REDUCING VULNERABILITY TO **EXTREME FLOODS** AND **CLIMATE CHANGE** IN THE **DNIESTER RIVER BASIN**

Workshop on the institutional capacities and practices for the communication of flood risks in the Dniester river basin

ENVSEC UNECE OSCE UNEP zoï environment

REPORT

The workshop on the issues relating to the institutional capacities and practices for the communication of flood risks in the Dniester river basin was held on May 27th-28th, 2013 in Lviv, Ukraine. Over 60 persons took part in the seminar. These included representatives of local authorities, and key organizations from Moldova and Ukraine, specifically specialists of hydro-meteorological organisations, water administrations, nature protection agencies, and rescue and emergency organizations of the national, basin, oblast and local levels. Invited specialists from other Western and Central European countries and international organizations also took part in the workshop.

The workshop was conducted as part of the project "Reducing vulnerability to extreme floods and climate change in the Dniester river basin" within the "Environment and Security" initiative (ENVSEC) with financial support from Sweden and Finland.

The main task of the meeting was to discuss the institutional capacities and practices for the communication of flood risks in the Dniester river basin at the local, national and interstate levels. Specialists of Moldova and Ukraine considered a number of important issues including:

- The flows and exchange of hydrometeorological information at various levels, including dissemination of information and communication on floods at the local level;
- The roles and actions of emergency departments in case of flooding;
- Modeling and mapping of flooded areas in the basin.

Representatives of the World Meteorological Organization (www.wmo.int) presented global experience on the dissemination of information about flood risks, and gave examples of projects on communicating flood risks to population in different countries (France, Serbia and Philippines). They also described the Associated Flood Management Program (www.apfm.info). Participants discussed the role of the WMO in helping to increase the efficiency of the hydro-meteorological observation and data exchange networks in the transboundary river basins. In this regard, such issues as differences in formats, protocols and data coding; insufficient quality of data and meta-data as well as management of joint data bases still remain problematic. The establishment, expansion and modernization of hydrometeorological observation networks is still a relevant problem for many countries and regions.

Representatives of Great Britain, Netherlands and Poland shared their positive as well as negative experience of communicating flood information and their interaction with the local population to alert them to the risks and dangers. Talking about a modern integrated approach to warning the public, the specialist of the English Environment Agency (www.environment-agency.gov.uk) described an agreement made with local mobile communication operators. According to this agreement every resident in the flood risk zone gets a text message to their personal mobile phones. The specialist on water resources and floods from the Netherlands demonstrated the flood maps that have been developed for some transboundary rivers and explained how these maps are used within the country and in transboundary basins. Experience of cooperation between the Netherlands, Belgium and Germany in the basins of the rivers Rhine and Maas was also presented. The use of different colours (green, yellow, orange, red and blue) to demonstrate various levels of hazard on maps and in the field was another useful example of experience. The Polish experience in the sphere of public education and awareness raising on flood issues and actions in case of flooding was also very interesting. Poland's experience demonstrates that practical work with children in schools, who then actively disseminate their knowledge to parents and friends, is an effective method.

Areas of the Danube and Tisa river basins flowing across Ukraine and a number of European countries have suffered from flooding for a long time. As a result these countries have undertaken long term work aimed at mitigating the consequences of catastrophic flooding. Among other measures, information campaigns for local people have been developed and implemented. Specialists from these transboundary basins demonstrated

how these approaches could be implemented under Ukrainian conditions, what is important for the Dniester river basin and provided information on transboundary cooperation between EU countries that operate within the EU Water Framework Directive and EU Floods Directive.

Representatives of the key basin organizations of various levels presented the role of their organizations in the general process of data exchange and had a chance to highlight and discuss issues of the prospective cooperation with the consideration of the "Study of the institutional capacities and practices for the communication of flood risks in the Dniester river basin" (Geneva, 2013) conducted within the framework of the current project. Some of these issues include the absence or disrepair of the warning system, absence of flood models and maps of the settlements of the basins, a high level of forecast uncertainty, inadequate technical equipment of emergency services and low awareness level among local people on flooding issues.

