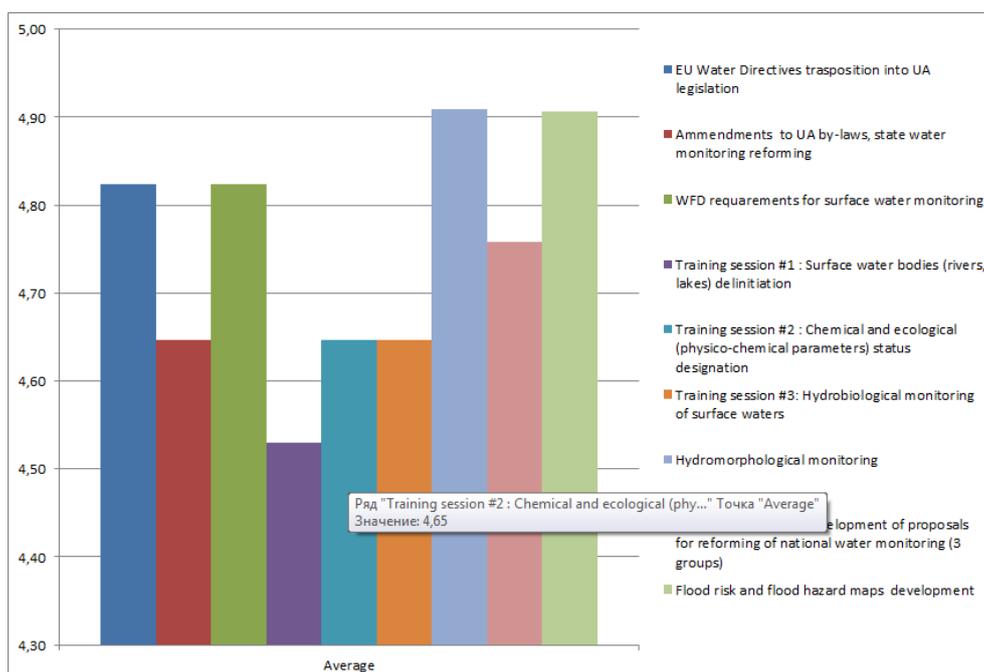


Figure 1 Evaluation of the sessions in Dnipro

In **Kharkiv** the project team after the event collected 38 filled in evaluation questionnaires by participants. The scoring table related to 9 presentations / sessions presents an average scoring from 4,7 to 4,97 (5 score is the best) (see Table 2 and Figure 2).

Table 2. Scoring table at Kharkiv training

	EU Water Directives transposition into UA legislation	Amendments to UA by-laws, state water monitoring reforming	WFD requirements for surface water monitoring	Training session #1 : Surface water bodies (rivers, lakes) delineation	Training session #2 : Chemical and ecological (physico-chemical parameters) status designation	Training session #3: Hydrobiological monitoring of surface waters	Hydromorphological monitoring	Training session #4: Development of proposals for reforming of national water monitoring (3 groups)	Flood risk and flood hazard maps development
Average	4,86	4,70	4,84	4,84	4,84	4,92	4,97	4,86	4,92

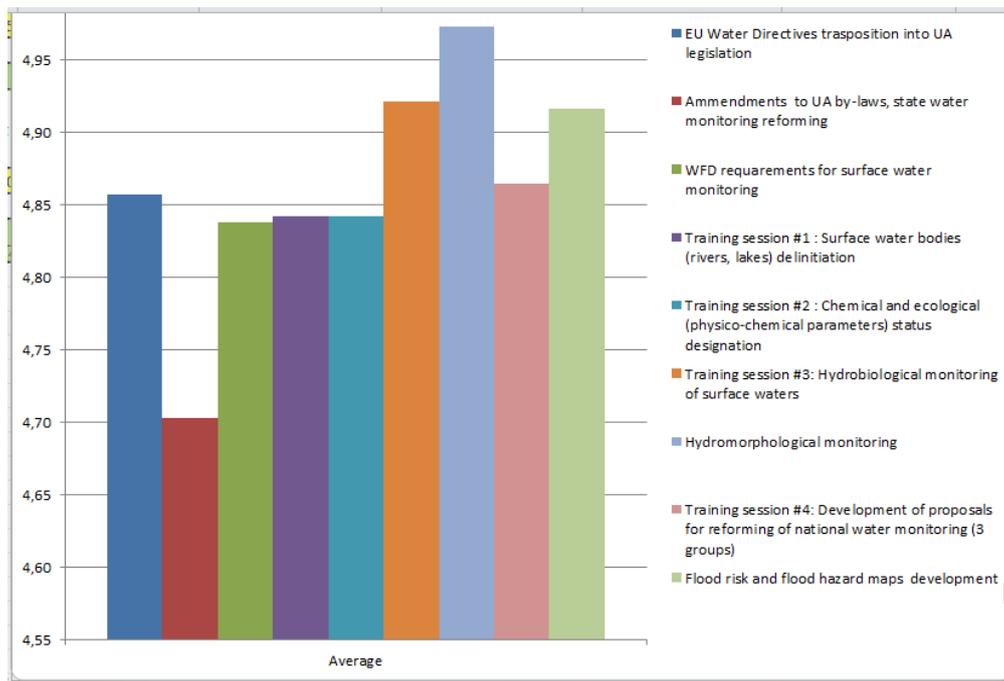


Figure 2 Evaluation of the sessions in Kharkiv

From the Evaluation charts, one can see that all the sessions were assessed above 4 score (good), which are considered like very good score. The highest grades are with presentation on hydromorphological monitoring and Flood risk and flood hazard maps development, and the lowest – with Surface water bodies (rivers, lakes) delineation and Amendments to UA bylaws, state water monitoring reforming.

