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Prevention, Preparedness and Response to Natural and Man- made Disasters in the EaP countries – PPRD East 2

Final Report

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Summary

PROJECT TITLE: Prevention, Preparedness and Response to Natural and Man-made Disasters in Eastern Partnership countries – PPRD East 2

CONTRACT NUMBER: 2014/352-249

COUNTRIES: Republic of Armenia, Republic of Azerbaijan, Republic of Belarus, Georgia, Republic of Moldova, and Ukraine, in the following referred to as Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine

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The opinions expressed in this report are the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union.

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ABBREVIATIONS

ADT	Advance Training Course
AM	Armenia (Republic of Armenia)
APENA	EU-funded Project “Support to Ukraine in approximation of the EU environmental acquis”
AZ	Azerbaijan (Republic of Azerbaijan)
BAT	Basic Training Course
BoO	Base of Operations
BY	Belarus (Republic of Belarus)
CA	Contracting Authority
CAG	Country Advisory Group
CP	Civil Protection
CPESS	Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs of the Republic of Moldova (former name of the CP authority in MD)
DEMA	Danish Emergency Management Agency
DG	Directorate General
DG ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations
DG NEAR	Directorate-General for Neighbourhood and Enlargement Negotiations
DLD	Disaster Loss Data
DRA	Disaster Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EaP	Eastern Partnership
EC	European Commission
EFAS	European Flood Awareness System
EFFIS	European Forest Fire Information System
EIB	European Investment Bank
EMS	Emergency Management Service
EMS RM	EMS Rapid Mapping
EMS R&R	EMS Risk & Recovery
ENPI	European Neighbourhood and Partnership Instrument
ERCC	Emergency Response Coordination Centre
ERRA	Electronic Regional Risk Atlas
EU	European Union
EUCPT	European Union Civil Protection Team
EUD	European Union Delegation

EU MOLDEX 2017	Full-scale Field Exercise organised within the PPRD East 2 programme
FRM	Flood Risk Management
GDACS	Global Disaster Alert and Coordination System
GE	Georgia (Republic of Georgia)
GIES	General Inspectorate for Emergency Situations of the Ministry of Internal Affairs of the Republic of Moldova
GIS	Geographic Information System
GloFAS	Global Flood Awareness System
HNS	Host Nation Support
HQ	Headquarters
ICT	Information Communication Technologies
INFORM	Index For Risk Management
INSPIRE	Infrastructure for Spatial Information in Europe
IPA FLOODS	The EU-funded Programme for Prevention, Preparedness and Response to Floods in the Western Balkans and Turkey
IT	Information Technologies
JRC	Joint Research Centre
KE	Key Expert
LEMA	Local Emergency Management Authority
MD	Moldova (Republic of Moldova)
ModEx	Module Exercise
NAG(s)	National Advisory Group(s)
NATO	North Atlantic Treaty Organization
NGO(s)	Non-Governmental Organisations(s)
NKE	Non-Key Expert
NPC	National Programme Coordinator
OPM	Operational Management Training Course
OSOCC	On-Site Operations Coordination Centre
PPRD East	EU funded "Programme for the Prevention, Preparedness and Response to Man-made and Natural Disasters" in the ENPI East Region, EU Flagship Initiative
PPRD East 2	Programme for Prevention, Preparedness and Response to Natural and Man-made Disasters in the EaP countries
RA	Republic of Armenia
RAD	Raising Awareness about Disasters
RTTX	Regional Table-Top Exercise
ToR	Terms of Reference
TTX	Table-Top Exercise

UA	Ukraine (Republic of Ukraine)
UCPM	European Union Civil Protection Mechanism
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction
VIP(s)	Very Important Person(s)
WG(s)	Working group(s)

EXECUTIVE SUMMARY

This draft Final Report provides an overview of the key achievements and accomplishments of the EU Programme for "Preparedness, Prevention and Response to Natural and Man-made Disasters in EaP Countries" (PPRD East 2) implemented in the period 01 December 2014 – 30 May 2019. It also includes lessons learnt and respective recommendations. This report is based on the PPRD East 2 work plan 2016-2018, activities presented in the Addendum #2, and all previous Progress Reports, all approved by the Contracting Authority.

Chapter 1 provides the programme synopsis; Chapter 2 presents a summary as well as detailed results and accomplishments which the programme achieved within each activity area, whereas Chapter 3 presents lessons learnt and recommendations.

Being a regional programme and at the same time the Flagship Initiative of the Eastern Partnership, in its implementation the programme focused on assisting Partner Countries in their efforts to align national legislation to the EU *acquis communautaire* and the EU good practice in civil protection and disaster risk management, as well as in establishing institutional sustainability, all complemented with extensive capacity building. The programme built capacities and strengthened the ownership of governments at the central, strategic and policy levels, and of all sectors, in order to solidify their ability to prevent and mitigate disaster risks, and in the case of disaster, to plan, manage and respond effectively and efficiently.

Building upon results of the phase 1, in many aspects the programme implementation approach was unique and innovative. The programme applied the incentive-based approach – ‘more for more’ – the more active a Partner Country was, the more assistance it received. At the same time, the programme focused specifically on meeting the goals agreed with the Partner Country, i.e. the programme offered Partner Countries to select disaster risk management priorities which were then jointly addressed within the programme. This flexibility in programme implementation, to recognize and adapt to the beneficiaries needs, was highly regarded by all six Partner Countries.

Another not so typical approach was the firm dedication of the expert team not to develop national level legislation and other strategic documents, but to rely on national public administration employees to develop draft laws, secondary legislation, standard operation procedures, and national strategies. Yet another implementation modality was the insistence on creating multi-stakeholder mechanisms, i.e. national inter-institutional working groups. Addressing disaster risk management is not the responsibility of only one national institution or only one ministry. On the contrary, effective and efficient disaster risk management requires involvement of the whole society.

And that is exactly the approach that the programme successfully implemented, as confirmed by the participants to the programme events - half were from civil protection authorities, and the other half were from other national and international disaster risk management stakeholders. Success of the programme implementation is also, *inter alia*, supported by:

- the appointment of 49 National Focal Point;
- the establishment of 19 national inter-institutional working groups;
- the modification of the national Water Codes done in Georgia and Ukraine;
- the development of the Preliminary Flood Risk Assessment Methodology in Georgia;
- the adjustment of national Disaster Loss Data legislation in Moldova and Ukraine;
- the development of new Host Nation Support legislation in all six Partner Countries and the adoption of a new Host Nation Support legislation in Moldova and Armenia;
- the development and adoption of new Civil Protection Volunteerism legislation in Armenia;

- the conduct of the first ever regional table-top exercise in ten national emergency management centres simultaneously;
- the conduct of the first ever regional full-scale field exercise with participation of six Partner Countries and three EU Member States;
- the inclusion of the information about the Union Civil Protection Mechanism in the teaching curriculum of the national Civil Protection University in Belarus; and
- the replication of the international coordination arrangements for disaster response training in Armenia and Azerbaijan.

And yet, the main results of the programme are established partnerships, ownership and networking, and the strong commitment of the Partner Countries for sustainable reform.

1. PROGRAMME SYNOPSIS

1.1. OVERALL OBJECTIVE

The overall objective of the PPRD East 2 was, as per the programme Terms of References, to contribute to the peace, stability, security and prosperity of the Eastern Partner Countries and to protect the environment, the population, the cultural heritage, the resources and the infrastructures of the region by strengthening the countries' resilience, preparedness and response to man-made disasters and disasters caused by natural hazards.

1.2. PURPOSE

Based on the results of the PPRD East programme - phase 1, the purpose of the PPRD East 2 was:

- Strengthening Partner Countries' civil protection capacities for disaster prevention, preparedness and response;
- Strengthening regional cooperation and bringing the Partner Countries progressively closer to the Union Civil Protection Mechanism.

The programme covers the countries of the Eastern Partnership, namely Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

1.3. RESULTS TO BE ACHIEVED AS PER TERMS OF REFERENCE

Result A. In the Partner Countries, the institutional and legal framework on disaster management and prevention is improved and approximated to the *EU acquis* and best practices. This entails in particular that:

- a. The relevant provisions of the *EU acquis* and best practices related to the prevention and management of disasters (e.g. EU Floods Directive, EU Civil Protection policies) are transposed in the national legislations or regulatory frameworks and are implemented. In case this relevant *EU acquis* and best practices cannot be fully transposed during the lifetime of the programme, national road maps leading to it are established and approved;
- b. Development of regional and national action plans implementing Risk Assessment Policies/Strategies and progress in the development of national risk assessments and disaster risk management planning are achieved;
- c. Legislative framework and inter-institutional arrangements in this domain have been adapted and formalised, in particular on the basis of the recommendations of the PPRD East programme phase 1.

Result B. Partner Countries and Participating States of the Union Civil Protection Mechanism cooperate closely through regular exchanges of information, expertise and best practices, trainings, table-top exercises and a joint regional exercise.

Result C. The Electronic Regional Risk Atlas (ERRA), developed under PPRD East programme phase 1 is further developed and put in practical use by Partner Countries. Data accessibility and comparability is improved at national and regional levels in line with the requirements of the Hyogo Framework for Action Agreement and in consistency with the European common approach for developing national loss databases and sharing of information.

Result D. Awareness about disasters (natural and man-made), their prevention and response, is improved in the Partner Countries, amongst civil protection professionals, volunteers and within the population in general.

1.4. GENERAL MANAGEMENT

The programme was implemented from a regional office in Kyiv, Ukraine, and from a dedicated programme office in the Danish Emergency Management Agency in Birkerød, Denmark. The backstopping support was provided from the Stantec office in La Hulpe, Belgium.

Key beneficiaries of the PPRD East 2 programme were:

- Ministry of Emergency Situations of the Republic of Armenia;
- Ministry of Emergency Situations of the Republic of Azerbaijan;
- Ministry of Emergency Situations of the Republic of Belarus;
- Emergency Management Service of the Ministry of Internal Affairs of Georgia;
- General Inspectorate for Emergency Situations of the Ministry of Internal Affairs of Moldova; and
- State Emergency Service of Ukraine.

The PPRD East 2 Steering Committee, the decision-making body of the programme, was established during the inception period. The Steering Committee members met usually once a year to steer the programme, give an opinion on progress reports or other relevant documents developed by the programme, and to endorse the work plan for each implementation period. The PPRD East 2 held in total 5 Steering Committees meetings. The PPRD East 2 Steering Committee was composed of

- Representatives of the European Commission: Mr Jean-François Moret followed by Ms Elisabeth Hundhammer for DG NEAR and Ms Marieta Koleva, followed by Mr Roberto Schiliro, Ms Erika Conti, and Ms Asta Mackeviciute for DG ECHO;
- One senior level representative from each Partner Country: Mr Sergey Azaryan followed by Mr Mushegh Ghazaryan and Mr Artavazd Davtyan (Armenia), Mr Samadaga Samadov (Azerbaijan), Mr Gennady Lasuta (Belarus), Mr Zviad Katsashvili followed by Mr Nikoloz Siradze and Mr Shalva Kvinikhidze (Georgia), Mr Ghenadie Barbu (Moldova), and Mr Anatoliy Boyko, followed by Mr Oleg Melchutskyi and Mr Ruslan Biloshytsky (Ukraine); and
- One National Programme Coordinator: Mr Hovhannes Yemishyan, followed by Mr Artavazd Davtyan and Mr Arthur Muradyan (Armenia), Mr Jeyhun Isgandarli (Azerbaijan), Ms Svetlana Shotskaya (Belarus), Mr Otar Kereselidze followed by Mr Giorgi Ghibradze (Georgia), Mr Sergiu Gradinaru followed by Mr Alexandr Tatarov (Moldova), and Mr Oleh Pinsky, followed by Mr Serhiy Kravchenko and Mr Nazar Boryshkevych (Ukraine).

National Programme Coordinators were pivotal in the PPRD East 2 implementation. Appointed by the key beneficiaries as main national interlocutors for the programme expert team, the National Programme Coordinators were the first contact points, permanent and active partners in the implementation of the programme. In addition to their almost daily involvement in programme implementation in their respective countries, they were in charge, ahead of each Steering Committee meeting, of addressing and clarifying any operational and technical issue, for providing inputs to the Steering Committee members for strategic decision-making, and endorsement of the programme progress and the work plans. National Programme Coordinators have also been recognised by DG ECHO as the National Training Coordinators in the context of the Union Civil Protection Mechanism.

The latest composition of the PPRD East 2 Steering Committee and the list of National Programme Coordinators are available on the programme website¹.

¹ <http://pprdeast2.eu/en/about-pprdeast2/steering-committee/>, <http://pprdeast2.eu/en/about-pprdeast2/nacionalnye-koordinatory/>

The programme was managed by:

From the contracting authority:

- Mr Jean-François Moret followed by Ms Elisabeth Hundhammer for DG NEAR, in close cooperation with
- Ms Marieta Koleva, followed by Mr Roberto Schiliro, Ms Erika Conte, and Ms Asta Mackeviciute for DG ECHO.

From the contractor (backstopping team):

- from DEMA, Birkerød, Denmark Mr Henrik Høigaard followed by Mr Flemming Klokager and Ms Tine Overby, Project Director;

and from Stantec (consortium leader)

- Ms Anca Andreescu, Senior Project Manager;
- Ms Aïda Yassine followed by Ms Alix Nokerman and Ms Caterina Cigala, Project Manager;
- Ms Eva Viktoriyova followed by Ms Kristina Gasparovicova and Ms Chiara Bartolucci, Project Assistant, all from La Hulpe Stantec office; and
- Ms Galina Sidelkovska, Project Assistant/Office Manager from the Regional office in Kyiv, Ukraine.

The following experts implemented the programme:

- Key-Expert Team (KE):
 - Mr Sergej Anagnosti, Team Leader (KE1);
 - Mr Michael Elmquist, Civil Protection Key Expert (KE2); and
 - Mr Dušan Zupka followed by Mr Antonín Petr, Capacity Building Key Expert (KE3).
- Specialised Non-Key Experts (NKE):
 - Dr Roberto Rudari, Information and Data Sharing and ERRA NKE;
 - Dr Marco Massabó, Flood Risk Management and Disaster Loss Data NKE;
 - Dr Luca Molini, Flood Risk Management NKE;
 - Dr Eva Trasforini followed by Ms Nataša Holcinger, Disaster Risk Assessment NKE;
 - Dr Giorgio Boni, Flood Hazard NKE;
 - Mr Alessandro Candeloro followed by Ms Daniela Cavini and Ms Veronique Ruggirello, Information & Media NKE;
 - Ms Helene Pans, Communication NKE;
 - Mr Rutger-Jan Schoen followed by Ms Anastasiya Nurzhynska, National Communication Strategy NKE;
 - Mr Philip Langdale, Host Nation Support NKE, lecturer at civil protection training courses and Team Trainer;
 - Mr Martin Thomsen, BAT Course Director, lecturer at civil protection training courses and Team Trainer;
 - Mr Thorbjørn Nesjan, OPM Course Director, lecturer at civil protection training courses and Exercise Safety and Security Advisor;
 - Mr Esa Ahlberg, ADT Course Director and Team Trainer;
 - Mr Allan Pellowe, lecturer at civil protection training courses and Team Trainer;

- Mr Vlad Petre, lecturer at civil protection training courses and Team Trainer;
 - Mr Ville-Veikko Pitkänen, Team Trainer;
 - Ms Patricia Gaspar, lecturer at civil protection training course;
 - Mr James Mc Alister, lecturer at civil protection training course;
 - Mr Mario Dobovisek, lecturer at civil protection training course;
 - Ms Susanne Kirstensen, role-player at civil protection training courses;
 - Mr Thorstein Vange Hansen, role-player at civil protection training courses;
 - Mr Tais Kroger Ziethen, role-player at civil protection training courses;
 - Dr Davide Miozzo, Volunteerism in Disaster Risk Management NKE;
 - Dr Tatiana Bedrina, Flood Risk Management and Disaster Loss Data NKE;
 - Dr Luca Cenci, GIS NKE; and
 - Mr Paolo Campanella followed by Mr Massimo Sardo, ERRA IT NKE.
- Local Coordinators (NKEs):
 - Ms Karine Taslakyan, Armenia;
 - Mr Rafiq Verdiyev followed by Ms Saltanat Mammadova and Mr Tarlan Arzumanov, Azerbaijan;
 - Mr Andrew Pinigin followed by Ms Elena Kachynskaya, Belarus;
 - Mr Kakhaber Mamuladze, Georgia;
 - Ms Iordanca-Rodica Iordanov, Moldova; and
 - Ms Olena Goryeva, Ukraine.

Local coordinators were the eyes, the ears and the voice of the programme in their respective countries. This expert network, established by the management structure, enabled effective information dissemination among different actors engaged in the implementation of the programme (expert team, national stakeholders, consortium and national service providers). Local coordinators had the key responsibility to facilitate the exchange of information in Partner Countries and provided “on the ground” logistic, administrative and technical support to the National Advisory Groups (more on National Advisory Groups is available in Chapter 2.2.5.2 Programme Management).

Annex 1 provides information on the use of resources at the end of the programme.²

Following the signature of a no-cost 6-months extension, the programme activities continued till the end of May 2019.

With reference to the presence of the Key Experts in the EaP region, it was approximately 30% for the KE1 and KE2 and 25% for KE3, with details provided in the table below.

Notwithstanding the ToR requirement of minimum 50% of key experts’ days spent in the beneficiaries countries, it was agreed with the CA that as long as the presence of the KEs in the region continues to contribute to the implementation of this work plan and considering the fact that the work plan was designed and agreed with both the EU and Partner Countries, it is acceptable to continue with this level of presence in the Partner Countries.

² The figures are indicative and final figures will be provided after the relevant expenditure verification is completed.