During the meeting many practical issues were discussed in small working groups. Participants jointly identified problem areas in the Dniester river basin with regard to information provision on floods, high risk of floods and insufficient institutional capacity to prevent and mitigate consequences (see map, Annex 1). In particular, participants identified:

- The upper reaches of the Dniester with the majority of rayons of the Lvovskaya, Ivano-Frankovskaya (including the city of Ivano-Frankovsk), Ternopolskaya and Chernovitzkaya Oblasts, especially in the basins of the Dniester tributaries – Stryi, Lomnitza, Lukva, Bystrica Nadvornyanskaya. The floods here are characterized by high speed of origination leaving little time for forecasting and response. The main risk is not flooding itself, but erosion of the river banks. In identifying the most vulnerable areas remoteness from transport communication in the mountain areas was taken into the account;
- The middle reaches of the Dniester: Ukraine – basins of the Smotrich, Ushitsa, creek Turunchuk, cities Mogilev-Podolskiy and Yampol; Moldova – cities and villages Soroki, Vadul-lui-Vode, Shtefan-Vode, Grigoriopol, Bender, Tiraspol, Parkan, Kitzkan; the middle reaches of the Dniester are regulated by the Dniester (Ukraine) and Dubossarskaya (Moldova) hydro power stations;
- Lower reaches of the Dniester – estuary and settlements of Gradenitsy, Troitzkoye, Yaski, Belyaevka, Mayaki and others. About 50 km of the Odessa-Reni highway is within the flooding area due to floods and overflows of the Dniester river in its the lower reaches.

In a discussion of specific gaps in the sphere of public awareness about floods and adequate operation of services responsible for the prevention and minimization of damage, participants repeatedly came back to the familiar, but important problems and solutions are required to improve the situation in the future. These problems include the absence of modern maps of flood areas; the absence (or incomplete or untimely execution) of clear interaction schemes between responsible organizations; the inadequate state of technical equipment of the latter; absence or lack of state or local financing for preventive measures, awareness and information campaigns.

In general participants have agreed with the following conclusions of the "Study of the institutional capacities and practices for the communication of flood risks in the Dniester river basin" that were complemented in the course of discussions during the meeting:

- Sharing of hydrometeorological information between organizations within each country as well as between the countries has been organized at a high level over many years; cooperation and information exchange is based on bilateral agreements on interaction;
- Information exchange is organized in a centralized way (between the countries – via Kyiv and Chisinau, within Oblasts and between them – via Oblast centers) that sometimes delays the delivery of

information to the local level. Information exchange between organizations of different agencies within one country may be impeded.

- None of the countries has an automated early warning system in the areas most at risk of dam failure at the Dnestrovskoye and Dubossarskoye water reservoirs;
- The local warning system is based on notification via loud speakers and horns, which in the majority of cases are either absent or have worn out after 30-40 years of operation;
- The countries do not have up-to-date maps of possible catastrophic flood zones and settlements at risk; old (or outdated) maps developed during the Soviet time are predominantly used. There are no electronic maps. Modeling as well as forecasts of flooding and flow change are done fragmentarily;
- The issue of training of civil protection specialists has not been fully resolved (in particular, in Moldova there is no higher-education facility for such training with only specialized courses available). Opportunities for training of local civil protection groups are often limited, in particular by the lack of practical and financial possibilities to take part in the training programs.
- Technical equipment of local civil protection formations is extremely poor;
- In general, the level of public awareness in the basin on actions before, during and after flooding is inadequate.

Having discussed the problem issues, participants of the workshop attempted to develop a conceptual basis for the improvement of local public flood communication plans. The following territories have been selected as pilot areas: Turukovskiy Rayon Lvivskaya Oblast, Ukraine, upper reaches of the Dniester; Mogilev-Podolskiy (Vinnitzkaya Oblast, Ukraine) and Vadul-lui-Vode village (Moldova) in the middle reaches; and Yaski village (Odesskaya Oblast, Ukraine) in the lower reaches of the river. The concepts of the local flood communication plans (with answers to 3 questions: events and their priority, target audience, ways and means of implementation) are provided in Annex 2.

To improve the use of information to prevent and reduce the damage caused by flooding in the Dniester river basin, participants of the meeting recommend:

- Improve and expand the system of automatic flow monitoring in the Dniester river basin (including its tributaries) and in the future integrate the existing automatic monitoring stations into a single system (at the national and basin levels) to ensure the free use and transfer of hydrological information;
- Discuss the issue of joint (transboundary) use of meteorological radars installed in the Dniester river basin as well as in the neighbouring basins and establish a system to exchange relevant data between interested organizations and countries;
- Provide assistance for the installation of precipitation gauges in the upper reaches of the Dniester and organize transfer of this data in real time to the corresponding agencies located downstream;
- Analyze the vulnerability of basin settlements to flash floods; in the selection of risk assessment methods consider differences in the geographical characteristics of different parts of the basins and peculiarities of floods at specific locations;
- Provide assistance in restoring of the early warning systems on flood risk with a special focus on settlements located in the proximity to hydro energy complexes;
- Organize modeling and mapping of catastrophic flood zones with the application of modern geo-information technologies considering the requirements of the EU Water Framework Directive and EU Floods Directive. Transfer the flood map for Mogilev-Podolskiy developed within this project to the Hydrometeorological Centre of Ukraine to be discussed at the Technical Council and to the local self-governance bodies of Mogilev-Podolskiy;

- Provide one-off or regular training for the leaders of local administrations, heads of civil protection formations, school directors and teachers to raise the level of their knowledge in the area of civil protection;
- Organize training and provision of information to the population (workshops, lectures, and information materials) to raise the level of public awareness on actions required before, during and after flooding.