6. IMPACTS ACHIEVED

WFD

During the trainings, key monitoring staff of SAWR and Hydromet and their regional departments in the Eastern and Southern regions got introduced to the new WFD compliant surface water monitoring planning. They got the opportunity to express their opinion regarding the future monitoring arrangements, coordination process at regional (Oblast, basin) as well as at national level.

APENA trainers presented monitoring for ecological and chemical status designation: ecological based on biological quality elements, hydromorphological and physical-chemical, which includes also basin-specific pollutants and chemical based on priority substances.

Besides, APENA experts conducted the training session on the reforming of the surface water monitoring in Ukraine, where participants of training could propose the monitoring stations in their area of responsibility (following the types of monitoring stated in the WFD: surveillance, operational and investigative), frequency of measurements and parameters.

FD

The participants as main users of subject maps expressed their opinion on the use of the maps in everyday work as a part of their official duties. Also the participants provided actual technical capacity assessment for maps development with case study at the event venue. The stakeholders shared their vision on the flood mapping methodology and suggested optional technical



requirements vital for local level. The proposal received were valuable and were taken into account while the ongoing drafting of national methodology on flood mapping. The results of the training sessions will be also discussed at working group of FD implementation in Ukraine.

7. CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1. All participants of the trainings got needed knowledge on new requirements for surface water monitoring and flood risk mapping.
2. The comments to the CMU Resolution “On State Water Monitoring” and Order of Ministry of Interior “Methodology of Flood Risk and Flood Hazard Maps Development” were obtained and included in the drafts prior interministerial consent procedure.
3. High quality of the trainings is confirmed by the participants’ scores (from 4,53 to 4,97 at 5 score scale).
4. High efficiency of interactive workshops (exercises, splitting into the groups, discussion of the results by groups’ rapporteurs) is proven (according to the participants’ feedback in questionnaire).
5. The knowledge and practical skills obtained in 2016 and 2017 by participants on surface water bodies delineation should be taken into consideration by MENR and SAWR during development of River Basin Management Plans. It should be also taken into account by another technical assistance project, dealing with WFD implementation, in particular EU WI+ for Dnipro river basin.
6. Analytical laboratory of SAWR located in Slovyansk (Donetsk Oblast) is assessed as the most upgraded in the system of SAWR and Hydromet for the whole Ukraine (equipment, skills, experience, staff, motivation).

Recommendations:

- To recommend MENR to consider SAWR’s Slovyansk analytical laboratory for consideration for further technical support (equipment purchasing, quality control assurance, staff training) in frame of EU WI+ project;
- To propose the following approach for training workshops for year 2018:
 - To conduct two workshops for representatives of SAWR (as main target group) on River Basin Management planning with focus on significant pressures and impacts of human activities following EU Water Framework Directive requirements and Flood Risk Management Plans development following EU Flood Risk Directive;
 - To conduct two field trainings on hydromorphological monitoring for Hydrometeorological Centers (responsible authority according to the new Resolution on state water monitoring), aiming at operational hydromorphological data collection and assessment for selected rivers.

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ANNEX: WORKSHOP AGENDA

Training for understanding the process of surface water monitoring planning and implementation and flood risk and flood hazard mapping	
Agenda:	
Day 1	
08:00-11:00	<i>Check-in</i>
09:30-10:30	<i>Breakfast</i>
10:30-11:30	<i>Registration of the participants</i>
11:30-11:50	Welcome (EU APENA project), participant's presentation
11:50-12:10	Introductory presentation: objective, goals, organization of the workshop, <i>Iarochevitch Alexei, KE 3</i>
12:10-12:40	EU Water Directives transposition into UA legislation, <i>Vykhrist Serhiy, Legal expert</i>
12:40-13:10	Amendments to UA by-laws, state water monitoring reforming, <i>Olga Lysiuk SAWR</i>
13:10-14:10	WFD requirements for surface water monitoring, <i>Jarmila Makovinska, Monitoring expert</i>
14:10-15:10	<i>Lunch</i>
15:10-16:20	Training session #1: Surface water bodies (rivers, lakes) delineation, <i>Oksana Konovalenko, Kyiv National University</i>
16:20-16:40	<i>Coffee break</i>
16:40-18:00	Training session #2 : Chemical and ecological (physico-chemical parameters) status designation, <i>Eduard Osiysky, Chemical status expert</i>
18:00- 18:30	Training session #3 : Ecological status designation, <i>Oksana Manturova, Hydrobiology expert</i>
19:00	<i>Dinner</i>



Day 2	
09:00-09:20	Surface water monitoring - intercalibration in Danube countries, <i>Maria Skobley, ICPDR national expert</i>
09:20-10:00	Biological parameters selection for different water categories, <i>Oksana Manturova, Hydrobiology expert</i>
10:00-10:50	Hydromorphological monitoring, <i>Iarochevitch Alexei, KE 3</i>
10:50-11:20	Surface water bodies monitoring in EU countries, <i>Jarmila Makovinska, Monitoring expert</i>
11:20 -11:40	<i>Coffee break</i>
11:40-13:00	Training session #4: Development of proposals for reforming of national water monitoring (3 groups), moderators: <i>Jarmila Makovinska, Eduard Osiysky, Oksana Manturova, APENA experts</i>
13:00-14:00	<i>Lunch</i>
14:00 - 14:20	FD implementation - state of art, <i>Petro Kropotov, SSES</i>
14:00- 15:30	Flood risk and flood hazard maps development, <i>Konstantin Tsitov, FD expert</i>
15:30-16:00	Discussion, summing-up
16:00	<i>Departure</i>