	1st reporting period	2nd reporting period	3rd reporting period	4th reporting period	5th reporting period	6th reporting period	7th reporting period	8th reporting period	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019
Sergej A.														
<u>Region</u>	60	46,5	33,5	45,5	20	34	16,5	25,5	7	6	14	6	0	
<u>Home-based</u>	47	62	63	69	74,5	85,5	87,5	90	16	15	6	10	20	
<u>Other</u>	8	12,5	15	3	18	2	17	14	0	0	0	5	0	
SUM	115	121	111,5	117	112,5	121,5	121	129,5	23	21	20	21	20	0
Micheal E.														
<u>Region</u>	43,5	42	24,5	23	19	30	20	18	3	1,5	14	8	0	
<u>Home-based</u>	47	21,5	38,5	49	6,5	41	66	40	8	8	5	8	7	
<u>Other</u>	9	42	31	25,5	65	20,5	8	14	10	7,5	0	5	12	
SUM	99,5	105,5	94	95,5	90,5	91,5	94	72	21	17	19	21	19	0
Dusan Z.														
<u>Region</u>	3,5													
<u>Home-based</u>	9													
<u>Other</u>	8													
SUM	23,5													
Antonin P.														
<u>Region</u>	7	67	21	35,5	15	37,5	24,5	17,5	4	3	12	8,5	0	
<u>Home-based</u>	10	56	88	80	96	89,5	85,5	94,5	15	20	7,5	8	20	
<u>Other</u>	55	3	17	13,5	10	0	9	12	0	0	0	4,5	0	
SUM	22	126	126	129	121	127	119	124	19	23	19,5	21	20	0

2. PROGRAMME ACHIEVEMENTS AND ACCOMPLISHMENTS

Being a regional programme and at the same time the Flagship Initiative of the Eastern Partnership, in its implementation the programme focused on assisting Partner Countries in their efforts to align national legislation to the *EU acquis communautaire* and the EU good practice in civil protection and disaster risk management, as well as in establishing institutional sustainability, all complemented with extensive capacity building. The programme built capacities and strengthened the ownership of governments primarily at the central, strategic and policy levels, and of all sectors, in order to solidify their ability to prevent and mitigate disaster risks, and, in the case of a disaster, to plan, manage and respond effectively and efficiently. In regard to capacity building, the programme organised or facilitated Partner Countries' participation at 97 events, out of which 41 were regional and 56 national events, with almost 3000 participations – half of which were from civil protection authorities, and the other half were from other national and international disaster risk management stakeholders. In this regard, the regional full-scale field exercise EU MOLDEX 2017 organised in Moldova in September 2017 is worth mentioning. It was the first ever exercise organised with the EU funding. It brought together rescue teams from six Partner Countries and from three EU Member States (Denmark, Czech Republic and Romania), with a total of almost 800 participants – rescue teams, EUCPT, team trainers, evaluators, role players, journalist students – media role players, observers, VIPs, interpreters, etc.

The programme also supported governments in implementation of the Hyogo, and then the Sendai Framework for Disaster Risk Reduction. The Sendai Framework places strong emphasis on the critical role played by National Platforms for Disaster Risk Reduction in supporting the implementation, monitoring and review of the Sendai Framework. The National/Country Advisory Group meetings provided opportunities for such effective coordinated action and mobilization of key stakeholders, and especially in Partner Countries (Azerbaijan, Georgia, Moldova and Ukraine) in which a National Platform for DRR is not established.

In many aspects the programme implementation approach was unique and innovative, or even experimental.

One of the main accomplishments of the programme is the established partnerships, ownership and networking. Partnerships were established not only between the expert team and key beneficiaries, but also among national institutions and disaster risk management stakeholders. This is the result of persistence of the expert team to implement most of the activities through national inter-institutional working groups. These working groups, when established and functional, provided the opportunity for national stakeholders to share information, discuss the options and agree on the joint actions and implementation road maps. It also provided the mechanism to implement agreed upon activities and road maps, and thus created the ownership of the processes and the results.

Similar to the thematic national inter-institutional working groups that brought together national civil protection and disaster risk management stakeholders, the PPRD East 2 programme continued with organisation of the National/Country Advisory Group meetings, the good practise initiated during the first phase of the PPRD East programme. National/Country Advisory Group meetings usually brought together all national disaster risk management stakeholders. The aim was not only to report on past and future programme activities, but also to provide the rare opportunity and possibility to discuss and debate all relevant national disaster risk management issues. When the situation analyses were performed in all six Partner Countries back in 2015, National/Country Advisory Group meetings convened in late autumn 2015 served to select (at that time) national disaster risk management priorities which were addressed within the PPRD East 2 programme. Findings and recommendations were validated, and road maps proposed by the PPRD East 2 experts for the implementation of those recommendations were endorsed. Thus endorsed recommendations (of all six Partner Countries, available in the country profiles on the programme web site) served as a

base for the development of the PPRD East 2 work plan 2016-2018, afterward approved by the CA and by the Steering Committee at its 2nd meeting held in February 2016.

Yet another programme implementation modality deserves to be mentioned – the programme relied on national experts i.e. national public administration servants to develop all national documents needed to facilitate alignment of national legislation and for obtaining institutional sustainability. In other words, partnerships were created and nurtured so the employees of civil protection authorities and other governmental institutions were the ones who developed draft laws, secondary legislations, standard operation procedures. PPRD East 2 experts brought EU experience and expertise thus securing that the new legislation developed is reflecting EU good practice and creating the national ownership of the processes and of the newly developed documents.

2.1. PARTNER COUNTRIES' PRIORITIES

Being fully aware that needs and priorities of the Partner Countries were similar but not quite equal, and that the interest of the Partner Countries in addressing disaster risk management thematic topics may differ, in depth situation analyses were undertaken in 2015. These analyses included assessment missions, regional workshops (on flood risk management, disaster loss data collection and processing, and ERRA) and desktop analyses. They focused on the status of the civil protection and disaster risk management systems and on specific thematic topics:

- Civil protection profile (phase 1);
- Uptake on phase 1 recommendations (phase1);
- Flood risk management;
- Disaster risk assessment;
- Disaster loss data collection and processing;
- Inclusion of disaster risk reduction in public spending;
- Host Nation Support chapter (phase 1);
- Civil protection volunteerism;
- Raising awareness about disasters (phase 1);
- Data and information sharing and INSPIRE Directive; and
- Electronic Regional Risk Atlas (phase 1).

All these analyses resulted in the development of six Country Profiles, in English and in national languages, where findings, recommendations, and respective road maps for recommendations' implementation were presented. Each Country Profile contained all findings, recommendations, and related road maps was presented, discussed and validated at the respective 2nd National/Country Advisory Group meeting. The finalised Country Profiles are available at the programme web site.

The following disaster risk management thematic topics, selected as 'priorities' by Partner Countries, were addressed within the programme:

DRM 'priorities'/Partner Country	AM	AZ	BY	GE	MD	UA
Flood risk management	✓	✓		✓	✓	✓
Disaster risk assessment	✓	✓		✓	✓	✓
Disaster loss data collection and processing	✓			✓	✓	✓

Electronic Regional Risk Atlas	✓	✓	✓	✓	✓	✓
Civil protection capacity building	✓	✓	✓	✓	✓	✓
Host Nation Support	✓	✓	✓	✓	✓	✓
Raising awareness about disasters	✓	✓	✓		✓	✓
Civil protection volunteerism	✓	✓	✓		✓	✓

The key achievements and accomplishments per thematic topic are:

Flood risk management

- Seven National Focal Points appointed – one in AM, AZ and MD, and two in GE and UA;
- Two national inter-institutional working groups established (AZ and MD) and facilitated/supported the work of two existing national inter-institutional working groups (AM and UA);
- Five working group meetings held with participation of 31 experts - 14 representing key beneficiaries and 17 other national stakeholders;
- Two regional workshops organised with participation of 37 experts - 23 representing key beneficiaries and 14 other national stakeholders, and six lecturers from Croatia Waters, Sava Commission, Rhine Commission, and DG Joint Research Centre;
- Facilitated participation of two Flood Risk Management experts from UA and GE at 21st and 23rd EU Flood Risk Management Working Group meeting and workshop;
- Documents developed by PPRD East 2:
 - Regional Guidelines for Flood Risk Management;
 - Draft Flood Risk Management Protocol for the Dniester River Basin;
 - Four national policy briefs (AM, AZ, GE and MD);
 - One guidance schema for clarifying flood risk management institutional framework (MD); and
 - One Water Code draft Modification and one draft Preliminary Flood Risk Assessment Methodology (GE);
- Documents reviewed by PPRD East 2:
 - Water Code of the National Assembly of the Republic of Armenia;
 - Water Code and the State programme for prevention of floods and mudflows in the territory of the Republic of Azerbaijan;
 - Draft Water Code of the Republic of Georgia;
 - Preliminary Flood Risk Assessment and Flood Hazard and Risk Mapping developed by the EIB-funded “Management and Technical Assistance Support to Moldova Flood Protection Project” in Moldova; and
 - Methodology for Preliminary Flood Risk Assessment, Methodology for Flood Hazard and Risk Mapping and Preliminary Flood Risk Assessment Report (“Development of criteria and preliminary flood

risk assessment for areas within river basins in accordance with the EU regulations”) for Ukraine;
and

- Documents developed and adopted by Partner Countries:
 - Proposal of modification of the Draft Water Code of Georgia for inclusion of EU Floods Directive 2007/60/EU in Georgia; and
 - Methodology for Preliminary Flood Risk Assessment and for Flood Hazard and Risk Mapping in Ukraine (in cooperation with APENA Project).

Disaster risk assessment

- Five National Focal Point appointed (AM, AZ, GE, MD and UA);
- Four national inter-institutional working groups established, and five meetings held in total, with participation of 88 experts - 32 representing key beneficiaries and 56 other national and international stakeholders;
- One regional workshop organised with participation of 19 experts - 12 representing key beneficiaries and seven other national stakeholders;
- One study visit organised to Croatia for three experts from Moldova;
- Documents reviewed by PPRD East 2:
 - National Disaster Risk Management Strategy of the Republic of Armenia;
 - Civil Safety National Plan, National Disaster Risk Reduction Strategy, Decree No. 453 on Preparing an Emergency Risk Management Plan, and draft Law on Civil Protection of the Republic of Georgia;
 - Methodological recommendations on development «Analysis of potential emergency situations at the level of rayon, municipality and ATU Gagauzia, and impact for the population, economy and the environment» in Moldova; and
 - Regulations on risk management organization in Ukraine; and
- PPRD East 2 developed DRA project summary in Moldova.

Civil protection capacity building

- Six National Programme Coordinators appointed as Training Focal Points and recognised by DG ECHO as the National Training Coordinators in the context of the Union Civil Protection Mechanism;
- Six National Focal Points for Exercise Planning and six National Focal Points for lessons learnt appointed;
- Four regional basic training courses, two regional operational management training courses and two regional advanced training courses held with participation of 181 experts - 129 representing key beneficiaries and 52 other national stakeholders;
- 18 civil protection officials participated at the EU Civil Protection Forums in 2015 and 2018;
- One regional lessons learnt workshop held with 14 participants in total, all representing key beneficiaries, and the lecturer from the Sector for Emergency Management of the Ministry of Internal Affairs of the Republic of Serbia;

- Two planning conferences for the regional full-scale field exercise EU MOLDEX 2017 held with participation of 55 experts - 44 representing key beneficiaries and eleven other national and international stakeholders;
- One regional table-top exercise held simultaneously in ten operational/emergency management centres with participation of 104 experts - 85 representing key beneficiaries and 19 other national and international stakeholders;
- Full-scale regional field exercise EU MOLDEX 2017 held with participation of 797 participants - 406 representing key beneficiaries, 286 from other national institutions, and 105 from international organizations and other institutions;
- One regional conference on lessons learnt from EU MOLDEX 2017 held with participation of 28 experts - 18 representing key beneficiaries and ten international stakeholders; and
- One regional workshop on coordination of international emergency relief operations with 24 participants in total, all representing key beneficiaries.

Host Nation Support

- Seven National Focal Points appointed (one in AM, AZ, GE, MD, and UA, two in BY);
- Five national inter-institutional Host Nations Support working groups established (AM, AZ, GE, MD and UA), and four meetings held (one in AM and MD, two in AZ) with participation of 63 experts - 40 representing key beneficiaries and 23 other national stakeholders;
- Eight national HNS TTXs held (one in AM, AZ, GE, and UA, two in BY and MD) with participation of 247 experts - 126 representing key beneficiaries and 121 other national stakeholders;
- Documents reviewed by PPRD East 2:
 - UN Convention on temporary admission - UN “Istanbul Convention”;
 - Commission delegated Regulation (EU) 2015/2446 of 28 July 2015 supplementing Regulation (EU) No 952/2013 of the European Parliament and of the Council as regards detailed rules concerning certain provisions of the Union Customs Code;
 - Agreement between the United Nations and the Government of the Republic of Armenia concerning measures to expedite the import, export and transit of relief consignments and possession of relief personnel in the event of disasters and emergencies, Order of Operation of Airports of Civil Aviation in Emergency Situations and Cooperation with State Bodies of the Republic of Armenia, Draft of Governmental Decree „On Approving the Procedure for Arranging Civil Protection and Disaster Management in Emergencies“ and draft “Standard Operating Procedures for Republic of Armenia Commission, LEMA and HNS team” in Armenia;
 - Draft “Organization of Activities in HNS of the Country Receiving Assistance during Emergencies” in Azerbaijan;
 - Agreement between the United Nations and the Government of the Republic of Belarus concerning measures to expedite the import, export and transit of relief consignments and possession of relief personnel in the event of disasters and emergencies, and draft “Regulations on the Procedures for the Provision of Host Nation Support by the Republic of Belarus during Emergencies”;
 - Draft Governmental Decree for „Approval of Procedure for Development of HNS Measures in the Field of Civil Safety“ in Georgia;

- Governmental Regulation on HNS No. 408, HNS Standard Operating Procedures, and draft Law “On exemption of taxes and legal fees connected to the entry/exit into/from Moldova of international intervention teams/modules” in Moldova; and
- Draft Resolution of the Cabinet of Ministers of Ukraine on the “Approval of the Procedure for Host Nation Support in Civil Protection”;
- Documents developed by Partner Countries:
 - Order of Operation of Airports of Civil Aviation in Emergency Situations and Cooperation with State Bodies of the Republic of Armenia, Draft of Governmental Decree “On Approving the Procedure for Arranging Civil Protection and Disaster Management in Emergencies”, and draft SOPs for RA Commission, LEMA and HNS team in Armenia;
 - Draft “Organization of Activities in HNS of the Country Receiving Assistance during Emergencies” in Azerbaijan;
 - Draft “Regulations on the Procedures for the Provision of Host Nation Support by the Republic of Belarus during Emergencies” in Belarus;
 - Draft Governmental Decree for “Developing rules of Host Nation Support Activities in the Field of Civil Safety” in Georgia;
 - Governmental Regulation on HNS No. 408, HNS Standard Operating Procedures, and Draft Law “On exemption of taxes and legal fees connected to the entry/exit into/from Moldova of international intervention teams/modules” in Moldova; and
 - Draft Resolution of the Cabinet of Ministers of Ukraine on the “Approval of the Procedure for Host Nation Support in Civil Protection” in Ukraine; and
- Documents adopted by the Partner Countries:
 - Order of Operation of Airports of Civil Aviation in Emergency Situations and Cooperation with State Bodies of the Republic of Armenia; and
 - Governmental Regulation on HNS No. 408 and HNS Standard Operating Procedures in Moldova.

Electronic Regional Risk Atlas

- Six National ERRA Focal Points appointed;
- One regional node and one national node (BY) of ERRA installed and maintained on the “cloud”;
- Five main national nodes of ERRA system installed on physical servers directly managed by the key beneficiaries (AM, AZ, GE, MD and UA) and one additional secondary node installed at the National Environmental Agency in Georgia;
- Eleven ERRA IT missions conducted in two rounds and more than 80 experts trained on IT, GIS and ERRA system maintenance;
- Two regional ERRA workshops held with participation of 66 experts – 60 representing key beneficiaries and six other national stakeholders, and the lecturers from DG Joint Research Centre and UNISDR; and
- Documents developed by PPRD East 2:
 - ERRA Software manual;
 - ERRA Installation Manual;

- ERRA User Manual;
- Terms of Reference for the ERRA upgrade; and
- “ERRA System Checklist” and “Key Dataset List”.

Disaster loss data collection and processing

- Four National Focal Points appointed (AM, GE, MD and UA);
- Three informal national inter-institutional working groups established (GE, MD and UA) and work of one formal national inter-institutional working group facilitated (AM);
- Three national working group meetings held with PPRD East 2 support and a total of 68 participants - 17 representing key beneficiaries and 51 other national stakeholders; working groups in MD and UA are meeting on a regular basis (without PPRD East 2 support);
- Two regional DLD workshops organized with in total 42 participants - 34 representing key beneficiaries and eight other national stakeholders, and with five lecturers from the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, the Polytechnic University of Milan, Italy, the UNISDR Europe office, the National Observatory of Natural Risks of France, and the DG Joint Research Centre;
- Facilitated participation of four experts (from GE, MD and UA) at 9th and 11th European Loss Data Workshop;
- Documents developed by PPRD East 2:
 - Four working group action plans;
 - Conceptual schema and policy brief for Armenia; and
 - Two reports on comparison of the classification of emergencies and associated losses (of UA and MD) and Joint Research Centre Guidance on Recording and Sharing Disaster Damage and Loss Data and disaster loss indicators of Sendai Framework;
- Documents reviewed by PPRD East 2:
 - Disaster Loss Data legislation of Armenia, Moldova and Ukraine; and
 - Disaster Data and Loss Assessment Methodology of Georgia developed by UNDP;
- Documents developed and adopted by partner countries:
 - Draft amendments of national legislation on Disaster Loss Data registration and collection in Moldova and Ukraine; and
 - New classification of emergency situation (hazard classification) in Georgia.

Civil protection volunteerism

- Three National Focal Points appointed;
- Two national inter-institutional working groups established (BY and MD), three meetings (two in BY and one in MD) held with in total 24 participants - 17 representing key beneficiaries and seven other national stakeholders;
- Study tour organised with participation of eight experts - seven representing key beneficiaries and one other national stakeholder;

- Regional workshops on civil protection volunteerism organised with 16 participants - 12 representing key beneficiaries and four other national stakeholders, and with two lecturers from the Education, Audiovisual and Culture Executive Agency of the European Commission and the Italian Red Cross;
- Public service announcement (cartoon video) developed in English, Russian and national languages of all six Partner Countries, and disseminated through key beneficiaries' communication channels;
- Documents developed by PPRD East 2:
 - Assessment Tool for Comparative Analysis of Civil Protection Volunteerism;
 - Application for Registration with Central Registry of Civil Protection Volunteer Organisations;
 - Set of Templates and Guidelines for Certification of CP Volunteer Organisations; and
 - Recommendations on the Evaluation of the Economic Value of Civil Protection Volunteerism;
- Documents developed by Partner Countries and reviewed by PPRD East 2:
 - Governmental Decree No. 186-N On establishing the procedure and amount of state compensation to volunteer rescuers for leaving for emergency scene for a term of up to 15 business days within a calendar year, Draft Law of the Republic of Armenia on volunteer activity and voluntary work, and Draft volunteer fire-rescue station establishment and activity regulation programme in Armenia;
 - Draft Law of the Republic of Belarus on the introduction of amendments to the Law of the Republic of Belarus on Fire Safety, and Draft Strategy for Development of Volunteerism in the Republic of Belarus for 2016 – 2020 in Belarus;
 - Draft Regulation on the organization and functioning of volunteer activities within the Civil Protection and Emergency Situations Service in Moldova; and
 - Draft Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Improving Legislation on Civil Protection" in Ukraine;
- Documents adopted by Partner Country:
 - Governmental Decree No. 186-N on Establishing the Procedure and amount of State Compensation to Volunteer Rescuers for Leaving for Emergency Scene for a Term of up to 15 Business Days within a Calendar Year in Armenia.