The recommendations of the workshop will be directly used by the international organizations implementing the project when planning future work and cooperation with the basin countries as well as by the state and local bodies, non-governmental and other organizations of Ukraine and Moldova to improve generation, dissemination and use of information on flooding and flash floods in the Dniester river basin.

The main consolidated materials of the workshop are provided in Annexes to this report.

More information about the project "Reducing vulnerability to extreme floods and climate change in the Dniester river basin" is available at:
http://www1.unece.org/ehlm/platform/pages/viewpage.action?pageId=22741054
https://www2.unece.org/ehlm/platform/pages/viewpage.action?pageId=28639255
http://dniester.org/materials/navodneniya-i-izmenenie-klimata/

ANNEX 1

Areas of the Dniester river basin that are extremely vulnerable to floods with inadequate capacity to inform people and local authorities (based on the results of work in small groups)

ANNEX 2

The concepts of the local plans on flood communication

Turkovskiy rayon, Lvovskaya Oblast, Ukraine

Turkovskiy rayon of the Lvovskaya Oblast in the upper reaches of the Dniester river was selected for more detailed analysis of the situation. Participants agreed that improvement of communication systems requires the development of interaction schemes at various levels, in particular at the basin level, including the development of interstate regulation on cooperation for flood protection and exchange of hydrometeorological data.

Activity	Who for?	What for?	How?
Modernization of the existing hydrometeorological stations (automation, 8 units)	Hydrometeorological services, water administration organizations	To improve forecasting and reduce the decision making time	Through the establishment of an automated information exchange system
Development of a single action plan for services and authorities in case of flood hazard (emergency situation) considering risk analysis and ranking (including the plans for settlements)	All services engaged	To systematize actions and identify priorities	Through a risk analysis, reconciling and coordinating of actions for services during a flood. Development of maps showing flooding areas.
Enhancing public awareness and knowledge about actions to take before, during and after flooding. (Working with the population on an ongoing basis)	Local residents	To enable informed and swift response and action by the population	Establishment of the civil protection corners, information programmes on radio and TV, presentations in schools, dissemination of prompt cards among people
Improving the communication of information and regulations when assessing and mitigating the consequences of emergency situations. Providing assistance to	Local self-governance bodies, bodies of executive power	For timely assessment of the situation, adequate response and decision-making	Practicing during training and learning sessions

enable the information to be used effectively in practice			
Provision of (incessant) means of communication	Local self-governance bodies	To ensure effective transfer of operational information	Through the development of the Oblast and rayon programmes for the financing and integration of measures to install Internet, phone and fax

Mogilev-Podolskiy, Vinnitzkaya Oblast, Ukraine

The experience of the flood in 2008 highlighted all the predicted concerns related to flooding. Central streets of the town were flooded as even the flood barriers constructed along the river within the city could not cope with such a rise of water.

The town is located downstream of the Dniester hydropower station. This creates additional social tension because if the dam failed, the travel time of the resulting wave is only 1 hour and 30 minutes. Because of this coordinating the actions of the administration and dispatchers of the Dniester HEPSP with the appropriate bodies and administrations in the downstream settlements, especially the timely warning about flushes during periods of flooding is very important.

The flood map for the area Mogilev-Podolskiy in Ukraine and Ataki, in Moldova was developed within the ENVSEC project "Reducing vulnerability to extreme floods and climate change in the Dniester river basin". (The flood of 2008 was used as the basis for this flood map with 3% of duration at water flow of 3400 m^3/s). Representatives of various organizations, including the authorities of Mogilev-Podolskiy discussed the possibility of using this map in the work of hydrometeorological services. For this purpose it is recommended to transfer this map to the Hydrometeorological Centre of Ukraine to be discussed by the Technical Council, which can then recommend how the map should be used in operational work. In parallel, flood modeling results will be provided to the local self-governance bodies (City Council), studied and passed over to be used by the relevant sub-departments of the city administration.