Raising awareness about disasters

- Five National Focal Points appointed;
- Three national inter-institutional working groups established (BY, MD and UA);
- Three meetings (in BY, MD, and UA) held with participation of 27 experts - 12 representing key beneficiaries and 15 other national stakeholders;
- Two regional workshops organised with participation of 26 experts - 18 representing key beneficiaries and eight other national stakeholders;
- Workshop for media role players – held with the participation of nine journalist students from Moldova;
- Documents developed by PPRD East 2:
 - Guidelines to develop a National Communication Strategy for Raising Awareness about Disasters
 - Draft framework for national communication strategy for raising awareness about disasters for Armenia and Moldova;

- Documents developed by Partner Countries and reviewed by PPRD East 2:
 - Draft Provisions of the crisis communication and public awareness strategy in emergency situations in Armenia;
 - Draft Communication Strategy of the Ministry for Emergency Situations of the Republic of Belarus for Emergency Prevention in Belarus; and
 - Draft Communication Strategy for Raising Awareness about Disasters in Ukraine; and
- Document reviewed by PPRD East 2:
 - Communication Strategy of the Civil Protection and Emergency Situations Service and the concept of risk situations prevention in Moldova (developed by UNDP).

Programme visibility

- Programme final video (Annex 16);
- Programme final brochure (in English http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.EN_.pdf and in Russian http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.RU_.pdf);
- Programme web-site (in English <http://pprdeast2.eu/en/> and Russian <http://pprdeast2.eu/ru/>);
- 48 after-the-event press releases (<http://pprdeast2.eu/en/category/news/>);
- Seven PPRD East 2 newsletters (<http://pprdeast2.eu/en/category/publications/>);
- 1555 subscribers on the programme e-mailing list;
- Programme promotional material – roll-up banners in English, Russian, and Partner Countries' national languages (Progress Report 1, Annex 23), leaflet, one-pager, and two factsheets (<http://pprdeast2.eu/en/category/publications/>);
- Updated PPRD East 2 Facebook page (<https://www.facebook.com/PPRDEast2/>); and
- EU MOLDEX 2017 logo, info sheet (<http://pprdeast2.eu/en/category/publications/>) and long (<https://youtu.be/2fnhUBJS1dE>) and short video (Annex 17).

Programme management

- Five Steering Committee meetings conducted with the participation of 176 experts, 67 representing key beneficiaries and 109 other stakeholders;
- Five National Programme Coordinators' meetings conducted;
- Five rounds of National/Country Advisory Group meetings conducted in AM, BY, GE, MD and UA, four rounds of National Advisory Group meetings conducted in AZ, with the participation of 768 experts, 329 representing key beneficiaries and 439 other national and international stakeholders;
- Inception Report and eight Progress Reports accepted by CA; and
- No-cost extension of the programme granted on 08 August 2018.

PPRD East 2 organized or facilitated participation at 97 events, 41 regional and 56 national events, with in total 2973 participations, 1568 (53%) representing key beneficiaries and 1405 (47%) other national and

international disaster risk management stakeholders (Annex 2). Participation of Partner Countries' experts are as follows:

- **Armenia:** 324 participations in total, 219 (68%) representing the Ministry of Emergency Situations, and 105 (32%) other national stakeholders; 251 (77%) were men and 73 (23%) women;
- **Azerbaijan:** 330 participations in total, 225 (68%) representing the Ministry of Emergency Situations, and 105 (32%), other national stakeholders; 307 (93%) were men and 23 (7%) women;
- **Belarus:** 296 participations in total, 190 (64%) representing the Ministry of Emergency Situations, and 106 (36%) other national stakeholders; 231 (78%) were men and 65 (22%) women;
- **Georgia:** 305 participations in total, 183 (60%) representing the Emergency Management Service, and 122 (40%) other national stakeholders; 257 (84%) were men and 48 (16%) women;
- **Moldova:** 1076 participations in total, 543 (50%) representing the General Inspectorate for Emergency Situations, and 533 (50%) other national stakeholders; 947 (88%) were men and 129 (12%) women; and
- **Ukraine:** 337 participations in total, 210 (62%) representing the State Emergency Service, and 127 (38%) other national stakeholders; 268 (80%) were men and 69 (20%) women.

2.2. DETAILED ACHIEVEMENTS AND ACCOMPLISHMENTS

This chapter provides a detailed overview of the programme's accomplishments and achievements, at the regional and at the national level, per each disaster risk management thematic topic addressed within the programme.

2.2.1. ACTIVITY AREA A – FLOOD RISK MANAGEMENT AND DISASTER RISK ASSESSMENT

Within the activity area A flood risk management and disaster risk assessment were addressed. Partner Countries were assisted in aligning national legislation to the EU Floods Directive, and the EU Risk Assessment and Mapping Guidelines for Disaster Management.

2.2.1.1. FLOOD RISK MANAGEMENT

The overall approach was based on four main pillars:

- **Partnership.** The continuous cooperation between the programme expert team and Partner Countries' institutions has been ensured by the Flood Risk Management National Focal Points. Armenia, Azerbaijan and Moldova have appointed one National Focal Point each, while Georgia and Ukraine have nominated two National Focal Points: one for aligning the legal framework to the EU Floods Directive, and one for technical activities related to the implementation of the Directive;
- **Ownership.** Ensuring ownership of results was at the core of the PPRD East 2 approach. In practical terms, PPRD East 2 has facilitated the constitutions of inter-ministerial working groups composed by national authorities involved in flood risk management, and these working groups were instrumental for facilitating the process of adopting legal changes and developing a policy brief toward the alignment to the EU Floods Directive. Ukraine established a formal working group (as a joint effort of PPRD East 2 and APENA Project). A similar formal working group is in place in Armenia. In Azerbaijan and Moldova working groups were also established but not by governmental order as in Armenia and Ukraine. As the Ministry of Environment and Natural Resources Protection of Georgia has the mandate to align the national legislation to the EU Floods Directive, no working group was established in Georgia;
- **Flexibility - responsiveness to the Partner Countries' needs.** All Partner Countries have similar approaches to flood risk management. However, in recent years, each Partner Country has started re-

forms of the sectors which are today at different levels of implementation. Moldova has fully approximated the national regulation to the EU Floods Directive back in 2013, Ukraine approved legislation in line with the EU Floods Directive in 2016, while the new Water Code of Georgia, that includes the provisions of the EU Floods Directive, is in the consultation process. Armenia and Azerbaijan intend to align the national legislation to the EU Floods Directive by including the main provisions on the Directive into national regulation. The different status of Partner Countries required an implementation approach responsive to the specific national needs, but nevertheless harmonized at the regional level; and

- **Networking.** Networking among experts of the region and from the EU Member States has short- and long-term positive effects: enables mutual exchange of experiences and practices within the region, serves as a leverage for transferability of good practices among different institutions, and accelerates innovation and changes for improving flood risk management. PPRD East 2 facilitated networking by maintaining the regional dimension - by organizing regional workshops - and by establishing and maintaining collaboration with the EU Working Group on Floods, the EU platform that supports EU Member States in their implementation of the EU Floods Directive. Specifically, PPRD East 2 facilitated participation of Ukraine and Georgia in the EU Working Group on Floods 21st and 23rd Meetings and Workshops (more information can be found in Progress Reports 5 and 7). As a result, Partner Countries' experts initiated direct exchange of information and experience with their peers from the Member States. Georgia also established direct contact with the representatives of the European Flood Awareness System (EFAS) and, as a direct follow up, Georgia is today member of the EFAS.

The PPRD East 2 intervention in this thematic area included three main steps:

- First step consisted in the analysis of the flood risk management situation and in mainstreaming the EU Floods Directives principles. The situation analysis showed the needs and the priorities for improving flood risk management in Partner Countries and at the regional level;
- Development of the Regional Guidelines on Flood Risk Management followed. The Regional Guidelines served as a reference for regional and national capacity development activities and fostered a coherence and harmonized approach within the region; and
- Providing support for improving legal, regulatory and institutional flood risk management framework was the third step. More specifically, assistance was provided to the responsible national institutions for developing (and adopting) legal and regulatory changes or for developing policy briefs toward the alignment to the EU Floods Directive. This support was provided to those Partner Countries that have selected flood risk management as a 'priority', i.e. to Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

SITUATIONAL ANALYSIS AND PREPARATION FOR MAINSTREAMING THE EU FLOODS DIRECTIVE PRINCIPLES TO THE PARTNER COUNTRIES

Approximately all of 2015 was dedicated to the situation analysis and to the presentation and explanation of the mainstreaming principles of the EU Floods Directive to Partner Countries. The activities focused on preparation and validation of Chapter 4 of the Country Profiles and on development and organisation of the regional workshop on policy and institutional development for flood risk management and approximation to the EU Floods Directive (detailed information can be found in Progress Report 2).

Chapter 4 of the Country Profile – Flood Risk Management and approximation to the EU Floods Directive

Chapter 4 contains findings, recommendations and respective implementation road maps. These were used to guide the actions and select the intervention modality for each Partner Country as well as to gather a regional overview and to highlight similarities and differences among Partner Countries. Country Profiles were instrumental for adjusting intervention actions to the Partner Countries' needs and contain:

- recommendations for improving flood risk management in line with the EU Floods Directive (WHAT);

- indication of institutions/organizations that should be involved (WHO);
- specific implementation actions (HOW); and
- tentative estimation of the duration of each specific action (WHEN).

Each Country Profile containing all findings, recommendations, and related road maps was initially elaborated in close consultation and cooperation with the respective National Flood Risk Management Focal Points and National Programme Coordinators and then presented, discussed and validated at the 2nd National/Country Advisory Group meetings. In addition, draft country profiles for flood risk management were presented at the regional workshop on policy and institutional development for flood risk management and approximation to the EU Floods Directive.

The regional workshop on policy and institutional development for flood risk management and approximation to the EU Floods Directive

The regional workshop on policy and institutional development for flood risk management and approximation to the EU Floods Directive was held on 15-17 September 2015 in Minsk, Belarus. The target audience was experts of the key Partner Countries' national authorities involved in integrated flood risk management and approximation to the EU Floods Directive policy development and its implementation. The workshop saw the participation of delegations of each Partner Country (with the exception of Azerbaijan³) reaching a total of 20 participants.

The workshop had two main objectives. The first objective was to explain the mainstreaming principles and requirements of the EU Floods Directive, to present the current state and good practices in implementation of the EU Floods Directive in EU Member States, and to share international approaches for flood risk management in trans-boundary river basins. For this purpose, invited lecturers contributed with presentations on the experience of Croatia (country which most recently joined the EU), the Rhine River Basin (International Commission for the Protection of the Rhine River Basin) and the Sava River Basin (International Sava River Basin Commission). The second objective was to review draft Country Profiles on Flood Risk Management, specifically findings, recommendations and the road maps related to policy development.

REGIONAL GUIDELINES AND CAPACITY DEVELOPMENT

Regional Guidelines on Flood Risk Management is a key document that guided all flood risk management activities of the PPRD East 2 programme (detailed information can be found in Progress Report 3). Guidelines were used for assisting Partner Countries in improving legal and institutional framework, and also for supporting Partner Countries in the implementation of the first step of the EU Floods Directive, i.e. while developing the Preliminary Flood Risk Assessment methodology.

Regional Guidelines on Flood Risk Management

PPRD East 2 developed the Regional Guidelines on Flood Risk Management that address the institutional and legal framework for approximating and implementing the EU Floods Directives, and the methodologies needed for the implementation of the three key steps of the Directive: Preliminary Flood Risk Assessment, Flood Hazard and Risk Mapping, and Flood Risk Management Plans.

The Guidelines built upon the Methodology for Hazard and Risk Mapping developed under PPRD East phase 1 and the national road maps on flood risk management presented in the Country Profiles. Furthermore, the Guidelines adapted the "Guidelines and Good Practices for approaching the EU Floods Directive"

³ Responding to the European Parliament resolution of 10 September 2015 on Azerbaijan (2015/2840(RSP)) the Ministry of Emergency Situation of Azerbaijan decided to put on hold participation in the PPRD East 2 programme, thus cancelling participation of the delegation of Azerbaijan at the regional workshop.

(developed within the EU-funded “Programme for Prevention, Preparedness and Response to Floods in the Western Balkans and Turkey” – IPA FLOODS) to the PPRD East 2 environment.

2nd regional flood risk management workshop

PPRD East 2 organized a 2nd regional flood risk management workshop on 12-13 July 2017 in Tbilisi, Georgia. The total number of participants was 20, eleven from national civil protection authorities and nine from other national entities, resulting in a good multiple-stakeholder representation. The objectives of the workshop were to improve the technical capacity of Partner Countries to produce and elaborate flood risk information and maps in line with the provisions of the EU Floods Directive. The Regional Guidelines on Flood Risk Management were used to train participants on the technical use of GIS methodology for Preliminary Flood Risk Assessment. Consequently, the presented GIS methodology has been used by the National Environmental Agency of Georgia to develop national methodology for and undertake the Preliminary Flood Risk Assessment countrywide. In addition, the risk management of technological accidents triggered by a natural hazard was also addressed – a lecturer from the DG Joint Research Centre presented approaches in Europe for assessing the risk of floods in conjunction with the presence of technological facilities. Detailed information can be found in Progress Report 6.

LEGAL, REGULATORY AND INSTITUTIONAL FRAMEWORK ON FLOOD RISK MANAGEMENT

Armenia

The flood risk management working group was established on 15 September 2017 by the Decree No.1043 of the Minister of Emergency Situation. The representative of the Ministry of Emergency Situation was appointed as the National Flood Risk Management Focal Point.

PPRD East 2 reviewed the Water Code adopted by the National Assembly of the Republic of Armenia on June 4, 2002 and the draft Road Map for Implementing Comprehensive and Extended Partnership Agreement on EU Water Acquis. The draft Road Map addresses the EU Floods Directive and assigns to the Ministry of Nature Protection the responsibility to align national legislation to the EU Water Acquis, including the EU Floods Directive. Based on this review, PPRD East 2 developed a policy brief for aligning national legislation to the EU Floods Directive and submitted it to the Ministry of Emergency Situations. The policy brief envisages to incorporate the main provisions of the EU Floods Directive directly into the Water Code and to develop methodologies for Preliminary Flood Risk Assessment, Flood Hazard and Risk Mapping and Flood Risk Management Plan as secondary legislation. This approach is similar to the one successfully implemented in Ukraine (see below) and ensures the full integration of water resource management with the flood management, and the introduction of the river basin principle as the geographical management unit. The river basin principle is one of the key components of the Water Framework and Floods Directives and guarantees the integration between the River Basin Management Plans and the Flood Risk Management Plans.

Azerbaijan

The inaugural meeting of the national inter-institutional flood risk management working group took place on 13 June 2018 in Baku, Azerbaijan. The working group requested PPRD East 2 to develop a policy brief for including the main provisions of the EU Floods Directive into national legislation, and to review the State programme for prevention of floods and mudflows on the territory of the Republic of Azerbaijan (2012-2015) (hereafter “the State programme”), with the aim to use these recommendations for the development of the new State programme.

PPRD East 2 analysed the Water Code of the Republic Azerbaijan n 418-IG of 26 December 1997 (hereafter “the Water Code”) and prepared the requested policy brief that includes recommendations for the alignment to the EU Floods Directive. The recommendations, reviewed and endorsed by the National Flood Risk Management Focal Point and presented at the 4th National Advisory Group meeting, are to establish Water Management Bodies, and to include the main provisions of the EU Floods Directives into River Basin

Agreements envisaged by the Water Code. The establishment of the Water Management Bodies should ensure the introduction of the river basin principle into Azeri legislation and it is fully in line with the principles of the Water Framework Directive and the Floods Directive.

PPRD East 2 reviewed the State programme as well. The main recommendation refers to the development of the national methodology for flood risk management planning, which should include Preliminary Flood Risk Assessment, Flood Hazard and Flood Risk Mapping, and Flood Risk Management Planning. It was also recommended to identify a responsible authority for the development and the implementation of said methodology.

Georgia

The Ministry of Environment and Natural Resources Protection has the mandate to develop a new Water Code for Georgia and to approximate national legislation to the EU Floods Directive. PPRD East 2 provided legal assistance for modifying the draft Water Code and approximate the national legislation to the EU Floods Directive. The approach, suggested by PPRD East 2 and adopted by Georgia, consisted in:

- inclusion of the main provisions of the EU Floods Directive into Water Code (PPRD East 2 proposed modification of the Article 40 of the national Water Code - can be found in Progress Report 6, Annex 4). The Water Code is undergoing a national consultation process and it is expected to be submitted to the Parliament during 2019; and
- developing methodologies for a Preliminary Flood Risk Assessment, Flood Hazard and Risk Mapping and Flood Risk Management Plan. PPRD East 2 assisted the National Environmental Agency in the development of the methodology for Preliminary Flood Risk Assessment, consisting of two steps: 1) development of the draft methodology and testing it on the pilot (Rioni) river basin, and 2) generalization of the methodology based on the outcomes of the pilot test.

Based on the testing results, the National Environmental Agency adjusted the general methodology for Preliminary Flood Risk Assessment initially drafted by the PPRD East 2. This methodology is being translated into Georgian, and the National Environmental Agency plans to approve it as internal regulation in 2019.

In parallel with the approval of the Preliminary Flood Risk Assessment methodology, the National Environmental Agency plans to apply the methodology to the entire country of Georgia and complete the first step of implementation of EU Floods Directive in 2019.

As a follow-up, development of the Flood Hazard and Risk Maps, and Flood Risk Management Plan methodologies will be conducted with the funding from the Swiss Cooperation and the Green Climate Fund respectively.

Moldova

The Governmental Regulation on Flood Risk Management no. 887 of 11 November 2013 aligns Moldova legislation to the EU Floods Directive. The inaugural meeting of the national inter-institutional flood risk management working group took place on 22 March 2017 in Chisinau, Moldova. As requested by the working group, the following has been done by the PPRD East 2:

- Proposal for modification of the Governmental Regulation on FRM no. 887 of 11 November 2013 to include time limits for the implementation of the requirements of the EU Floods Directive in Moldova;
- Development of schema for supporting the clarification of roles and responsibilities of different institutions in the implementation of the EU Floods Directive. Subsequently, responsibility for the technical implementation of the EU Floods Directive has been assigned to Apele Moldovei, resulting in an improvement of the institutional setting; and
- Review of the Study on Preliminary Flood Risk Assessment and Flood Hazard and Risk Mapping developed in the framework of the European Investment Bank funded Project. The review concluded that

the Study is in compliance with the EU Floods Directive requirements and with the EU flood risk management good practice thus enabling the Ministry of Agriculture, Regional Development and Environment to officially endorse the Flood Hazard and Risk Mapping as a national reference document.

The governmental reform, conducted in 2018, gave the responsibility for managing the implementation of the EU Floods Directive to the Ministry of Agriculture, Regional Development and Environment. Consequently, the new National Flood Risk Management Focal Point was appointed at the end of 2018. The new Focal Point is fully informed about the above presented and enabled to follow up after the PPRD East 2 closure.

Ukraine

PPRD East 2 and the EU funded Technical Assistance Project "Support to Ukraine in approximation of the EU environmental acquis" (hereafter "APENA"), have jointly supported Ukraine in the approximation of the national regulatory framework to the EU Floods Directive. The Law "On amendments to some legislative acts of Ukraine regarding the implementation of integrated approaches to water management by basin principle, Verkhovna Rada (VVR), 2016, № 46, st.780", has been approved. It includes the main general provisions of the EU Floods Directive in the primary national legal framework, while envisaging the adoption of methodologies for the Preliminary Flood Risk Assessment, Flood Hazard and Risk Mapping and Flood Risk Management Plan as secondary legislation. This specific approach has been proposed by PPRD East 2 and accepted also by Azerbaijan and Georgia.

Close cooperation with APENA resulted in providing comments and recommendations on the methodologies for Preliminary Flood Risk Assessment and Flood Hazard and Risk Mapping, developed by the national Interdepartmental Commission for the implementation of Directive 2007/60 / EC of the European Parliament and the Council of 23 October 2012 on the management of flood risk assessment. Comments and recommendations provided by the PPRD East 2 experts were accepted by the Interdepartmental Commission and included in the revised versions thus ensuring that the methodology for the Preliminary Flood Risk Assessment is in line with the PPRD East 2 Regional Guidelines on Flood Risk Management.

The Ukrainian Hydro-Meteorological Institute used this methodology and elaborated the preliminary flood risk assessment identifying 220 areas with potentially significant flood risk for the entire Ukraine. The assessment report is currently under the process of approval. PPRD East 2 reviewed this preliminary flood risk assessment report and recommended, for the next update, to adopt a modelling approach that can complement incomplete historical datasets, as described in the Regional Guidelines on Flood Risk Management.

Flood risk management in Dniester river basin

PPRD East 2 provided support for improving flood risk management in the trans-boundary Dniester river basin, a catchment shared between Moldova and Ukraine. PPRD East 2 drafted the Flood Risk Management Protocol, thus enhancing the existing Regulation on Cooperation in Flood Protection (2006) between the two countries. The draft Flood Risk Management Protocol includes the main provisions of the EU Floods Directive (similar to the Sava Flood Defence Protocol), and it can serve as an example for other trans-boundary river basins in the region.

The draft Protocol is based on the Treaty of the Dniester River Basin between the Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine. The Treaty was ratified by Moldova in 2012 and by Ukraine in 2017. The Treaty includes provisions of the Water Directive and envisages the establishment of the river basin commission.

PPRD East 2 submitted the draft Flood Risk Management Protocol to the key beneficiaries in Moldova and Ukraine, and to the Ministry of Agriculture, Regional Development and Environment of Moldova and the Ministry of Ecology and Natural Resource of Ukraine, as these two latter institutions are responsible for the implementation of the Treaty of the Dniester River Basin. The draft Protocol was also shared with the Global Environment Facility financed Programme on "Enabling transboundary cooperation and integrated water

resources management in the Dniester River Basin” (<http://dniester-basin.org/materials/navodneniya-i-izmenenie-klimata/>).

2.2.1.2. DISASTER RISK ASSESSMENT

Disaster Risk Assessment is one of the most important baseline documents of comprehensive disaster risk management. Technical assistance offered by the PPRD East 2 focused on aligning disaster risk assessment approaches and systems that existed in Partner Countries to the EU disaster risk assessment good practice based on the EU Risk Assessment and Mapping Guidelines for Disaster Management.

SITUATION ANALYSES

The mere status, existing capacities, awareness and organization of disaster risk assessment systems in Partner Countries was assessed in 2015. Findings and recommendations for Disaster Risk Assessment included:

- Transposition of EU Risk Assessment and Mapping Guidelines for Disaster Management into (Partner Country's) legislative framework;
- Institutional Set-up;
- Hazard Mapping;
- Risk Mapping; and
- Data Sharing.

The assessment confirmed that many Partner Countries had a lot of information available, had many specific risk assessment experts, but the cooperation with scientists was limited and response planning documents were related to hazard (and not risk) assessments. There were no comprehensive risk assessments in the countries; different sectors used different methodologies, criteria, and data to determine possible consequences, and there was not one united disaster risk assessment document in any of the Partner Countries that would make risks comparable and risk levels determined at the national level. This, unfortunately, resulted in most of the Partner Countries focusing more on the preparedness and much less on disaster risk reduction. The focus was on the most frequent hazards and countries were mostly unaware of the benefits of a disaster risk assessment system that includes cooperation of all sectors. The documents existing in most of the Partner Countries could have been characterised as hazard assessments and the systems as disaster management systems (and not disaster risk management systems).

The programme proposed a different, holistic approach and a comprehensive disaster risk assessment, the one that includes cooperation of all sectors and is used as a baseline for the disaster risk management and general development as such. Introducing this approach included a change from reactive to proactive, including a paradigm change from a system focused on responding after a disaster happened to a system focused on disaster risk reduction – focused on analysing the factors of risk, vulnerabilities and resilience of societies, and then reducing the risks through knowledge-based investments. Only after these steps are accomplished, focus should be placed on preparedness for the remaining risks and on responding to a potential disaster. This approach requires a certain amount of raising awareness and changes in the organizational systems.

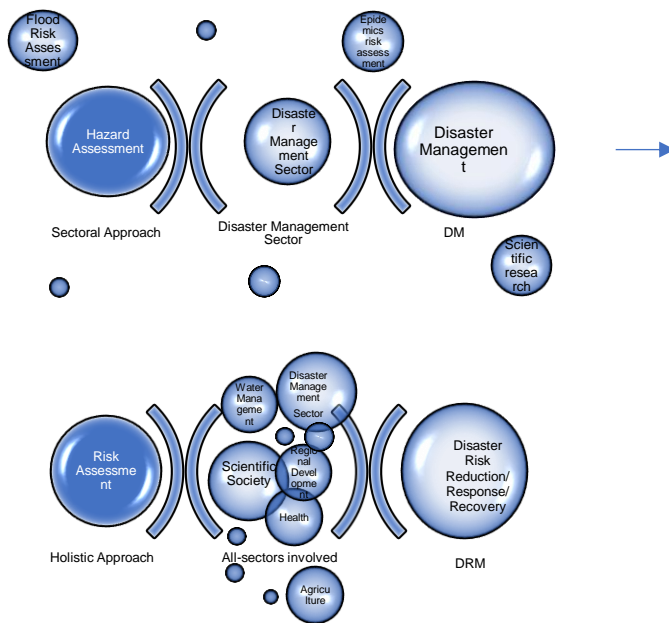


Figure 1. From disaster management to disaster risk management, the proposed approach

All these analyses resulted in the development of Chapter 5 of the Country Profiles, discussed and reviewed with the national Disaster Risk Assessment Focal Points and National Programme Coordinators, and validated at the 2nd National/Country Advisory Group meetings. Armenia, Azerbaijan, Georgia, Moldova and Ukraine selected Disaster Risk Assessment as ‘priority’ to be addressed within the PPRD East 2 programme.

ORGANISATIONAL APPROACH AND CAPACITY DEVELOPMENT

The PPRD East 2 work plan 2016-2018 defined steps that needed to be taken in each Partner Country to include systematic disaster risk assessment into national regulations and practices:

- Intersectoral working groups – that would ensure broad cooperation and coordination of all sectors;
- Single risk working groups – that would ensure sectors taking responsibility and ownership;
- Scientific and academia involvement – that would ensure using the existing scientific and knowledge base in a country, but also forming a risk assessment and risk knowledge base;
- All-risk approach – that would ensure analyses of not only the most frequent ones, but also the high consequence-low probability risks as well as those that are frequent with low consequences, but collectively can result in a big impact on the country; and
- National Guidelines/Methodology – that would ensure comparability of the different risk assessments and methodologies.

The aim of these steps was to ensure that the national disaster risk assessment document become a baseline for future smart decision-making, and provide managers with all information needed to make their planning and financing decisions in the future. These steps were presented to all Partner Countries and at every working group meeting PPRD East 2 attended in the form of the action plan. At the same time, each Action Plan was tailored to each Partner Country’s context and its needs because the legal basis in each of the countries as well as the countries organizations are different. Although the regional approach shows many benefits, in order to approach the risk assessment regionally all the countries have to be introduced

to the approach individually. There are a few prerequisites for this kind of approach to a multi-sectoral risk assessment:

- A National Focal Point is a prerequisite needed at the national level to coordinate, motivate and guide all sectors in developing a risk assessment. At the end of the programme each of the countries has a Focal Point nominated and introduced to the work plan;
- Active involvement of all sectors is needed to make disaster risk assessment a national effort, to use all available data and knowledge, and to share responsibility for risk assessment and risk management at a later stage. National inter-institutional working groups are a mechanism to ensure this. By the end of the programme all Partner Countries established national inter-institutional disaster risk assessment working groups and the groups were introduced to the approach, and the work plan, and have adopted the plan tailored to their context and needs; and
- The meetings of the working groups were usually a unique opportunity for all sectors to get together and discuss disaster risks. Some meetings also discussed steps after the risk assessment. In order to have the risk assessment process sustainable, the action plan, as well as roles and responsibilities of different actors, should become part of the legislative framework. Before tending to risk analysis, the working groups' tasks focused on drafting:
 - Legislative framework; and
 - National Guidelines.

Following the appointment of National Disaster Risk Assessment Focal Points, the establishment of inter-institutional national working groups was addressed in 2016. As the establishment of the working groups was more challenging than expected, the programme decided to gather the National Disaster Risk Assessment Focal Points, experts and future risk assessment process coordinators at the regional disaster risk assessment workshop.

A 2-day regional workshop on disaster hazard and risk assessment methodologies and tools, based on the Guidelines developed under the PPRD East 1 programme, EU Risk Assessment and Mapping Guidelines for Disaster Management, the EU Member States good practices, and ERA as a platform supporting disaster risk assessment, was held on 21-22 September 2016 in Tbilisi, Georgia with the participation of 19 experts, 12 from national disaster risk management authorities and seven from national and international organizations. Methodologies and tools for disaster risk assessment of specific hazards as well as multi-hazard risk assessments were presented and discussed with the overall objective of developing/adjusting/enhancing a national disaster risk assessment methodology or guidelines. The regional workshop aimed at:

- clarifying the general and specific objectives of disaster risk assessment activities in Partner Countries;
- aligning the understanding of participants of the EU Risk Assessment and Mapping Guidelines for Disaster Management and of different methodologies available for disaster risk assessment; and
- identifying existing methodologies in the Partner Countries and identifying gaps to develop a disaster risk assessment methodology at the national level.

As main findings of the regional workshop, specific steps have been agreed with the Partner Countries with reference to:

- mapping responsibility – hazard, vulnerability, and exposure for single peril, multi-hazard mapping, as well as ERA maintenance; and
- definition of a methodology (compliant with the EU Risk Assessment and Mapping Guidelines for Disaster Management) at national level for hazard assessment and mapping for single hazards, risk assessment and mapping for single hazards, and multi-risk assessment and mapping.

More detailed information can be found in Progress Report 4.

Besides working on each thematic topic, the programme made an effort to demonstrate the interconnectivity of different activities. During the 2nd disaster loss data regional workshop organised on 24-25 July 2018 in Kyiv, Ukraine the good practices in EU Member States disaster risk assessment methodologies and processes were highlighted, and demonstrated how disaster loss data can be used for disaster risk assessment, and more specifically, for improving specific disaster risk scenarios.

LEGAL, REGULATORY AND INSTITUTIONAL FRAMEWORK ON DISASTER RISK ASSESSMENT

Armenia

PPRD East 2 was requested to enhance the National Disaster Risk Reduction Strategy of Armenia in regard to the EU good practice in disaster risk assessment. The strategy was analysed, and recommendations (Progress Report 6, Annex 8) were submitted to the Ministry of Emergency Situations. The Strategy addresses disaster risk assessment as part of the overall disaster risk management, though it does not specify the methodologies to be adopted and the distribution of roles and responsibilities of institutions and stakeholders for disaster risk assessment. The need to develop a separate disaster risk assessment methodology or national guidelines has been stressed in order to enable a clear role division within the national disaster risk assessment system and to ensure that disaster risk analysis results are comparable. On 19 July 2018 a meeting of the informal national inter-institutional working group was held in Yerevan. Representatives of more than ten different national institutions were introduced to the steps necessary for starting the disaster risk assessment process⁴, and on 10 August 2018 the inter-institutional disaster risk assessment working group was officially established (Annex 3). During the 5th National Programme Coordinators' Meeting held in October 2018 the Ministry of Emergency Situations agreed to proceed with the task of defining the legal framework and the national disaster risk assessment methodology.

Azerbaijan

The inaugural meeting of the national inter-institutional working group on disaster risk assessment was held on 03 May 2018 (meeting minutes, Annex 4). PPRD East 2 facilitated the preparation of this meeting by drafting the meeting agenda and recommending potential working group members. At the meeting all participants were introduced to the disaster risk assessment process and the EU Risk Assessment and Mapping Guidelines for Disaster Management, so initial determination of roles and responsibilities commenced at the meeting. After the meeting the programme sent to the national Disaster Risk Assessment Focal Point and National Programme Coordinator the revised list of proposed members of the main risk assessment working group, the proposed and discussed list of the single risk working groups members, and the adjusted disaster risk assessment implementation road map, all for completion and adoption (Progress Report 7, Annex 9). In October 2018 the programme was informed that a new national disaster risk assessment focal point should be appointed and that the implementation of disaster risk assessment activities, agreed upon at the working group meeting in May 2018, are pending this appointment.

Georgia

The National Disaster Risk Reduction Strategy was analysed. It is considered to be a positive document listing the threats in the country and can be very useful during the identification phase of the risk assessment. However, the development of separate national disaster risk assessment guidelines was suggested in order to properly quantify and evaluate disaster risks in accordance with the EU Risk Assessment and Mapping Guidelines for Disaster Management. Establishing a disaster risk assessment coordinating working group and smaller single risk working groups was recommended, and lists with respective institutions to be included in the working groups were delivered for review (Annex 5). The disaster risk assessment

⁴ Disaster risk assessment process consists of definition of specific roles and responsibilities for disaster risk assessment, disaster risk assessment working group establishment, national risks identification, single risk working group establishment, national disaster risk assessment guidelines/methodology development, disaster risk assessment documents undertaken.

process was explained, and next steps were suggested in written communication with the national Disaster Risk Assessment Focal Point and at the 4th Country Advisory Group meeting held on 30 November 2017. When the new National Programme Coordinator was appointed at the beginning of 2018, PPRD East 2 was requested to revise the “Decree on Development of the Procedures for Preparing the Emergency Risk Management Plan”. The document can be used as good guidance framework, but it is missing a few determinative figures such as the scoring criteria that would allow risks to be comparable. PPRD East 2 also commented the draft Law on Civil Protection recommending a more precise definition of disaster risk reduction and disaster risk assessment processes in the Law. As Georgia started drafting a national disaster risk assessment in accordance with the EU Risk Assessment and Mapping Guidelines for Disaster Management in the middle of 2018, the Emergency Management Service informed the programme that there is no further need for PPRD East 2 assistance in this area. In November 2018 the programme sent an inquiry about communication and compatibility of different risk assessment processes in the country. A conclusion is drawn, based on information received, that results of different sectors’ processes are not compatible or comparable. In further communication with the Emergency Management Service the programme repeated the offer to review the whole national disaster risk assessment process and provide guidelines on approximating the national disaster risk assessment process to the EU Risk Assessment and Mapping Guidelines for Disaster Management requirements. Georgia has declined this offer thanking the programme for the extensive help in developing the local level risk assessment guidelines and reviewing the national documents that reportedly contributed to enhancing the overall quality of the disaster risk assessment process.

Moldova

The first draft table of analysis was developed during the regional workshop, further populated by the National Disaster Risk Assessment Focal Point and discussed during the inaugural meeting of the national inter-institutional working group on 29 November 2016 in Chisinau. As requested, PPRD East 2 reviewed the concordance of the “Methodological DRA Recommendations”⁵ (methodology for disaster risk assessment at the local level) with the EU Risk Assessment and Mapping Guidelines for Disaster Management and presented and discussed the findings and the recommendations at the same meeting. The agreement reached at the meeting was to develop, at the first stage, a document (mechanism) on assigning roles and responsibilities in disaster risk assessment to central level institutions and organizations already involved in prevention and management of emergencies, and then, as a second step, to develop a disaster risk assessment mechanism at the national level (Progress Report 4, Annex 10).

Afterward, the programme was informed by the key-beneficiary that addressing disaster risk assessment and developing new national-level disaster risk assessment methodology within the PPRD East 2 would be overwhelming for their human resources (taking into consideration the engagement of personnel in the preparation and organisation of the exercise EU MOLDEX 2017). The key-beneficiary decided to address disaster risk assessment through a separate project, which will include not only legal and institutional reform, but also extensive capacity building of all national institutions responsible for disaster risk assessment. PPRD East 2 obtained information on similar experiences and projects from EU Member States, and the Risk Assessment of National Disasters Project (RO-RISK), implemented by the Romanian Civil Protection, was shared with Moldavian colleagues.⁶

As Moldova started the process of sectoral/Governmental reorganization, the decision was reached that the national disaster risk assessment project should focus on the sustainable disaster risk assessment process development with a clear division of roles, capacity development and data collection and analysis.

⁵ MD Methodological DRA Recommendations “Analizei situațiilor excepționale posibile la nivel de raion, municipiu, UTA Găgăuzia și impactul asupra populației, economiei și mediului ambiant” – “Analysis of Possible Emergency Situation at the level of District, Municipalities, UTA Găgăuzia (autonomous territory) and the impact on population, economy and environment”

⁶ https://www.igsu.ro/documente/RO-RISK/Raport_Final_de_tara.pdf

Consequently, the draft project outline was proposed by PPRD East 2. It included a number of objectives some of which are: identifying the roles and responsibilities in the risk assessment process, developing a multi-sector disaster risk assessment coordinating body at the national level, developing governmental-scientific single risk assessment working bodies, developing disaster risk assessment capacity at the national level, developing the necessary disaster risk assessment tools at the national level, performing the first assessment for the initially selected ten disaster risks, smart disaster risk management capacity development (learning about the disaster risk assessment results and how to use them as basis for future disaster risk reduction), drafting a lessons learnt and disaster risk assessment system at the local level document, and raising public risk awareness. The draft project outline can be found in Progress Report 6, Annex 10.