Action	**To be executed by?**
Preventative measures	
Development of information bulletins, prompt cards, stands, etc	Departments for Emergency Situations, local self-governance bodies
Organization of training events, seminars, lectures, presentations	Departments for Emergency Situations, local self-governance bodies
Communication to the public	
Development and timely transfer of information on flood risks, including	Departments for Emergency Situations, local self-governance

forecasts. Recipients of information: local self-governance bodies, local departments on hydrometeorology, water resources, emergency situations, border guard and other users	bodies
Convocation of the Commission for the Emergency Situations to discuss the situation and make a decision on communication	Local self-governance bodies
Warning the population on the level of flood hazard via radio, TV, media, loud speakers, sirens, mobile phones (sms), local inspectors, volunteers, etc	All responsible bodies
Actions during the flood	
Monitoring of actions	Emergency response team of the Commission for Emergency Situations
Forecast update	Hydrometeorological Services
Recalculation of flood zones	Commission for Emergency Situations
Making changes in the action plan	Commission for Emergency Situations
Mitigation of flood consequences	
Drawing conclusions	
Financial appraisal of the damage	Commission for Emergency Situations, local self-governance bodies
Clarification of the flood area	Hydrometeorological and water services, department of architecture
Accumulation of information for the data base	Hydrometeorological and water services, department of architecture

Vadul-lui-Vode village, Chisinau, the Republic of Moldova

Vadul-lui-Vode village is an important recreational, therapeutic and tourist zone in Moldova located 20 km away from Chisinau. Sanatoria for children are located here with thousands of tourists visiting the village annually. The village is located in proximity to the Dubossarskaya hydropower station. Timely warning on floods is extremely important to reduce the damage to tourist infrastructure as well as increase safety of the local population and visitors.

Activity	**Who for**?	**To be executed by?**
Installation of a warning system for the whole village:	Local self-governance bodies, population,	Dubossarskaya hydropower

• Warning sirens; • Loud-speaking communication system	economic organisations	station, local self-governance bodies, economic organisations
Timely provision of hydrometeorological and meteorological forecasts via early warning systems	Local self-governance bodies, economic organizations	Hydromet Service, the Service for Civil Protection and Emergency Situations
Briefing the population, personnel and visitors of the economic entities on the behaviour rules in case of a threat of emergency situation (flood)	Local self-governance bodies, economic organizations	The Ministry of Education, the Service for Civil Protection and Emergency Situations
Training of responsible bodies and personnel of local self-governance bodies and economic organisations	Population, personnel of the economic organizations, visitors	Local self-governance bodies, economic organizations
Visual Information : ✓ stands ✓ posters ✓ booklets ✓ calendars ✓ video clips ✓ radio programmes, etc	Population, personnel of the economic organizations, visitors	NGO

Yaski village, Odesskaya Oblast, Ukraine

Among other rayons of the Odesskaya Oblast, the village of Yaski has been selected. This is one of the most flooded areas. According to the representatives of the Odesskaya Oblast the main focus should be on awareness and information campaigns to raise the level of trust of the local population in the official forecasts and warnings, and to reduce the reluctance of some people to take part in a short-term re-settlement or evacuation from flooding zones.

Problem	**Solution**
No official hydrological post on the Ukrainian part of the Turunchuk creek	Install a hydrological post above the village of Troitzkoye to enable more accurate flood forecasts to be made
No official maps of the flood zones	Develop maps of flood zones using official criteria
Not all residents know (or are fully aware)	Official provision of information and briefing of the population; Residents should be required to sign that they have received this

that they live in a flood risk zone	information. In the briefing document people should be offered the opportunity to sign up to receive flood warnings by sms
Not all residents are ready to relocate in either the short or long terms	Conduct systematic public information work. Information provision should be organized by the chair of the village council and conducted quarterly.
Not all people know what to do in case of a flood	✓ develop short popular information ✓ put information stands adjacent to the village council, church and school ✓ develop a manual for the village council and other institutions in the village ✓ develop a booklet for local people ✓ work via schools/children ✓ Mass media ✓ Identification of flood risk zones in locality (zoning in locality through marks on buildings and poles with notes on predicted and historical flood levels).

ANNEX 3

Information on the workshop in mass media*

*The articles are available in Ukrainian only

Announcement of the workshop in the Internet media and news agencies (one week to the start)

International experts to discuss readiness of people to floods in the Dniester river basin

http://galinfo.com.ua/news/133818.html
http://zik.ua/ua/news/2013/05/21/409683
http://portal.lviv.ua/news/2013/05/21/145630.html
http://lvov.startnews.net/mizhnarodni-eksperti-obgovoryat-gotovnist-lyudey-do-pavodkiv-u-baseyni-dnistra
http://vgolos.com.ua/zhyttya/news/15591.html
http://www.lviv.tv/u-lvovi-hovorytymut-pro-pavodky-u-basejni-dnistra/
http://segodnya.novostimira.com/n_4573989.html
http://uanews.lviv.ua/society/2013/05/21/5228.html
http://rss.novostimira.com/n_4573989.html