On 23-27 April 2018, PPRD East 2 organized, in close cooperation and with great assistance provided by the National Protection and Rescue Directorate of the Republic of Croatia, a Study visit of Moldovan experts to Croatia on the topic of disaster risk assessment (DRA Study visit agenda can be found in Progress Report 7, Annex 10). The process of developing a national disaster risk assessment system, the legislative framework required to efficiently coordinate disaster risk assessment process as well as the experience in conducting national disaster risk assessment have been presented and shared. Methodologies for specific risks relevant for Moldova (fire, earthquake, flood, snow and ice) have been presented by different experts and scientific institutions involved in disaster risk assessment process in Croatia. Moldova reported the Study visit to be important and very informative – the report made by the Moldovan experts can be found in Progress Report 7, Annex 10. The disaster risk assessment Study visit report among other things states the difficulty the key beneficiary faces to coordinate the national disaster risk assessment process due to the reassignment of responsibilities within the Government.

Following the programme's recommendations, the General Inspectorate for Emergency Situations approached the Technical Agency, newly appointed national coordinator of the risk assessment process, and in December 2018 the Agency appointed new members to the working group. The meeting of the new working group was held in late January 2019, and all members were introduced to the new work plan and disaster risk assessment process as well as the EU Risk Assessment and Mapping Guidelines for Disaster Management requirements and recommendations. The main conclusion reached was the mutual agreement between the General Inspectorate for Emergency Situations and the Technical Agency to continue the good work already started on disaster risk assessment also after the PPRD East 2 programme ends.

Ukraine

The inaugural meeting of the working group on disaster risk assessment was held on 13 July 2016 in Kyiv with 18 participants in total, five from SES and 13 from other governmental institutions (Progress Report 4, Annex 11). Formalization of the working group was discussed, as well as a preliminary version of the table of analyses that was then further analysed and populated during the regional disaster risk assessment workshop.

As requested, the PPRD East 2 team provided recommendations on how the Sectoral Risk Management Committee (once established, as prescribed by the "Regulations on Risk Management Organizations") should address the development of disaster risk assessment methodology in line with the EU Risk Assessment and Mapping Guidelines for Disaster Management, Guidelines for Hazard and Risk Assessment used during PPRD East phase 1, and the EU good practice.

The recommendations addressed:

- the necessity for the Committee to set its position regarding the general approach to disaster risk reduction, adopting the EU Risk Assessment and Mapping Guidelines for Disaster Management principles;

- the necessity of developing suitable sub-laws or procedures addressing disaster risk assessment related topics such as the coordination among authorities and agencies, the involvement of external experts in the definition and application of disaster risk assessment methodologies or the communication with the public;
- the introduction of the EU Risk Assessment and Mapping Guidelines for Disaster Management principles in the national sectoral scientific research programme, to be defined by the Committee, with the goal of improving the understanding of risks, their impacts and alternatives for risk mitigation; one of the expected outputs of this programme is the perfection of a risk assessment methodology, including hazard and risk mapping; and
- the definition of a road map for the development and implementation of a disaster risk assessment methodology in the country.

The State Emergency Service confirmed that all recommendations were accepted and adopted.

During 2017, the PPRD East 2 provided comments on the Regulations on risk management organization and recommended intensifying the disaster risk assessment process. The Regulations are considered to be a positive document; however, the importance of the assessment and the multi-sectorial assessment process have not been stressed enough and disaster risk assessment process with roles and responsibilities of certain institutions has to be established within the Regulations. The process of developing stand-alone national disaster risk assessment guidelines was put on hold until the on-going process of developing a new legal civil protection framework is finalised.

An overview of the measures aimed at a risk-oriented approach was provided to the programme in June 2018. As stated in the overview, Ukraine has either developed or is working on developing different single risk assessment methodologies and methods such as for geological risks, floods and fires. In addition, the Resolution of the Cabinet of Ministers of Ukraine #342 of 10 May 2018 approved the “Methodology for developing the criteria to assess the degree of risk associated with economic activity and determined the frequency of implementation of the planned state supervision (control) measures”, as well as the unified forms of Acts to be issued based on the results of scheduled (unscheduled) state supervision (control) measures. However, the programme had no opportunity to confirm that these methodologies are in conformity with the EU Risk Assessment and Mapping Guidelines for Disaster Management and the EU good DRA practice as they were not provided for the review.

2.2.2. ACTIVITY AREA B – CIVIL PROTECTION CAPACITY BUILDING AND HOST NATION SUPPORT

Within the activity area B focus was on civil protection capacity building, as well as on aligning national legislation to the EU Host Nation Support Guidelines.

2.2.2.1. CIVIL PROTECTION CAPACITY BUILDING

The stated results to be achieved were “Partner Countries and Participating States of the Union Civil Protection Mechanism cooperate closely through regular exchanges of information, expertise and best practices, trainings, table-top exercises and a joint regional exercise”⁷.

EXCHANGE OF INFORMATION WITH PARTICIPATING STATES OF THE UNION CIVIL PROTECTION MECHANISM

Concerted efforts were made to strengthen the network of National Programme Coordinators and operational contact points in Partner Countries and Participating States of the Union Civil Protection Mechanism. In the first instance, this was manifested through the invitation to Partner Country representatives to attend the European Civil Protection Forums in Brussels on 6-7 May 2015, and on 6-7 March 2018. Report on

⁷ Progress Report 1, Chapter 1.3

their active participation at both Forums can be found in Progress Reports 1 and 7. Most notable was participation of Ms Rusudan Kakhishvili from Georgia and Ms Nadejda Chetraru from Moldova, as well as the PPRD East 2 Team Leader, as speakers on the panel related to the 4th pillar “Fostering resilience in Europe’s Neighbourhood” at the 6th European Civil Protection Forum.

Secondly, the Country Profiles developed under PPRD East phase 1 were updated in 2015 with information about each Partner Country’s civil protection authorities, contact details, legislative arrangements and host nation support procedures. During the latter half of 2018, all Partner Countries agreed to provide further updates, given the organisational and other changes having taken place during the last three years. So far (end of April 2019), however, only Belarus and Georgia have provided their updates.

Thirdly, with the cooperation of the EU-funded Exchange of Experts in Civil Protection Programme, the PPRD East 2 facilitated exchanges based on the criteria that the subject matter to be studied during the exchanges was relevant to the activities under the PPRD East 2 programme. The following exchanges were arranged:

- Visit of team from Azerbaijan to Denmark (Progress Report 5, Annex 10);
- Belarus to Czech Republic (Progress Report 3, Annex 9);
- Georgia to Austria (Progress Report 4, Chapter 3.2, task B.1.1);
- Georgia to Slovenia (Progress Report 5, Annex 17);
- Moldova to Italy (Progress Report 2, Annex 10);
- Ukraine to Austria (Progress Report 6, Annex 11);
- Ukraine to Estonia (Progress Report 2, Annex 12);
- Georgia and Moldova to Denmark to observe ModEx DK (Progress Report 7, Annex 11);
- All Partner Countries to observe exercise Barents Rescue 2015 in Finland (Progress Report 2, Annex 11);
- All Partner Countries to observe exercise Sequana 2016 in France (Progress Report 3, Annex 10); and
- Observers from Participating States of the EU Civil Protection Mechanism to observe exercise EU MOLDEX 2017 in Moldova (Progress Report 6, Chapter 3.2, Task B.1.1).

The feedback from participants in the exchanges, as well as from the hosts, showed that most of the exchanges had been useful or very useful, and had achieved their objectives. In one case, however, the aim had been partially achieved since the host country was not prepared to release the confidential information sought by the participants. The lessons learnt is that exchanges require clear indication of the aims to be achieved, and sound preparation undertaken both by the participants and by the hosts.

At the special invitation from DG ECHO, an Urban Search and Rescue team from Belarus took active part in the MoDex Falck exercise in Denmark in December 2016. The team assisted in search-and-rescue operations in cooperation with teams from Finland, France, and the United Kingdom.

At the special request received from the key-beneficiary in Georgia, the assessment of the fire rescue department of the Emergency Management Service of the Ministry of Internal Affairs of Georgia, and its compliance with the standards of the relevant EU Member States (Germany, Austria, Poland, etc.) in terms of standardization and unification of the fire-fighting-rescue vehicles, equipment and infrastructure took place in the first quarter of 2019. Findings confirmed that the overall management system (112-control centre) is state-of-the-art, whereas the fire-fighting stations outside Tbilisi suffer from lack of essential technical equipment and protective gear for the personnel. It is recommended that standards should be set for the purchase of new equipment to ensure interoperability, and that protective gear (helmets, gloves, fire-retardant uniforms) be acquired as a matter of urgency, not only for the professional fire-fighters, but also for the volunteers which the Emergency Management Service is intent on recruiting (Annex 6).

TRAINING COURSES

The PPRD East 2 programme conducted a civil protection training programme consisting of four Basic Training (BAT) courses, two Operational Management Training (OPM) courses, and two Advanced Training (ADT) courses. The programme further arranged a series of table-top exercises (TTX), one in each Partner Country focusing on Host Nation Support, and one regional table-top exercise (RTTX) focusing on decision-making and international coordination in response to a request for assistance in an emergency. The capacities built through these training courses and table-top exercises were complemented and tested through a regional full-scale field exercise. Subsequently, concerted efforts were made to analyse and build upon the lessons learnt from all the activities.

In the development of the curriculum for the training courses, the PPRD East 2 experts stayed as close as possible to similar courses conducted under the Union Civil Protection Mechanism. The course content was almost identical to the EU courses, and the trainers and lecturers supporting the courses were all experts with experience from teaching courses under the Union Civil Protection Mechanism and/or under the IPA Civil Protection Cooperation Programme. In line with the EU courses, each course started with information about the Union Civil Protection Mechanism – the BAT courses giving an introduction to the Mechanism, the OPM courses giving an update on developments relating to the Mechanism, and the ADT courses discussing future trends and the relationship between the Union Civil Protection Mechanism and other international organisations engaged in emergency response (in particular the UN, NATO, and the Red Cross/Red Crescent organisations). In addition to information about the Union Civil Protection Mechanism, all training courses included aspects of Host Nation Support, both in theoretical lectures and during practical exercises. Certain modules were specific to each course. The BAT courses looked at the emergency environment and included aspects of early warning, safety and security, cultural awareness, information management and team procedures. The OPM courses looked more specifically at the responsibilities of other international bodies, civil-military cooperation, humanitarian issues and code of conduct, while the ADT courses focused on political decision making in response to requests for international emergency assistance, international coordination mechanisms, the roles of the On-Site Operations Coordination Centre (OSOCC) and the Local Emergency Management Authority (LEMA), and also included theoretical and practical training in media relations (each participant having the opportunity to be interviewed on video).

However, despite the overall similarities with the courses under the Union Civil Protection Mechanism, certain differences were introduced. The experience from the training courses conducted during PPRD East phase 1 indicated that the pool of English-speaking officials from the Partner Countries had largely been exhausted, so it was decided to provide the BAT and OPM courses with simultaneous interpretation between English and Russian. Secondly, it became clear that, since the break-up of the Soviet Union, cooperation between the Partner Countries in response to emergencies had been very limited and far from the level of cooperation existing among the Participating States of the Union Civil Protection Mechanism. The PPRD East 2 experts therefore designed the training courses with the aim to foster networking among the Partner Countries and to provide information about the subjects being taught at the courses. For this purpose, the participants were put together in four groups of six, with one from each Partner Country in each group. Also, the course programme included team building exercises and a presentation given by one participant from each Partner Country on the status and arrangements for civil protection in that country.

From the outset, the PPRD East 2 team stressed to the Partner Countries that emergency response and, in particular, Host Nation Support, involve many national authorities in addition to civil protection, and Partner Countries were therefore encouraged to nominate 50% of their course participants from institutions or authorities other than civil protection. Although the aim of 50% was not reached at the training courses, it was still positive that 31% (57 out of 182) were from non-civil protection authorities. That balance was more than rectified through the TTX'es focusing on HNS (100 non-civil protection participants out of a total of 189) and other activities. The purpose of aiming for this balance was not only to spread the knowledge of emergency response procedures, but also to create better national networks between the civil protection authorities and their cooperation partners in other relevant ministries and institutions.

Unlike the BAT and OPM courses, it was decided not to provide Russian interpretation at the ADT courses. The reason was that these courses were designed for senior officials who would be leaders of their national teams cooperating with teams from the Participating States of the Union Civil Protection Mechanism. The first ADT course, conducted already in April 2016, was reserved for officials who had completed the BAT and OPM courses under PPRD East phase 1, as no ADT course was conducted in phase 1, whereas ADT 2 was reserved for officials who had completed BAT and OPM training during phase 2.

The training courses were evaluated by the participants using the same format as for Union Civil Protection Mechanism courses. All courses were highly rated (none below 4 out of 5). More than that, the experts and trainers were able to note a marked progress from the first to the later courses both in regard to knowledge acquired and, not least, in the level of engagement and activity from the participants. The feed-back from the Partner Countries at the later National/Country Advisory Group and Steering Committee meetings also indicated that the training courses had been indispensable in preparing the participants for the involvement in the regional full-scale field exercise. As the courses followed the lay-out of the similar Union Civil Protection Mechanism courses, the EU agreed that participation in the BAT and OPM courses qualified the participants to apply for the available slots at the EU High Level Course and the Course on Negotiation and Decision Making. Several Partner Country experts have already participated at the EU courses.

If courses for the Partner Countries are to be continued, it is recommended to replace the BAT courses with courses of a wider scope, e.g. to include aspects of disaster prevention, dealing with impact of industrial disasters and possibly nuclear emergencies.

The courses were completed as follows:

- BAT 1 – June 13-19, 2015;
- BAT 2 – August 29 – September 4, 2015;
- BAT 3 – November 7-13, 2015; and
- BAT 4 – November 28 – December 4, 2015.

All BAT courses were conducted at the Danish Emergency Management Agency (DEMA) Emergency Services College at Tinglev, Denmark. Course reports can be found in Progress Report 2, Annex 14.

- OPM 1 – May 1-6, 2016; and
- OPM 2 – 26 June – 01 July 2016.

The OPM courses were conducted at the DEMA Staff College at Snekkersten, Denmark. Course reports can be found in Progress Report 3, Annex 11 (OPM 1) and in Progress Report 4, Annex 15 (OPM 2).

- ADT 1 – April 17-22, 2016; and
- ADT 2 – May 15-19, 2017.

The ADT courses were conducted at the Crisis Management Centre at Kuopio, Finland. Reports on the courses can be found in Progress Report 3, Annex 12 (ADT 1) and in Progress Report 5, Annex 11 (ADT 2).

The overall impact of the training courses was demonstrated by the fact that several elements of the training had been introduced in the national civil protection academies and training courses in some of the Partner Countries. In particular, Belarus has included the information about the Union Civil Protection Mechanism in the curriculum of the Civil Protection University of Belarus, and Armenia has included the aspects of international coordination arrangements for disaster response in the training at the Armenian Civil Protection Academy.

REGIONAL TABLE-TOP EXERCISE

The PPRD East 2 experts proposed, and Partner Countries and the EU agreed, that the regional table-top exercise (RTTX) should be conducted as a “command-post” (i.e. political decision making) exercise as a lead-in to the regional full-scale field exercise. It was conducted in two parts: the first day exercising the issue of a request from the disaster-stricken country for international emergency assistance and the provision of responses from other countries willing to provide assistance. The second day focusing on bilateral negotiations between the disaster-stricken country and the assisting countries concerning the possible provision of host nation support.

As it had already been decided that the regional full-scale field exercise would be hosted by Moldova (and named EU MOLDEX 2017), the RTTX had the same lead-in scenario (an earthquake in Romania causing collapsed buildings and other damage in Moldova) and took place, for the exercise purposes, the day before the start of the field exercise, although in reality it was conducted six months earlier. It was further decided that the RTTX would be played in the capitals of the participating countries (the six Partner Countries plus the Czech Republic, Denmark, and Romania) and in the Emergency Response Coordination Centre (ERCC) in Brussels as a coordination hub. Each country operated from the national emergency operations centre in order to ensure realism and optimize the learning value. Experts from PPRD East 2 were assigned to support each Partner Country and to assist in the evaluation of lessons learnt from the exercise.

To start the exercise in the morning of 28 March 2017, it was assumed that the Government of the Republic of Moldova had already decided to request international assistance. The task was now to put in motion that political decision. For that purpose, Moldova sent an initial request to the ERCC which, in turn, contacted each of the countries participating in the exercise. In each country, the request was being studied and decisions were made concerning what kind of assistance could be offered. The exercise highlighted the inherent delays in sending, receiving, discussing, and evaluating requests and offers of assistance. Some offers were not found suitable whereas most offers were accepted by Moldova. A temporary delay in responses from Moldova turned out to be the result of a failure of the national IT-provider. This was only identified through the network of PPRD East 2 experts communicating together through alternative means (the “telegram” app). This episode brought to bear the importance of never relying on only one means of communication.

On the second day of the exercise, the countries offering assistance made bilateral requests directly to the Government of the Republic of Moldova to ascertain the type and extent of host nation support that could be made available. These questions became exceptionally realistic as they related to the actual deployment of rescue teams planned for the regional field exercise half-a-year later.

At the conclusion of the bilateral exchanges, a short lessons learnt discussion was held in each of the Partner Countries. A general observation from one experienced EU trainer and exercise planner was that this type of TTX, conducted in several countries simultaneously and acting as the command-post lead-in to the field exercise, was an innovation that could serve as an example for future exercises. Many of the observations made by the participating countries influenced the discussions held in June 2017 at the second planning conference for the regional full-scale field exercise (see below) and were particularly useful for the host country, Moldova, in its further development of its national host nation support standard operating procedures. (A report on the RTTX can be found in Progress Report 5, Annex 12).

REGIONAL FULL-SCALE FIELD EXERCISE EU MOLDEX 2017

Already at the initial meetings between the PPRD East 2 expert team and the Partner Countries offers were made by two countries, Belarus and Moldova, to host the regional full-scale field exercise. The PPRD East 2 experts analysed the offers and concluded that both countries would be able to arrange and support an international exercise. As a decision had to be made, the European Commission finally accepted the offer from Moldova while also expressing its appreciation for the offer made by Belarus. Once the decision was made, the process of detailed planning for the exercise started.

Initially, the PPRD East 2 experts visited Moldova and had the opportunity to discuss with the responsible officers from the then Civil Protection and Emergency Services Sector (CPESS – later to be renamed as the General Inspectorate for Emergency Situation (GIES) of the Ministry of Interior of the Republic of Moldova). The meetings also included visits to the proposed exercise sites and possible sites for the establishment of a base of operations (BoO).

The regional lessons learnt workshop taking place in Minsk in September 2016 (see below) offered the first opportunity for the Partner Countries to indicate what kind of rescue teams they would be ready to send to the exercise in Moldova. Three Participating States of the Union Civil Protection Mechanism (Czech Republic, Denmark, and Romania) also indicated their interest in participating actively in the exercise.

The first formal planning conference took place in Chisinau on 1-2 March 2017. Each of the “assisting” Partner Countries participated with two persons of which one was the focal point for exercise planning and the other either focal point for lessons learnt or focal point for host nation support. The participants had the opportunity to visit the proposed exercise sites and discussed the practical arrangements for the exercise, including the host nation support arrangements. The report on the planning conference can be found in Progress Report 5, Annex 13.

The second planning conference took place on 14-15 June 2017, i.e. after the RTTX mentioned above. The experience from the regional table-top exercise highlighted a number of matters discussed, in particular the size of the foreign rescue teams, their transportation to Moldova, host nation support arrangements and financial modalities. For practical and financial reasons, PPRD East 2 decided that the foreign rescue teams should consist of 24 persons in addition to the focal points for exercise planning and lessons learnt. This was different from the ModEx exercises where complete teams of up to 80 persons participate. However, exercises for complete teams represent a different approach and would not be practicable with teams coming from five Partner Countries and three Participating States of the Union Civil Protection Mechanism. The report on the second planning conference can be found in Progress Report 6, Annex 13, and a detailed description of the exercise planning process can be found in Progress Report 6, Chapter 3.2, Activity B.3.

The exercise started with the arrival of the first team in the evening of 17 September 2017. The remaining teams arrived the following day, and in the morning of 19 September 2017, the actual exercise was formally opened, and teams were sent to their respective areas of operation at the request of the Local Emergency Management Authority, coordinated with the On-Site Operation Coordination Centre. The LEMA and the OSOCC were both located in meeting rooms close to the Base of Operations. This had the advantage of easy coordination between the two, but the disadvantage of the OSOCC not being physically present at the BoO. The actual tasking of the rescue teams had been pre-scripted by the exercise planners (from Moldova and PPRD East 2) with the aim to ensure that all teams would be busy, and that there would at all instances be at least two teams from different countries working together. These aims were achieved but at the cost of free play by the LEMA and the OSOCC. It is recommended for future exercises not to pre-script the detailed employment of the teams, as long as there are enough tasks to ensure that all teams will be challenged and busy.

While the Terms of Reference for PPRD East 2 included a list of detailed provisions for the field exercise (all of which were fulfilled), the PPRD East 2 team decided to formulate the overall aim of the exercise in four key phrases that were easy to bear in mind:

- Coordination;
- Cooperation;
- Communication; and
- Host Nation Support.

All four aspects were fully achieved. **Coordination** took place not only within the LEMA and the OSOCC, but also at the exercise sites where the Local Incident Commanders had to coordinate the activities of each

rescue team. **Cooperation** between rescue teams from different countries functioned impeccably, even to the point where a rescue team from one country borrowed equipment from the team from another country and the teams helped each other to perform the rescue operations.

Communication between teams of different countries seemed not to be a problem. The exercise planners had assumed that the teams would communicate through their common knowledge of the Russian language, but in fact many of the team members were not comfortable speaking Russian, but, as one exercise participant explained, communicated through the common language of emergency response. Apart from that, the PPRD East 2 team had foreseen that the communication between the team trainers, European Union Civil Protection Team members, evaluators, and observers (all from Union Civil Protection Mechanism Participating States) would require a number of interpreters. A couple of professional interpreters were contracted, but in addition, some 18 language students were asked to support the exercise, and even though they were not professional interpreters, their assistance was of immense value and highly appreciated by the team trainers and Contracting Authority. Furthermore, also related to communication, the exercise was used as an opportunity for journalist students to experience the tasks of a media representative at the site of a disaster. To prepare the nine participating students, a workshop was held the day before the start of the exercise. During the exercise, the students conducted interviews with the LEMA and OSOCC as well as with the local incident commanders in the field. This turned out to be a highly valued learning experience for the students, but also many of the civil protection officers learnt that they needed to be better prepared for meetings with the media in the field.

Finally, as regards **Host Nation Support**, the exercise provided the chance for Moldova to fully test its draft host nation support guidelines and standing operating procedures. It demonstrated to the assisting countries the value of well-prepared host nation support arrangements even though less would have been required, had all assisting countries aimed for a higher degree of self-sustainability. Also, Ukraine had the opportunity to practice aspects of host nation support being transit country for the assisting team from Belarus.

The level of activity during the first day of the exercise was very high. Rescue teams were deployed to extract persons buried in rubble, rescue injured persons from rooftops, intervene in connection with accidents involving hazardous materials, and providing life-saving operations in flooded areas. It was originally planned to continue the exercise activities until after dark, in order to test night-time operations, but the exercise control was informed that the teams were exhausted and asked for a break until next morning. It later transpired that not all teams shared that feeling, and the cancellation of night-time operations was seriously regretted by some teams.

In all, the exercise involved 151 rescuers from foreign countries, 591 personnel from Moldova, and 55 other attendees, a total of 797 persons. A complete and detailed report on the exercise can be found in Progress Report 7, Annex 15.

THE LESSONS LEARNT PROCESS



At the request of the European Commission, the PPRD East 2 team arranged and conducted a regional workshop on lessons learnt, held in Minsk, Belarus in September 2016. This was an addition to the approved PPRD East 2 work plan 2016-2018. The workshop included key-note presentations by the EU (DG ECHO) and by a representative of the Sector for Emergency Management of the Ministry of Interior of the Republic of Serbia, speaking on the basis of experience from the flood disaster in Serbia in May 2014. The

workshop highlighted the process of identifying lessons from exercises and real emergencies, deciding which lessons should be acted upon, and revising procedures and legislation accordingly, thus converting lessons identified into lessons learnt. The opportunity of the workshop was also taken to have an initial exchange of views on what kind of rescue teams would participate in the regional full-scale field exercise in 2017. The report on the workshop can be found in Progress Report 4, Annex 14.

Immediately after the end of the regional full-scale field exercise EU MOLDEX 2017, on 21 September 2017, PPRD East 2 arranged a “Workshop on Transfer of Technical Knowledge and Experience” as an opportunity for the participants at the exercise (team leaders, team trainers, evaluators, EUCPT members, observers, exercise focal points, lessons learnt focal points, and members of the Exercise Control) to have a first exchange of experience from the exercise. The PPRD East 2 team issued a questionnaire to all participants inviting their comments in writing in preparation of the formal lessons learnt conference planned to take place in February 2018. The report on the workshop can be found in Progress Report 6, Annex 20.

The lessons learnt regional conference took place in Prague, Czech Republic, on 7-8 February 2018 at the invitation of the General Directorate of the Fire Rescue Service of the Czech Republic. On this occasion, Partner Countries and the participating EU Member States (Czech Republic, Denmark, and Romania) were represented by their rescue team leaders and their focal points for exercise planning and for lessons learnt. In addition to the national experiences, the conference had reports from the team trainers, evaluators, EUCPT, and exercise control. Lessons identified were both in regard to exercise planning and conduct, and in regard to actual response to emergencies. Several findings related to individual countries, such as preparedness to send rescue teams abroad, logistics arrangements, and host nation support, while other lessons applied generally to all participants. This was particularly the case in regard to the interaction between different international coordination bodies, such as the On-Site Operations Coordination Centre, the Local Emergency Management Authority, and the Urban Search and Rescue Coordination Cell. It was recommended by the participants that PPRD East 2 arrange a workshop to look specifically at this relationship. The report on the lessons learnt regional conference can be found in Progress Report 7, Annex 12.

After the lessons learnt regional conference, the PPRD East 2 experts conducted visits to each Partner Country to discuss and ascertain the individual lessons learnt and their implementation in the form of revision of national procedures, instructions, or legislation. The opportunity was also taken for each Partner Country to demonstrate the state of training and equipment of the rescue teams and their training facilities. Reports on the follow-up missions to Azerbaijan, Georgia, Moldova, and Ukraine are in Progress Report 7, Annex 13. Reports on the missions to Armenia and Belarus can be found in Progress Report 8, Annex 9.

As suggested by the participants at the lessons learnt regional conference, PPRD East 2 organised a “Workshop on Coordination of International Emergency Response” at the DEMA Staff College in Sneekkersten, Denmark, in July 2018. This workshop, which was additional to the approved PPRD East 2 work plan 2016-2018, was conducted in the format of “Train the Trainers” with the stated purpose of the participants arranging similar workshops in their home countries. Again, international experts with experience from previous training and exercises supported the PPRD East 2 team in the conduct of the workshop. As a result of the workshop, and in accordance with the stated purpose, both Armenia and Azerbaijan arranged national workshops. Armenia indicated that the subject matter would be included in the curriculum of their Civil Protection Academy, while Azerbaijan stated that such workshops would also be arranged at the regional levels. The report on the “Workshop on Coordination of International Emergency Response” can be found in Progress Report 8, Annex 8.

2.2.2.2. HOST NATION SUPPORT

Experience from recent major disasters demonstrated that arrangements for requesting, receiving and supporting international rescue teams need to be in place well before a disaster hits.

The programme has consistently stressed that host nation support is not a task only for the national civil protection/disaster risk management authority. It is a multi-disciplinary horizontal concept involving various Governmental authorities as the Ministry of Foreign Affairs, Ministry of Internal Affairs, Ministry of Finance,

Ministry of Health, Ministry of Transport and Communications, Ministry of Defence, Customs and Border control, Police, Civil Aviation and Veterinary authorities and many others.

The experience from the PPRD East phase 1 presented in the Study on the provision of international assistance and host nation support (<http://phase1.pprdeast2.eu/assets/files/Publications/HNS%20Study.pdf>) showed that some host nation support elements already existed to a certain extent in the Partner Countries' legislation though the national disaster risk management authorities were not aware that these elements are part of the host nation support concept. This was further confirmed by the assessment conducted in 2015 and presented in Chapter 8 of the Country Profiles. It was clear that in order to introduce and implement the EU Host Nation Support concept in the Partner Countries it was imperative to:

- introduce the host nation support concept across all relevant national stakeholders;
- map which elements of the host nation support concept already exist in the national legislation;
- test if existing elements meet, and to what extent, the requirements defined by the EU Host Nation Support Guidelines; and
- identify host nation support gaps not covered by the existing disaster risk management legislation.

After thorough analysis of possible approaches on how to address these four steps, it was decided to conduct two types of host nation support table-top exercises: one individual in each Partner Country, and one Regional Table-top Exercise (described above) with the participation of all six Partner Countries and the Emergency Response Coordination Centre simultaneously.

CONDUCTING ONE HNS TABLE-TOP EXERCISE IN EACH PARTNER COUNTRY

The host nation support table-top exercises were organised according to the below schedule:

- 29 September – 1 October 2015 (Moldova, 3 days, 25 participants);
- 24-25 February 2016 (Azerbaijan, 2 days, 29 participants);
- 15-16 March 2016 (Ukraine, 2 days, 35 participants);
- 29-30 March 2016 (Belarus, 2 days, 29 participants);
- 6-7 April 2016 (Georgia, 2 days, 35 participants); and
- 17-18 May 2016 (Armenia, 2 days, 34 participants).

They focused exclusively on host nation support and were conducted in the national crisis management centres with the participation of relevant Government agencies and institutions. Detailed report on HNS TTX conducted in Moldova can be found in Progress Report 2, Annex 18, and for the remaining Partner Countries in Progress Report 3, Annex 13. The main recommendations of the programme expert team were that:

- the host nation support concept needs to be promulgated to all relevant institutions;
- there is a need to develop one single legal document on host nation support followed with more technical and operational Standard Operating Procedures;
- a core national host nation support team consisting of all relevant national stakeholders should be established; and
- capacity building/training programme should be put in place to regularly expose the host nation support teams to issues that can occur when dealing with international assistance teams.

The detailed recommendations for each Partner Country were presented, discussed and agreed on at the 3rd National/Country Advisory Group meetings held in October and November 2016. Following these agreements, Partner Countries were invited to nominate a single National Focal Point for host nation support and to establish the core host nation support team/working group. The National Focal Points were appointed in all six Partner Countries. In regard to the working groups, Belarus decided not to set-up a specific working group but to use the existing command and control structure, whereas other five Partner Countries established dedicated host nations support working groups.

DEVELOPMENT OF NATIONAL HOST NATION SUPPORT LEGISLATION

As proved by previous experiences from development and implementation of host nation support concepts in the Participating States of the Union Civil Protection Mechanism, and as confirmed by the conducted national host nation support table-top exercises, there was a clear need to develop a legislative framework for host nation support. Basically, two approaches could have been used:

- 1) to map which host nation support elements exist in which legislation and continue using the existing legislation for host nation support purposes; or
- 2) to develop a new stand-alone legislation for host nation support.

The PPRD East 2 experts strongly advocated the second approach. All Partner Countries except Belarus opted for the second approach though it required enormous efforts to develop a new legislative framework for host nation support, the new category in the disaster risk management field. Belarus decided to use the existing legislation for the function of being the sending nation (country providing assistance) and to develop amendments to the existing law to cover the function of being the hosting nation (country requesting international assistance). However, after the EU MOLDEX 2017 and the lessons which Belarus learnt during the exercise, the Ministry of Emergency Situation of Belarus decided to change this approach and to develop stand-alone legislation for host nation support.

The PPRD East 2 experts contributed to the development of a new host nation support legislation by active participation in the Host Nation Support working group meetings in Armenia, Azerbaijan and Moldova, by sharing examples of host nation support legislation and standard operating procedures from the Participating States of the Union Civil Protection Mechanism (Croatia, Czech Republic), and by sharing host nation support legislation of Moldova and Georgia with other Partner Countries. It can be concluded that all six Partner Countries achieved a lot in the area of host nation support.

Armenia

“Order of Operation of Airports of Civil Aviation in Emergency Situations and Cooperation with State Bodies of the Republic of Armenia” which includes a chapter on host nation support, and a host nation support chapter in national Disaster Risk Management Strategy were adopted. The draft of Governmental Decree „On Approving the Procedure for Arranging Civil Protection and Disaster Management in Emergencies“ and the draft “Standard Operating Procedures for Republic of Armenia Commission, LEMA and HNS team” are being prepared and subject to adoption by the Government.

Azerbaijan

The draft of “Rules on provision of Host Nation Support in emergency situations” was developed and is under internal discussion.

Belarus

“Regulations on the procedures for the provision of Host Nation Support by the Republic of Belarus during emergencies” was drafted and should be forwarded for approval to the Government in the nearest future.

Georgia

The draft Governmental Decree for „Developing rules of Host Nation Support Activities in the Field of Civil Safety“ is to be adopted soon.

Moldova

Newly developed host nation support legislation – “Governmental Regulation on HNS No. 408” and Host Nation Support Standard Operating Procedures - is adopted. Taking into account one lesson learnt during the EU MOLDEX 2017, Moldova developed a draft Law „On exemption of taxes and legal fees connected to the entry/exit into/from Moldova of international intervention teams/modules“ which is now in the adoption process.

Ukraine

The draft “Resolution of Cabinet of Ministers of Ukraine on Approval of the Procedure for Host Nation Support in Civil Protection” was completed and submitted for the inter-ministerial discussion, after which it will be submitted by the Ministry of Justice to the Government for adoption.

In addition to the six host nation support table-top exercises conducted in 2015 and 2016 (as per PPRD East 2 work plan 2016-2018), the programme offered those Partner Countries that had at least a draft host nation support law and/or draft Host Nation Support Standard Operating Procedures in place to organise an additional table top exercise to test the newly drafted/developed host nation support legislation.

Moldova used this opportunity in January 2018 (one-and-a-half days, 29 participants) and **Belarus** in March 2019 (one day, 25 participants). In both events, the entire host nation support process was tested through a simulation exercise with active participation of members of the Host Nation Support working group in Moldova and representatives of central bodies in Belarus. Both exercises were followed by analysis of lessons identified which served as a basis for the identification of potential gaps in the national host nation support systems and for identification of next steps (the report on TTX in Moldova can be found in Progress Report 7, Annex 14).

2.2.3. ACTIVITY AREA C – ELECTRONIC REGIONAL RISK ATLAS AND DISASTER LOSS DATA COLLECTION AND PROCESSING

Activities and accomplishments presented in this Chapter address further improvement, interoperability and the current status of the Electronic Regional Risk Atlas, as well as the overall approach and results achieved in the thematic area of disaster loss data collection and processing.

2.2.3.1. ELECTRONIC REGIONAL RISK ATLAS

The Electronic Regional Risk Atlas was one of the most successful pillars in the first phase of the PPRD East programme. As such, phase 2 aimed at reinforcing and improving the impact of ERRA related activities in the Partner Countries. Despite the fact that ERRA is mainly perceived as an IT system, its programmatic importance goes far beyond that. ERRA enabled in fact, especially in this second phase of the programme, to:

- build a network of people that effectively exchanged experiences on the programmatic themes as well as on technical challenges;
- build strong professional knowledge on technical topics like IT and GIS;
- highlight the links among the different programme activities, such as disaster risk assessment, flood risk management and disaster loss data collection;
- discuss and improve knowledge on topics related to the Atlas, such as disaster risk assessment data needs; and
- familiarize themselves with technologies and services related to the disaster management topic available from the European Commission (e.g. Copernicus services) and worldwide.

During the first period of programme implementation, the focus was on identifying the needs of the Partner Countries and design a shared road map to improve the system and its use, while in the second period the effort was mainly devoted to guarantee the sustainability of the platform through:

- ensuring working installation on servers locally managed by beneficiaries;
- training of beneficiary staff on installation and administration of the system; and
- maintaining the system from the IT and content point of view.

FURTHER IMPROVEMENT OF ELECTRONIC REGIONAL RISK ATLAS

PPRD East 2 had amongst its key objectives to further improve the Electronic Regional Risk Atlas originally developed under PPRD East phase 1, both as a regional software system and as a national electronic disaster risk assessment database and easy-to-use internet-based platform.

In the early stages of the programme, ERRA was transferred from the Consortium that developed the system during the PPRD East phase 1 to the PPRD East phase 2. This transfer was achieved in September 2015 when all hosting services were moved to the PPRD East 2 Consortium members, and the source code of the system (ERRA core source code and additional components) was transferred. On the basis of the delivered code, the ERRA Developer Document was produced by the PPRD East 2 experts by using software reverse engineering (Progress Report 1, Annex 17). The ERRA Developer Document is a crucial documentation since without it the PPRD East 2 was not in the position to modify, upgrade and make any major changes or fix bugs in the ERRA source code. Content of the Development Document was presented to Partner Countries' ICT experts during the first regional workshop on ERRA in Tbilisi on 18-22 May 2015 (Progress Report 2, Annex 20). During this ERRA regional workshop, a set of bugs and malfunctions of ERRA software had been identified with the contribution of users from the Partner Countries. All those bugs were fixed and a bug-free version of the code prepared.