Notification of the workshop

Not only rescuers have to deal with flood relief – the specialist

http://zik.ua/ua/news/2013/05/27/410781

In Lviv the experts discussed the terms of the Dniester Basin Treaty

http://www.lviv.tv/u-lvovi-eksperty-obhovoryly-umovy-dnistrovskoho-basejnoho-dohovoru/

The international workshop on flood prevention started in Lviv

http://dyvys.info/ekonomika/u-lvovi-rozpochav-robotu-mizhnarodnyj-pavodkovyj-foto.html
http://galinfo.com.ua/news/134279.html

Readiness for floods: Lvivska Obast exceeds Moldova – rescuer from Chisinau

http://galinfo.com.ua/news/134317.html
http://dyvys.info/dif/lvivska-oblast-pereversh
uj
я34ке-vsyu-moldovu-za-hotovnistyu-do-pavodkiv-ryatuvalnyk-z-kyshynevu.html

The Hydromet of Ukraine will ask the World Bank for money for its network

http://www.ukrinform.ua/ukr/news/ukrgidromettsentr_prositime_groshey_u_svitovogo_banku_na_pereosnashchennya_meregi_1831223
http://dyvys.info/ekonomika/ukrajinskyj-hidromettsentr-prosytyme-hroshi-v-svitovoho-banku-foto.html
http://galinfo.com.ua/news/134385.html
http://www.lviv.tv/ukrajinskyj-hidromettsentr-prosytyme-hroshi-u-svitovoho-banku-dlya-svojeji-merezhi/
http://zik.ua/ua/news/2013/05/28/411091

Publications on the workshop results in the Internet media and news agencies

Lviv officials would like to engage the church into emergency response

http://vgolos.com.ua/zhyttya/news/15870.html
http://zik.ua/ua/news/2013/05/29/411342
http://vgolos.com.ua/zhyttya/news/15885.html
http://risu.org.ua/article_print.php?id=52473&name=extraordinary_situations&_lang=ua&

Articles on the workshop results in the Internet media

http://karpatskijobjektiv.com/?p=1076

http://ukr-vestnik.com/novosti-lvova/9190-news.html

Articles on the workshop results in newspapers

Lviv, "Lviv Post" newspaper:

"Church bell as the alarm sound", http://www.lvivpost.net/lvivnews/n/20413

Kyiv, "Ukraine Young" All-Ukrainian newspaper

SMS Ukrainian style: Save Yourself

Due to chronic shortage of funds the public warning system on flood risks is at the "pre-war" level, http://www.umoloda.kiev.ua/number/2282/283/81267/

ANNEX 4

The workshop agenda

Day I, May 27, 2013

8:30-9:00	Registration
9:00-9:20	Opening Representatives from *Ukraine and Moldova* *ENVSEC secretariat, Geneva* *OSCE, Kyiv* *World Meteorological Organization* *Brief presentation of the workshop participants (tour de table)*
Introduction: communication as an instrument for flood risk reduction	
9:20-9:35	Presentation of the project "Reducing vulnerability to extreme floods and climate change in the Dniester river basin" *Mr. Nickolai Denisov, ENVSEC*
9:35-9:50	Flood communication from the global perspective *Ms. Isabel Riboldi, WMO*
9:50-10:10	Flood forecasting and warning Good flood communication practices: case study from the UK *Mr. Phil Rothwell, the Environmental Agency*
10:10-10:20	Q&A
Session 1 ***Flood communication practices in Dniester river basin***	
10:20-10:40	Flood communication study for the Dniester river basin *Ms. Lesya Nikolayeva, ZOI Environment Network*
10:40-11:00	Flood communication in the Republic of Moldova *Mr. Vitaliy Mutaf, Civil Protection and Emergency Situations Service*
11:00-11:20	Flood communication in Ukraine *Mr. Ivan Baziv, Main Department of Emergency Situations Service of Ukraine in Lviv oblast*
11:20-11:40	Discussion
11:40-12:00	Coffee break
12:00-12:20	Role of the Departments for Emergency Situation and for Chornobyl Catastrophe issues of the State Administration in the oblasts *Mr. Oleksii Tytarenko, State Administration in Lviv oblast*
12:20-12:35	Q&A Discussion of the European vs. Dniester experience in flood management and communication
Session 2 ***Flood communication practices at the local level***	
12:35-12:55	Flood education and communication on the local level as a base of flood risk reduction Good flood communication practice: case study from Poland *Mr. Roman Koniezhny, Institute of Meteorology and Water Management*
12:55-13:15	*Flood risks assessment and public awareness in the Ukrainian part of the Danube river* Good flood communication practice: case study from the Danube river, Ukraine *Mr. Oleg Diakov, Centre for Regional Studies*
13:15-13:30	*Q&A*
13:30-14:30	*Lunch*
14:30-14:45	*Observations and communication on flood risks within the system of water resources management* Good flood communication practice: case study from the Tisza river, Ukraine *Ms. Tamara Myronchyk, Tisza River basin water resources directorate*
14:45-15:00	Case study from Tlumach rayon of Ivano-Frankivsk oblast *Mr. Ivan Shkvarok, Tlumach rayoun Administration*
15:00-15:15	Case study from Oknitsa and Stefan Vode rayons, Republic of Moldova

	Ms. Ludmila Serenko, Mr. Viorel Tomov, Civil Protection and Emergency Situations Service
15:15-15:30	Discussion of the European vs. Dniester experience in flood communication at the local level
Session 3 ***Mapping gaps in flood communication*** *(work in 3 break out groups)*	
15:30-17:00	Interactive identification of the most vulnerable communities: 1) locations in the basin which are the most threatened by floods 2) locations with the lowest flood-communication capacities
16:00-16:20	Coffee break
Plenary session *Presentation, discussion and mapping of the problematic issues*	
17:00-17:30	Reporting from the breakout groups: the most vulnerable locations in the basin (high flood risks / low flood communication capacities)
17:30-18:00	Discussion
18:00	Conclusions of Day I
19:00	Reception

Day II, May 28, 2013

Session 4 ***Information flows and exchange***	
09:00-09:20	Enhancement of hydrological networks and data sharing in transboundary basins *Mr.* Tommaso Abrate*, WMO*
09:20-09:40	Hydrometeorological data flows in Republic of Moldova *Mr. Valeriu Cazac, Mr. Gherman Bejenaru, Hydrometeorological Service of Republic of Moldova*
09:40-10:00	Hydrometeorological data flows in Ukraine *Ms. Lidia Petrenko, Hydrometeorological Centre of Ukraine*
10:00-10:20	Q&A Discussion of the European vs. Dniester experience in organising hydrometeorological data flows
10:20-10:40	Coffee break
Session 5 ***Flood modeling and mapping***	
10:40-11:00	Flood modeling and mapping Good flood communication practice: case study from the Netherlands *Mr. Douwe Meijer, River management consultant*
11:00-11:20	Flood modeling and mapping of the territory Mohyliv-Podilskyy, Ukraine – Ataki, Moldova *Mr. Pavlo Kolomiyets, Ukrainian Center for environmental and water projects*
11:20-12:00	Q&A Discussion of the European vs. Dniester experience in using models and maps of the flooded territories on the practice
Session 6 ***Elaboration of measures at the local level*** ***(work in 3 break out groups)***	
12:00-13:30	Identification of measures to improve flood communication local plans
13:30-14:30	Lunch
Plenary session *Presentation and discussion of the 3 models of flood communication local plans*	
14:30-15:00	Reporting from the breakout session
15:00-16:00	Discussion
16:00	Conclusions and closing

ANNEX 5

The list of participants

Name	Organization	Contacts
Moldova		
Vitaliy Mutaf	Civil Protection and Emergency Situations Service	Tel: +37322738501 +37322738544 Cell: +37379604283 vmutaf@mail.ru
Ludmyla Serenko	Civil Protection and Emergency Situations Service	Tel: +37322738572 Cell: +37369191034 serenco@meteo.md
Valeriu Cazac	Hyrdometeorological Service	Cell: +373069191014 valeriucazac@hotmail.com
German Bejenaru	Hyrdometeorological Service	Cell: +37360064000 gherman.bejenaru@meteo.gov.md
Viorel Tomov	Shtefan Vode rayon Department of Emergency Situation	Tel: +37324222832 Cell: +37379604205
Gennadii Syrodoev	Institute of Ecology and Geography of the Academy of Science of Moldova	Tel: +37322739248 syrodoev_g@rambler.ru
Viktor Myrza	Representative of training center in Chisinau	Tel: +37322774400 Cell: +37379902778 mirza.vick@gmail.com
Leonid Ershov	Regional Information Center of Transnistria	+37355277735478 pelican.ershov@yandex.com
Roman Korobov	NGO “Eco-Tiras”	Cell: +373069166687 rcorobov@gmail.com
Vladimir Ursu	NGO “Eco-Tiras”	Tel: +37322623895 Cell: +37379557059 ecotrans@gmail.com
Ukraine		
Anatolii Prokopenko	Ukrainian Hydrometeorological Center	Tel: +380442399324 Cell: +380675470705 prokopenko@meteo.gov.ua office@meteo.gov.ua
Lidia Petrenko	Ukrainian Hydrometeorological Center	Cell: +380955450611 hydro@meteo.gov.ua
Valentyna Doroshenko	Ukrainian Hydrometeorological Center	Tel: +380442399360 hydro_d@mail.ru
Nina Guliaeva	Novodnistrovska monitoring station	Cell: +380989947614, +380938736326 mgnovodnistr@meteo.gov.ua
Igor Fedyk	Lviv Regional Center of Hydrometeorology	Tel: +380322389668 Cell: +380503715972
Svitlana Kolodko	Lviv Regional Center of Hydrometeorology	Tel: +38032721741 Cell: +380503715973
Nadiya Myhailyshyn	Lviv Regional Center of Hydrometeorology	Tel: +380322721741
Tetyana Gorodnicheva	Lviv Regional Center of Hydrometeorology	Tel: +380322721741
Viktor Sytova	Hydrometeorological Center for Black and Azov Seas	Tel: +380482631610, +380482634326 sytov_job@te.net.ua
Viktoriia Slyzka	Ivano-Frankivsk Regional Center of Hydrometeorology	Tel: +380342523170, +380342776551 Cell: +380978586125
Olga Deryk	Vinnytsya Regional Center of	Tel: +380432673359, +380432674752