The availability of this new code triggered the first round of installation missions that ended before the second regional ERRA workshop. The second regional ERRA workshop, held in Kyiv, Ukraine on 14-15 June 2016, was mainly devoted to present, explain and discuss the ERRA road map developed on the inputs gained in the first regional workshop. The road map included the following priorities:

- **Use of ERRA in emergency and strategic planning:** this has been achieved by identifying the reference institutions in disaster risk assessment, disseminating among them the potential of the ERRA platform and establishing a cooperation with the key beneficiaries on the use of the ERRA system. This cooperation was instrumental in the development of the document that illustrates the use cases and functionalities to be further developed in ERRA. At the regional workshop, training was provided to the key institutions in disaster risk assessment on how to use ERRA for emergency and strategic planning;
- **Mainstreaming with other national initiatives:** this activity concerned the coordination and, from a technical point of view, the integration and interoperability of ERRA with other institutional geoportals and the continuous check that the various component of the system (e.g. the metadata editor) were in line with request of national laws and rules in Partner Countries. An example is Georgia, where a parallel project on the INSPIRE Directive established standards for the metadata for data and services;
- **Support to disaster loss data collection, recording, sharing and processing;** and
- **Data sharing inside Partner Countries and within the EaP region:** this activity was also supported by PPRD East 2 assisting institutions in the Partner Countries in defining the rules for information sharing inside the country with particular focus on data sharing between institutions and the general public, as well as for information sharing outside the Partner Country with particular focus on the EaP region in the context of the PPRD East 2.

One of the most relevant outcomes of the discussion with the Partner Countries was the preparation of Terms of Reference for the ERRA system upgrade.

The existing version of the ERRA platform did show some limitations and Partner Countries requested certain upgrades, that were formally shared with the programme and the Contracting Authority during the 2nd ERRA regional workshop. The main objective of this workshop was to define, together with the key beneficiaries and future ERRA national stakeholders, the most suitable approach for improving both the ICT dimension of the platform (including the requirements for handing over the upgraded ERRA to the Partner Countries), as well as disaster risk assessment processes. Discussions focused on how to improve the present version of ERRA and how to make information useful to a wide range of stakeholders in the Partner Countries, in line with the relevant EU Directives and Guidelines on civil protection and disaster risk management.⁸

Partner Countries put forward different comments and requests, that have been thoroughly reviewed and evaluated in order to decide if they could be included in the ToRs, in the light of their importance, technical feasibility, compliances with the ERRA philosophy and budget implications. They are reported in detail in the workshop reports and captured in the final version of the ToR (Progress Report 3, Annex 15).

From the IT point of view the design of the upgraded ERRA focused on simplicity in order to obtain improved stability of the system. The designed upgraded version of ERRA would have implemented the same functionalities of the current ERRA by using only one IT language on the client and server sides. The code and architecture of ERRA would have been simplified, facilitating the transfer of the ability to manage, administer and upgrade the system.

Several discussions were held with the Contracting Authority and DG Joint Research Centre as a possible technical partner to take the responsibility of the system after the programme ends. As a conclusion, the Contracting Authority decided to postpone the upgrade of the system till a solution for the system sustainability is found (Progress Report 5, Chapter 3.3, Task C.1.1). Consequently, the programme focused on the maintenance of the system in its actual configuration and in handing over the system to the beneficiaries in the Partner Countries.

For this purpose, a second round of ERRA IT mission was performed. The two main objectives of the ERRA IT missions were: to restore and make existing ERRA IT installations fully functional on local servers, and to provide the necessary training to the institutions hosting the installation on how to administer the system, upload the data, style the data and compile the metadata catalogue. In addition, each mission had additional specific objectives depending on the Partner Country visited (ERRA IT missions' reports can be found in Progress Report 8).

At the end of the missions and after further remote assistance each Partner Country has a working local installation of ERRA that completes the regional node maintained on a cloud server by the programme. In Georgia a second installation in the National Environmental Agency has been also completed in close coordination with the key beneficiary i.e. Emergency Management Service.

ENHANCEMENT OF ERRA INTEROPERABILITY

With the increasing availability of data and services on the disaster risk management panorama, the ability to import, connect and use these services becomes of foremost importance. For this reason, one of the tasks of the programme was to guarantee the interoperability of the ERRA system with such services and with national spatial data infrastructures where available.

The interoperability of ERRA with other services existing in the realm of disaster risk assessment, like Copernicus services (e.g., EFAS, EFFIS, EMS RM and EMS R&R) and other repositories of open data and services (e.g. Global Assessment Report, INFORM), has been highlighted as one of the priority tasks for the ERRA further development. Services and data presented and identified at the first ERRA Regional Workshop have been further studied in terms of technical specifications. Feasibility to interoperate them with ERRA has been also assessed. The first ERRA regional workshop also served to identify, with Partner

⁸ the EU Floods Directive, the EU Risk Assessment and Mapping Guidelines for Disaster Management, the INSPIRE Directive, the Guidance on Recording and Sharing Disaster Damage and Loss Data.

Countries, the platforms and the type of data, from other global, EU and/or national initiatives, which should become visible and interoperable with the new upgraded ERRA platform. Those data and platforms have been presented at the regional workshop directly by DG JRC and UNISDR experts - the best possible explanation of the available services has been provided to the Partner Countries.

During the 2nd ERRA regional workshop additional focus was placed on defining the minimum set of data and services that should be interoperable with the upgraded ERRA platform. Partner Countries agreed on the necessity of enhancing the ERRA interoperability towards the Copernicus services, with specific focus on the emergency management services (EMS). The following Copernicus services were identified and included into the Terms of Reference for the ERRA upgrade:

- EFAS - European Flood Awareness System;
- GloFAS – Global Flood Awareness System;
- EFFIS - European Forest Fire Information System;
- GDACS – Global Disaster Alert and Coordination System;
- UNISDR - Global Assessment Report;
- Copernicus services other than EFFIS and EFAS such as EMS Rapid Mapping and EMS Risk & Recovery; and
- INFORM platform from DG JRC.

Also included in the Terms of Reference are specific IT modalities aimed to enhance the interoperability of ERRA.

Following the Contracting Authority's decision to postpone the ERRA upgrade (due to a lack of system sustainability), the focus of ERRA interoperability was to explore feasibility to connect these same services to the current ERRA system. Thus, systems such as GloFAS (the Global Flood Awareness System), EFFIS (the European Forest Fire Information System), and GDACS have been connected to the corrected final version of the ERRA system and the compatibility with other data and services identified, such as UNISDR Global Assessment Report, and INFORM platform of DG Joint Research Centre, have been secured.

The link to the GDACS system has been renewed according to the new specifications of the GDACS service and was integrated in the new ERRA installation package. Same applies for GloFAS.

The EFFIS Web Map Service links to ERRA have been tested and verified on new ERRA installations in Armenia, Azerbaijan, Georgia and Ukraine.

In the case of visualization of EFAS (the European Flood Awareness System) on ERRA nodes, a formal agreement has to be concluded between DG Joint Research Centre and the National Hydro-Meteorological Services so the latter can receive EFAS data and redistribute it to interested institutions, and also on the ERRA national platform(s). The process of becoming the member of EFAS network has been presented and explained to Partner Countries, and, as mentioned above, Georgia is today a member of EFAS.

ERRA DELIVERY PACKAGE

As requested by the Contracting Authority, the regional ERRA node will remain functional till the end of May 2019, as part of the ERRA delivery package. The other elements of the ERRA delivery package are:

- User Manual
- Developer Manual
- Installation Manual
- Software installation package.

The ERRA delivery package is available in Annex 7.

2.2.3.2. DISASTER LOSS DATA COLLECTION AND PROCESSING

The overall approach in the area of disaster loss data collection and processing is also based on the four main PPRD East 2 pillars:

- **Partnership.** Disaster Loss Data Focal Points ensured an effective collaboration between programme experts and national institutions. Armenia, Georgia, Moldova and Ukraine have all appointed National Focal Points. Focal Points guaranteed the smooth exchange of information among national stakeholders and with the PPRD East 2 team and have also chaired national inter-ministerial working groups;
- **Ownership.** As mentioned in previous sections, ensuring ownership of results was at the core of the PPRD East 2 approach. Disaster Loss Data collection is highly regulated in almost all Partner Countries, with clear distribution of responsibilities among institutions. PPRD East 2 built upon the strongly structured institutional settings thus increasing the ownership and facilitating mainstreaming of international policies and EU approaches into national regulation. Furthermore, PPRD East 2 facilitated the establishment of national inter-ministerial working groups as a multi-stakeholder consultative platform to foster exchange of information and change of legislation. Georgia, Moldova and Ukraine have established disaster loss data working groups, whereas Armenia relaunched in 2017 the activities of the Commission on estimation of damages and losses, which was formally created but not active since 2012;
- **Flexibility - responsiveness to the Partner Country's needs.** Partner Countries have long experience in disaster loss data collection and processing. However, regulations in place in 2015 needed to be adapted at national level in order to allow the exchange of data at global level and with the EU Member States. PPRD East 2 supported the Partner Countries in these efforts. Furthermore, PPRD East 2 adapted the implementation approach as soon as the Sendai Framework entered into implementation phase (December 2017) and included the Sendai Framework reporting requirements on disaster loss data as an integral part of this action; and
- **Networking.** Networks of experts established within the region and with the EU Member States have both short- and long-term positive effects: they enable mutual exchange of experiences and practices on disaster loss data collection and processing within the region, and they serve as leverages for transferability of good practices among different institutions. Networks also accelerate innovation and changes for improving disaster loss data collection systems in line with the recent requirements of the Sendai Framework and Guidance for Recording and Sharing Disaster Damage and Loss Data developed by DG Joint Research Centre.

PPRD East 2 has facilitated networking by organizing regional workshops, National Advisory Group meetings, exchange of experts with EU Member States as well as stimulating the activities of national working groups. Furthermore, PPRD East 2 has established direct contact with the European Working Group on Disaster Loss Data and has supported participation of Georgia, Moldova and Ukraine. This participation was highly beneficial as EU Member States and Partner Countries learnt from each other about different approaches for collecting and recording disaster loss data. As a direct follow up to the EU Working Group meeting participation, PPRD East 2 organized the Exchange of Experts in Slovenia for Georgia and obtained participation of EU Member States at both regional workshops.

PPRD East 2 intervention consisted of three activities:

- Initial activity focused on undertaking situation analysis of disaster loss data collection and processing in Partner Countries. Based on this analysis, its findings and recommendations were used to develop and agree upon national implementation road maps, as well as to define capacity building activities;
- The second level activity consisted of regional capacity building, i.e. on presenting, clarifying and building Partner Countries' capacities to implement two reference guidances: the Guidance on Recording

and Sharing Disaster Damage and Loss Data, published by DG Joint Research Centre in 2015 (hereafter “JRC DLD Guidance”), that contains a set of minimum standards for sharing disaster data among EU Member States, and the technical guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction, published by UNISDR in 2017 (hereafter “UNSDR Technical DLD Guidance”). The situation analysis and the JRC Guidance were presented and explained at the 1st regional DLD workshop whereas the 2nd regional DLD workshop focused on sharing EU good practices and on capacity development for the implementation of both reference guidance; and

- Supporting Partner Countries in improving and aligning national legal, regulatory and institutional framework for disaster loss data collection and processing to the European good practices, JRC Guidance and Sendai Framework requirements on Disaster Loss Data was the third level activity. This support was provided to Partner Countries that selected disaster loss data collection and processing as priority topic to be addressed within the PPRD East 2 programme: Armenia, Georgia, Moldova and Ukraine.

SITUATION ANALYSIS AND REGIONAL CAPACITY BUILDING

Situation analysis was undertaken during the first year of programme implementation. Its findings and recommendations were used to develop the objectives of the 1st regional DLD workshop, one of those being the finalisation of draft national road maps for improving disaster loss data collection and processing.

In December 2017 the Sendai Monitoring Framework entered its full implementation phase and UNISDR published the Technical Guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction. With an aim to facilitate exchange of Partner Countries’ lessons learnt in adapting national legislation to these two reference guidance, and with an aim to assist Partner Countries identifying challenges and opportunities in reporting disaster losses within the Sendai Framework, the 2nd regional DLD workshop was organised in mid 2018.

Country Profiles

Similar to other thematic areas, Country Profiles contain findings, recommendations and national road maps for improving disaster loss data collection and processing in Partner Countries. Situation analysis highlighted that disaster loss data collection is well structured and highly regulated in Partner Countries. All Partner Countries but Georgia had clear sectoral legislation and standards for emergency classification and damage assessment. Azerbaijan, Belarus, Moldova and Ukraine have developed modern and up-to-date IT systems for recording disaster data. Furthermore, there was (and still is) a regional mechanism in place for sharing disaster loss data among members of the Commonwealth of Independent States. Despite the well-structured institutional and legal framework, the assessment evidenced the gap – there was a need to enable the exchange of data at international level by adopting standards in line with JRC DLD Guidance and Sendai Framework requirements.

Country Profiles guided the national intervention actions at the same time ensuring a regional coherent approach. They have been instrumental for adjusting intervention actions to reflect the Partner Countries’ needs. Country Profiles were firstly presented at the regional workshop on disaster loss data and successively endorsed by National/Country Advisory Groups (Progress Report 2).

First regional DLD workshop

The first regional workshop on disaster loss data was held in Chisinau, Moldova, from 7-9 July 2015. A total of 24 participants attended the three-day workshop, 17 representing key beneficiaries and seven other national institutions. Participants were experts working with disaster loss data collection and processing, and multi-sectoral damage assessment of man-made and disasters caused by natural hazard.

The workshop, as one of the first activities related to improving disaster loss data collection and processing, was a constructive and productive opportunity for sharing information and good practices of EU Member

States with Partner Countries with special focus on the set of Guidelines and Guidance Documents elaborated by the DG Joint Research Centre. The main objectives of the workshop were to:

- present and explain requirements of the JRC DLD Guidance and, more specifically, the minimum standards for sharing disaster data among EU Member States;
- share good EU and international approaches for collecting, recording and sharing disaster loss data, presented by experts from Slovenia, Italy and UNISDR;
- exchange on current practices in Partner Countries in relation to legal and institutional framework, methodologies and tools for collecting, processing and sharing disaster data; and
- confirm the gaps and suggest possible improvements of current systems in Partner Countries, as identified by the assessment – finalise the draft national road maps.

Regional workshop report can be found in Progress Report 2, Annex 21.

Second regional DLD workshop

The 2nd regional workshop on Disaster Loss Data was organized in Kyiv on 24-25 July 2018, with participation of 18 experts, all from key beneficiaries. The workshop was organized after the Sendai Framework entered its full implementation phase, i.e. after the first deadline of Sendai Reporting on disaster damage and losses. The workshop objectives were to:

- share Partner Countries' achievements and lesson learnt in improving Disaster Loss Data Collection and Processing systems during PPRD East 2, in particular in aligning national legislation to JRC DLD Guidance and UNISDR Technical DLD Guidance;
- highlight challenges and opportunities in reporting to the Sendai Framework and collecting data in line with Sendai Framework requirements;
- demonstrate how disaster loss data can be used for disaster risk assessment and more specifically for improving the description of risk scenarios; and
- facilitating further the positive effects of networking with the EU Member States and EC institutions, in particular with the National Observatory of Natural Risks of France and DG Joint Research Centre.

The workshop reinforced the need to exchange experts in disaster loss data collection and processing in relation to the Sendai Framework reporting, and for improving the use of disaster statistics in disaster risk assessment as well as disaster risk management.

LEGAL, REGULATORY AND INSTITUTIONAL FRAMEWORK

PPRD East 2 provided technical support at national level to align national legislations and regulations to the requirements of the JRC DLD Guidance and of the UNISDR Technical DLD Guidance. Combination of technical support at national level and regional activities ensured effective implementation of the national actions and regional coherence in the approaches.

In order to support Partner Countries, PPRD East 2 has developed a table of compliance that Partner Countries used to analyse the compliance of the current legislation with both guidance documents. The table of compliance addressed hazard classification, indicators on damages and economic losses as well as sectoral disaggregation. PPRD East 2 has also developed a national working group action plan and policy brief for improving disaster loss data collection and processing at national level. The achievements accomplished in each Partner Country is as follows.

Armenia

The Republican Commission Assessing the damages caused to Natural and Legal persons due to an Emergency was established in 2012, but not active until March 2017 when a new consultative session of the Commission was held. The Commission decided to amend the national DLD legislation, namely the Republic of Armenia Government Decree № 325-A dated April 10, 2012. As a follow up, PPRD East 2 developed an action plan for the working group for aligning Armenian legislation to the JRC DLD Guidance and UNSDR Technical DLD Guidance. The action plan was not implemented by the Commission. Successively, the PPRD East 2 team, National Programme Coordinator and Disaster Loss Data Focal Point agreed to draft a policy brief to align the national regulation to the JRC DLD Guidance and UNSDR Technical DLD Guidance. It was further agreed that PPRD East 2 would develop a conceptual schema for the functioning of the disaster loss data collection system in Armenia.

PPRD East 2 analysed national DLD legislation⁹. The analysis evidenced (Progress Report 7) that, in general, loss indicators used in Armenia are in line with the JRC DLD Guidance and UNSDR Technical DLD Guidance. Nevertheless, several key indicators are missing and should be added, among others critical infrastructure, productive sectors and cultural heritage. Moreover, PPRD East 2 suggested to include additional disaggregation of economic sectors in the legislation; this will be highly beneficial for both the reporting to the Sendai Framework and for increasing the potential use of disaster loss data in the entire disaster risk management cycle. PPRD East 2 summarized the analysis and recommendations into the policy brief that was submitted to the National Focal Point and, successively, in March 2019 to the National Advisory Group. The recommendations were accepted and should be incorporated in the new disaster loss data collection forms that will amend the current legislation. At the time of writing this report, the development of the forms is at the beginning.

In cooperation with the World Bank funded “Improving Post-Disaster Damage Data Collection to Inform Decision Making” Project, PPRD East 2 developed a Conceptual Schema for the functioning of disaster loss data collection system in Armenia (Progress Report 8). The Schema addresses three levels: municipal, regional and national and proposes clear distribution of responsibilities for each level from the collection process to the economic assessment of damages.

Georgia

The institutional reform and the merger of the State Security and Crisis Management Council and the Emergency Management Agency into the Emergency Management Service in 2018 have influenced the implementation of activities in Georgia. The Emergency Management Service took over the work done on disaster loss data by the State Security and Crisis Management Council and ensured continuity. Before the reform, the State Security and Crisis Management Council was the key beneficiary institution for this thematic area. With the support of PPRD East 2, it established national inter-institutional working group, developed the action plan for reforming the disaster loss data collection system in Georgia and initiated the implementation of the action plan. The first tangible result was drafting and endorsement of the new classification of emergency situations (hazard classification) in line with the natural hazard classification of the EU INSPIRE Directive.