	Hydrometeorology	pgdvinnitsa@meteo.gov.ua hydro.vin@gmail.com
Igor Krulkevych	Main Department of Emergency Situations in Odesa oblast	Tel: +380487245263 Cell: +380503362189 gav.i2012@yandex.ua
Valerii Globenko	Deputy Director Main Department of Emergency Situations of Ukraine in Lviv oblast	Tel: +38 0322390250 (main office) Tel: +38 0322390204 (direct) lviv@mns.gov.ua
Ivan Baziv	Deputy Director Main Department of Emergency Situations of Ukraine in Lviv oblast	Tel: +380322390310 Cell: +380676756572 ibaziv@mail.ru
Borys Vynnychenko	Main Department of Emergency Situations of Ukraine in Vinnycia oblast	Tel: +380432566523 Cell: +380679493560 spasatel74@mail.ru
Sergiy Storozhenko	Main Department of Emergency Situations in Ivano-Frankivsk oblast	Cell: +380973002209 uczif@ukr.net
Volodymyr Stebnyckyy	Department for Civil Protection of the State Administration in Ivano-Frankivsk oblast	Tel: +380342540941 Cell: +380503732993 steb.vol@ukr.net
Oleksii Tytarenko	Department for Civil Protection of the State Administration in Lviv oblast	Tel: +38 0322333101, +38 0322510629 Fax: +38 0322757291 Cell: +38 0676743028 uprnslv@gmail.com
Sergii Beliaev	Department for Civil Protection of the State Administration in Lviv oblast	Tel: +380322332283 Cell: +380676739648 uprnslv@gmail.com
Yaroslav Vivcharuk	Ternopil Water resources department	Tel: +380352259943 Cell: +380963377530
Yurii Gavrykov	Pivdennyy Bug Basin Authority, Vinnytsa Water resources department	Tel: +380432356203 Cell: +380673673975
Natalia Kruta	Lviv Water resources department	Cell: +380673720554 natasha-kruta@yandex.ua
Antonina Kugut	Odessa hydrogeological reclamation expedition	Tel: +380487070250, +380487061252 Cell: +380679766466 www-oggme-@ukr.net
Oleg Kozar	Water Resources Department in Ivano-Frankivsk oblast	Tel: +380342523136 Cell: +380671579109 ovr.vovr.if@i.ua
Grygorii Kikerchuk	Dniester-Prut Basins Department of Water Resources	Tel: +380372279200 Cell: +380502843927 grig.8@mail.ru
Oleksandr Glavatskyy	Water resources department in Hmelnytsk oblast	Tel: +380382787795 Cell: +380976036979 vvrovg@ic.km.ua
Ivan Shvarok	Tlumach rayon administration	Cell: +380503731500 vptlum@ukr.net shkvarokvanja@rambler.ru
Pavlo Kolomiyets	Ukrainian Center for environmental and water projects	Tel: +380445266187 mark@env.kiev.ua pkolomiets@gmail.com
Tetyana Volynska	Mogyliv-Podilskyy local authority / emergency situations	Cell: +380969282579 unsmpmvk@ukr.net
Oleksandr Dubelt	Mogyliv-Podilskyy local authority / general architecture	Cell: +380961995452 gawkala@i.ua
Bogdan Stecyk	Lviv oblast branch of Ukrtelecom	Tel: +380322614371

		Cell: +380911143880 romaniuk.teodozii@yandex.ua
Ludmyla Arhipova	International Charity Foundation "EuroAsia"	Cell: +380503732382 konsevich@ukr.net
Viktor Shcherbak	International Charity Foundation "EuroAsia"	Cell: +380672151388 vdavavia@mail.ru
Lilia Grychulevych	NGO Mama-86-Odesa	Cell: +380963195528 michlilya@yandex.ru
Roman Sizo	Center for Regional Studies	Tel: +380487198536 Cell: +380679070842 sizo.roman@gmaol.com
Volodymyr Shushnyak	Regional Agency for Sustainable Development	Cell: +380676702277 shushniak@gmail.com
Petro Budzhak	NGO "Evroecoskop"	Cell: +380676708336 petro.budzhak@gmail.com
International organizations and external experts		
Nickolai Denisov	ENVSEC	Tel: +41229178281 nickolai.denisov@zoinet.org
Hanna Plotnikova	OSCE-Kyiv	Tel: +380444920382 hanna.Plotnykova@osce.org
Alla Yushchuk	OSCE-Kyiv	Tel: +380444920382 Cell: +380992883037 alla.yushchuk@osce.org
Tommaso Abrate	WMO	tabrate@wmo.int
Isabel Riboldi	WMO	Tel: +41227308212 iriboldi@wmo.int
Lesya Nikolayeva	Zoi Environment Network	Cell: +380505504294 (UA) Cell: +41767740341 (CH) lesya.nikolayeva@zoinet.org
Roman Konieczny	Expert, Poland Institute of Meteorology and Water Management	Tel: +48 12639 8139 Fax: +48 12425 1929 roman.konieczny@imgw.pl
Phil Rothwell	Expert, England The Environmental Agency	Cell: +447990800019 phil.rothwell@environment-agency.gov.uk
Douwe Meijer	Expert, The Netherlands	Cell: +3165328040 douwe@riquest.nl
Oleg Diakov	Expert, Danube, Ukraine Center for Regional Studies	Tel: +380487998991 utsc@te.net.ua
Tamara Myronchuk	Expert, Tisza, Ukraine Tisza River Basin Water Resources Directorate	Cell: +38505886064 tm1410@rambler.ru

ANEEX 6

Participants' feedback

Institutional potential and practice of information exchange related to flood risks in the Dniester river basin

Lviv • 27-28 may 2013

Summary of feedback from participants (34 anonymous questionnaires filled)

	useful / good*				
	not at all	not very	rather	very	Why? Comments
INDIVIDUAL SESSIONS					
Dniester cooperation, international and British experience in communicating flood information		2	18	14	useful experience and information; very good level of awareness work and access to information in the UK*
Exchange and use of flood-related information: analysis of situation in the basin, work of emergency services	1	2	11	20	allows reaching a new level, which is more efficient than the current one; short response time*
Local-level use of information in the basin + the experience of Poland, Danube, Tisza		1	11	22	high level of most of the presentations; especially Tisza as the experience of a neighbour country of the same level; strong monitoring and cooperation in the Tisza basin*; good analysis and forecasting*
Flows of hydrometeorological information in the Dniester basin + WMO experience		2	17	14	no common data base and communication channels between the countries*
Modelling and mapping of flood risks + Dutch experience		1	12	21	NL is the country where this is a survival issue, and it has enormous experience; the Dutch experience impresses a lot; the Dutch presentation was too short; good approach and modelling tools
Work in groups: areas at risk, design of communication strategies		4	12	18	
GENERAL ISSUES					
Individual (free) interaction with colleagues and experts			7	27	very democratic and welcoming atmosphere; broad opportunities to interact with people helped build connections
Organisational / logistical aspects of the meeting (food, accommodation, interpretation)		1	6	27	one of the interpreters was not prepared for simultaneous interpretation; the quality of interpretation was not even
How useful are the results of the meeting for your work?		1	10	22	very much, the meeting materials will be used for working with people; learnt new ideas which can now try to implement
How would you rate the meeting overall?		**1**	**10**	**22**	excellent; five [the highest score at school]

* the comment seems to refer to the content rather than to the quality of the session

** some participants left some cells empty, hence total scores may be different in different lines

1. **What did you like?**

- presentations were useful, interesting and valuable
- presentations and experience of foreign experts
- the engagement of foreign experts
- the wide range of highly competent participants
- very good that people from the regions could come and establish contacts
- good exchange of experience, new ideas and results
- possibility to study experience of other basins, and not only from Western Europe
- work in groups allowed the exchange of views, knowledge, ideas
- training in working groups
- organisation of the workshop
- food and the reception

2. **What did you not like?**

- no serious issues or problems
- too long plenary table: it was not always possible to see the speaker
- was not possible to watch a presentation and a speaker at the same time
- *Appele Moldovei* and Moldova's local authorities did not participate, Transnistrian organisations were under-represented

3. **Other considerations, suggestions, comments**

- add environmental issues to the agenda
- put online the presentations by V. Mutaf, Ph. Rothwell, R. Konieczny, D Meijer
- meet again after some time
- all in all everything was wonderful! Thank you very much!
- many thanks to the organisers for an opportunity to participate!