In addition, the State Security and Crisis Management Council obtained the support from UNDP for the implementation of the component of the Action Plan dedicated to the development of disaster loss data

⁹ List of Legal Acts:

- Annex 1 to Decree N62-A of Minister of Emergency Situations of the Republic of Armenia on Classification of Emergency Situations, dated 5 May 2011;
- Decree N1582-N of Government of Republic of Armenia on approving the procedure for Assessing the damages caused to natural and legal persons due to emergencies, dated 10 November 2011;
- Decree N352-A of Prime Minister of the Republic of Armenia dated 10 April 2012 on approving the composition and activity procedure of the Republican Commission assessing the damages caused to natural and legal persons due to emergencies and on declaring void the Republic of Armenia Prime Minister’s Decree N97-A of 8 February 2007.

indicators in line with JRC DLD Guidance and UNSDR Technical DLD Guidance. Furthermore, UNDP assisted the State Security and Crisis Management Council in developing a Disaster Damage and Loss Assessment Methodology. PPRD East 2 reviewed the draft Methodology and provided recommendations regarding alignment to the JRC DLD Guidance and UNSDR Technical DLD Guidance, and a clear distribution of responsibilities among ministries and other national institutions. Moreover, with an aim of sharing the examples of good practice, PPRD East 2 provided the DLD methodologies developed by Slovenia and Moldova to the Emergency Management Service, facilitated participation of Georgian experts at the EU Working Group on Disaster Loss Data workshops, and organized, with the EU Civil Protection Exchange of Experts Programme support, the Study visit of Georgian experts to Slovenia. At the time of writing this report, the Emergency Management Service is finalising, with UNDP support, a new version of the Disaster Damage and Loss Assessment Methodology.

Moldova

PPRD East 2 supported the key beneficiary in establishing the inter-institutional working group and in developing the action plan for aligning national legislation to the JRC DLD Guidance and the UNSDR Technical DLD Guidance. Regular meetings of the working group were instrumental for the implementation of the action plan and development and adoption of the “Operational Decision to amend the Decree of the Chief of Civil Protection and Emergency Situations Service n 139 of 04 September 2012 on the statistical record of emergency situations and their consequences in the Republic of Moldova and its adaptation according to the JRC - Disaster Loss Data Guideline and the Sendai Framework”. As a follow-up, the working group, assisted by the PPRD East 2, compared the emergency classification of Moldova with the classification suggested by JRC DLD Guidance and, hence, with the natural hazard classification prescribed by the EU INSPIRE Directive, and concluded that the emergency classification of Moldova is substantially in line with both EU documents. The working group then compared the loss data indicators used in Moldova with the JRC DLD Guidance and the UNSDR Technical DLD Guidance requirements. The comparison highlighted the need to include two main changes in national legislation. One amendment should introduce disaggregation per age, gender, disability and income of affected people, while the second amendment should introduce more indicators for the economic sectors and especially for critical infrastructure and for the productive sector.

Based on these conclusions, the key beneficiary has developed the necessary new template tables that include the requested new disaggregated disaster damage and loss indicators (Progress Report 7). With the introduction of these new template tables existing national legislation related to disaster loss data registration and collection, namely the internal Regulation Order of Civil Protection and Emergency Situations Service No. 139 of 04.09.2012, will be amended.

Ukraine

PPRD East 2 supported the State Emergency Service to establish the inter-institutional working group on disaster loss data and developed the working group action plan. The working group met regularly, and as one of the steps in the implementation of the action plan, a comparison of existing national legislation with the JRC DLD Guidance and the UNSDR Technical DLD Guidance requirements was conducted. The results emphasized the need to include additional indicators in the national legislation – data for affected people should be disaggregated by gender, age, income and disabilities, while for economic and physical damage it was suggested to disaggregate for type of building (residential, hospital, education) and for different economic sectors. As a follow-up, the State Emergency Service drafted the amendments to the current legislation.

2.2.4. ACTIVITY AREA D – RAISING AWARENESS ABOUT DISASTERS AND CIVIL PROTECTION VOLUNTEERISM

Activities implemented within this activity area addressed raising awareness about disasters from the strategic perspective, and assisted Partner Countries in establishing legal and institutional set-up for sustainable civil protection volunteerism.

2.2.4.1. RAISING AWARENESS ABOUT DISASTERS

SITUATION ANALYSIS

As agreed at the 1st National Programme Coordinators and Steering Committee meetings held in March 2015 and at the first round of National/Country Advisory Group meetings held in April and June 2015, the first initiative of this activity area focused on the assessment in all six Partner Countries regarding the:

- existence (or non-existence) of policy level document for raising awareness about disasters (like National Communication Strategy) in the area of civil protection/disaster risk management;
- on-going and planned awareness raising activities about disasters; and
- synergies with other actors active in disaster risk management awareness raising activities.

The methodology used for this assessment included interviews with relevant national interlocutors, and, in order to gain as much information as possible from as many stakeholders as possible, collection of additional information via questionnaire covering all assessment topics. Information obtained during the interviews and received through the questionnaire were combined with additional information identified through internet sources. It all served as a basis for the analysis of the current situation of raising awareness about disasters in Partner Countries.

The analysis of the existing legal and institutional framework, and the current practice in the area of raising awareness about disaster, led to the identification of priority areas and activities for each Partner Country. The entire analysis, its findings and recommendations were summarised in Chapter 10 of the Country Profiles. The outcomes of the assessment and the consequent recommendations were presented to each Partner Country at the 2nd National/Country Advisory Group meetings held during October and November 2015, for their consideration and validation. They varied to a certain extent, nevertheless two findings were common and identical for all six Partner Countries. All Partner Countries are quite active in organising awareness raising activities (e.g. organising activities for children of various age, organising various campaigns for general population, producing booklets, leaflets, etc.). At the same time, in all Partner Countries there is no policy/strategy level document which would govern all these processes and activities and make sure that available resources are used as effectively and efficiently as possible. As a result, the programme team recommended all Partner Countries to develop a National Communication Strategy for Raising Awareness about Disasters. Armenia, Azerbaijan, Belarus, Moldova and Ukraine accepted this recommendation. It was also agreed that organisation of any subsequent national awareness raising/media campaigns on disaster risk management and awareness raising activities in schools within the PPRD East 2 programme will be directly linked to the development and implementation of the National Communication Strategies. In other words, these campaigns and awareness raising activities would be implemented only when the National Communication Strategies are adopted and where the proposed awareness raising/media campaigns would actually be contributing to the achievement of the national strategic objectives, including the national campaigns on the promotion of the EU approach to volunteerism (Progress Report 2, Chapter 5.2).

DEVELOPMENT OF NATIONAL COMMUNICATION STRATEGIES FOR RAISING AWARENESS ABOUT DISASTERS

With an aim to support Partner Countries in the development and implementation of their national communication strategies it was necessary to set-up a process and implementation structure. For the latter, the Partner Countries were invited to establish inter-institutional national working groups for raising awareness about disasters and to nominate the National Focal Points for Raising Awareness about Disasters. Setting-up these working groups was an inevitable step in the process because one of the assessment findings was that the awareness raising activities were conducted by various institutions which very often did not cooperate and did not coordinate their actions. It was important to bring organisations active in this field around the same table.

It also became clear that there was an imminent need to harmonise Partner Countries understanding of the structure and definition of a national communication strategy - its strategic goals, identification of target groups and interlocutors involved in the strategy development and implementation, and to bring Partner Countries to the uniform understanding regarding the purpose of the action plan for implementation of the national communication strategy. These were the objectives of the regional workshop on national communication strategy organised in October 2016 in Moldova (two days, 12 participants, the full report can be found in Progress Report 4). To further support the development of the national communication strategies, the programme developed and distributed in English and Russian the “Guidelines how to develop a National Communication Strategy for Raising Awareness about Disasters”, and on specific requests received from Armenia and Moldova, a specific country-tailored framework defining how to coordinate responsibilities and roles on awareness raising activities about disasters between different national stakeholders. Additional support was provided by direct participation of programme experts at the meetings of the national working groups in Ukraine, Belarus and Moldova, and remotely by providing various comments, recommendations, and guidance on drafts of the national communication strategies.

The actual development of the national communication strategies was negatively influenced for various reasons:

- late appointment of the National Focal Points in all Partner Countries;
- late establishment of the working groups in Belarus and Moldova, and no establishment of the working groups in Armenia, Azerbaijan and Ukraine¹⁰;
- replacements and appointment of new National Focal Points in Armenia and Ukraine;
- decision not to develop the national communication strategies during the PPRD East 2 programme (Azerbaijan, Belarus);
- involvement of key staff in planning, preparation and execution of the regional full-scale field exercise EU MOLDEX 2017 (Moldova);
- reconstruction of the state administration (Moldova); and
- political changes and legal and administrative constrains (Armenia).

All these factors led to the situation that none of the Partner Countries which initially decided to develop and implement a national communication strategy during the PPRD East 2 programme achieved this goal. Nevertheless, certain progress was made, especially taking into account that national communication strategy for raising awareness about disaster is an innovative and unique document – to the knowledge of the PPRD East 2 expert team, a national communication strategy for raising awareness about disaster does not exist in any Union Civil Protection Mechanism Participating State.

Armenia

Initial draft of the national communication strategy was developed (Annex 8), although the review of this draft by the programme experts revealed that the draft was actually a service level communication strategy and not the national level strategy. Then the Ministry of Emergency Situations decided to develop „National Strategy for Crisis Communication and Public Awareness in Emergency Situations" as part of the National Disaster Risk Management Strategy. Unfortunately, due to the internal national legal constrains, and in accordance with the existing legislation, the Ministry does not have the authority to draft and adopt secondary legislation (e.g. the strategy). In order to obtain said authority, the Ministry initiated the process of revising and improving the legal disaster risk management framework, and this reform is expected to be finalised when the new Government is fully established and functioning.

Azerbaijan

¹⁰ The RAD WG was established, 1st meeting of the RAD WG organised but then the RAD WG was cancelled.

The decision to develop the national communication strategy within the PPRD East 2 programme was revoked by the Ministry of Emergency Situations. However, a draft „Education concept“ was developed jointly by the Ministry of Emergency Situations and the Ministry of Education.

Belarus

An initial draft of the national communication strategy was developed by the Ministry of Emergency Situations (Annex 9). Guidance and recommendations for the next steps in the strategy development were discussed amongst the national stakeholders and programme experts at the working group meeting on 14 March 2017, but then the decision was taken by the Ministry to postpone the strategy development.

Moldova

Moldova had a service level communication strategy in place since 2015 (Annex 10), so the plan was to “upgrade” this existing strategy to the national level strategy. The next steps and way ahead were discussed and agreed on at the working group meeting held on 30 November 2016. However, development was delayed due to the intensive involvement of the key-beneficiary staff in planning, preparation and execution of the regional full-scale field exercise EU MOLDEX 2017 followed by the reconstruction of the state administration after which the Civil Protection and Emergency Situations Service was transformed into the General Inspectorate of Emergency Situations. This change, *inter alia*, required re-definition of roles and responsibilities of governmental entities in the area of communication about disasters and in the area of raising awareness about disasters, which is still underway.

Ukraine

The inaugural meeting of the national working group for raising awareness about disasters was held on 03 November 2016, however, then the process was delayed by fluctuation of the National Focal Points which resulted in a break-up of the working group. At the ad-hoc meeting of the informal working group organised on 20 December 2017, the conclusion was reached to continue developing the National Communication Strategy and to establish an official inter-ministerial working group to carry-out this task. An official invitation to establish this working group was sent by the Head of the State Emergency Service to other relevant institutions on 15 December 2018, and the process is still ongoing.

Development of the national communication strategies remains high priority for all five Partner Countries which decided to develop the national communication strategy within the PPRD East 2 programme, i.e. Armenia, Azerbaijan, Belarus, Moldova and Ukraine. All of them confirmed readiness to continue working in this direction after the end of the PPRD East 2 programme.

WORK WITH JOURNALISTS

The PPRD East 2 team decided to re-activate the journalist network which was established during phase 1 of the programme because it was seen as a possible useful source for developing programme visibility actions. The first step in this re-activation process was an assessment of the experience of the members of the journalist network from working in the PPRD East 1, on their involvement in drafting national communication strategies, and on their experience from working in disaster risk reduction and disaster risk management. The assessment was conducted through a questionnaire which was shared in English and in Russian with all members of the journalist network. The response rate was however, and despite efforts of the programme team and numerous reminders, very low (ten replies received out of 42 questionnaires distributed). The very low responsiveness of the journalist network members and the experience from working with the journalist network during the phase 1 led the expert team to reassess whether the members of the journalist network were genuinely interested in working with the PPRD East 2 on permanent basis, i.e. whether the cooperation modality created during the phase 1 would be the most effective and efficient way to address the public awareness raising issues in Partner Countries.

The media (not only in Partner Countries, but globally) are generally less interested in investing resources and informing about disaster risk management and disaster risk reduction subjects (i.e. prevention and

preparedness), while response operations to a real disaster trigger quite large interest. Taking this into account, and after consultations with the Contracting Authority, it was concluded that efforts should be invested into working with another already existing network, which proved to be working well - the existing journalist networks of the EU Delegations. The journalist networks of the EU Delegations are used to work with the EU and to inform about EU related subjects. These networks are much larger, cover many more recipients, and this option should be more sustainable because the networks will maintain their existence after the PPRD East 2 programme is concluded.

In order to provide the members of EU Delegations' journalist networks with a better understanding of the specifics and complexity of disaster risk management and to involve them into the programme's activities, the programme organised a regional workshop for EUD journalists and national communication experts (who would be representing key beneficiaries i.e. national civil protection/disaster risk management authorities) to share with them concrete and successful EU experiences on awareness raising and disaster prevention and ways to interact with national civil protection authorities. Involving both journalists (media) and the national communication experts provided a unique opportunity for networking and enhancing collaboration between media professionals and communication specialists of the national civil protection authorities, sharing best practices in all sectors.

The regional workshop on cooperation with journalists and communication experts was organised on 01 – 02 November 2016 in Kyiv, Ukraine (two days, 17 participants, workshop report can be found in Progress Report 4). The objectives of the workshop were:

- to analyse the role and mandate of media in disaster risk reduction and disaster risk management at the national level, and in the context of the Sendai Framework for DRR 2015 – 2030;
- to analyse and discuss national procedures for civil protection and media collaboration and the ways how to improve them, based on identification and analysis of lessons learnt in the communication field during past emergencies (e.g. the Georgian floods June 2015, Ukraine Oil Depot Explosion 2015) and
- to enhance collaboration between media professionals and communication specialists of the national civil protection authorities.

In order to have a balanced presence of journalists and communication experts, the programme invited Partner Countries to nominate one communication expert from the national disaster risk management authority with experience in working with journalists and media, and one journalist who actively cooperates with the national disaster risk management authority. To increase the cooperation with the journalists' networks of the EU Delegations in the Partner Countries, the programme invited all six EU Delegations to nominate one journalist with previous experience in disaster risk management. Only three Delegations (AM, BY and UA) used this opportunity and nominated the journalists. One of the workshop's conclusions was to provide the journalists an opportunity to participate in PPRD East 2 events, particularly in the Regional TTX in March 2017, and in the full-scale field exercise EU MOLDEX 2017 in September 2017.

With the aim of implementing this conclusion, the programme invited the journalists to participate in PPRD East 2 Regional TTX in March 2017. Only one of them reacted to this invitation and none of them took part in the event.

Due to this lack of journalists' interest to participate in the Regional TTX (an integral part of the EU MOLDEX 2017), the programme decided not to invest any more resources in a group which is not interested in cooperation and decided not to invite them to the EU MOLDEX 2017 as originally planned but rather offer this opportunity to journalist students. The plan was to give students the opportunity to:

- learn about the role of media during international emergency response operations; and
- to play the role of international media during an international emergency response operation.

PPRD East 2 therefore invited a group of journalist students from Moldovan universities to participate at EU MOLDEX 2017 and to simulate the media during the exercise, guided and supported by the programme's Info & Media NKE.

Prior to the exercise, the group of nine journalist students received on 17 September 2017 a specialised 1-day workshop for media role players focused, *inter alia*, on:

- familiarisation with PPRD East 2 programme and EU MOLDEX 2107;
- provision of the necessary information about Union Civil Protection Mechanism, other international humanitarian actors and their roles in international disaster response operations;
- necessary exercise operational information: exercise scenario, who is doing what, and safety and security rules; and
- the key role of media in disaster situations, as partner of the civil protection authorities to disseminate only reliable and verified information, thus contributing to fight sentiments of panic among the population.

The journalist students took very active part in both the training and in the exercise and contributed to increase the realism of the exercise.

2.2.4.2. CIVIL PROTECTION VOLUNTEERISM

Based on the assessments on volunteerism in civil protection and disaster risk management conducted in 2015 in all Partner Countries, recommendations and respective road maps have been developed for all Partner Countries. Azerbaijan, Belarus, Moldova and Ukraine agreed to include fostering volunteerism in disaster risk management as one of the main priorities for the further development of their civil protection systems. In this regard, the activities proposed by the PPRD East 2 programme were focused on two levels - the regional level activities (open for all Partner Countries) and national level activities focused on assistance aimed to Azerbaijan, Belarus, Moldova and Ukraine.

REGIONAL LEVEL ACTIVITIES

In order to provide key insight in the EU good practices and access key legal documents (laws, sub-laws, standard operating procedures, etc.) on civil protection volunteerism, a study tour was organised for two members of each national working group on civil protection volunteerism - Azerbaijan, Belarus, Moldova and Ukraine and one representative of Armenia and Georgia. The study tour was conducted on 11 - 16 September 2016 (six days, eight participants, report can be found in Progress Report 4) included meetings with:

Finland

- Ministry of Interior, Department for Rescue Services;
- Helsinki Fire Department;
- TAMMISALO Voluntary Fire Department;
- Finnish National Rescue Association SPEK; and
- Finnish Red Cross;

Denmark

- Danish Emergency Management Agency (DEMA) HQ;
- DEMA Fire and Rescue Centre - DEMA voluntary training centre;
- East Zealand Emergency Management; and
- Danish People's Aid (Danish humanitarian NGO).

This design gave the participants the opportunity to observe different legal and institutional setups, and the different range of activities conducted by civil protection volunteers in EU Member States, namely in Finland and Denmark. Voluntary organisations and national civil protection authorities were visited, thus all aspects of voluntary associations (in terms of volunteer management, governance, programming) and the volunteer-based disaster response/preparedness and prevention actions and systems were observed. The study tour concluded with a final half-day workshop summarising and discussing all information and documents received. Participants discussed, elaborated and analysed how this new information will be used in the revision or development of their own national legislative and institutional frameworks on civil protection volunteerism. Additionally, civil protection voluntary systems of Germany and Italy were presented, thus participants received, in total, information about four different civil protection voluntary systems from Union Civil Protection Mechanism Participating States.

To enable Partner Countries to present the progress made, and to exchange the experience in developing and establishing the national civil protection voluntary legal and institutional frameworks, the programme organised a two-day regional workshop. The regional workshop on civil protection volunteerism was organised on 30-31 May 2017 in Minsk, Belarus (two days, 15 participants, report can be found in Progress Report 5). The workshop fully met its objectives in:

- providing Partner Countries' experts with a regional forum and the opportunity to present the progress made, and to exchange the experience in developing and establishing the national civil protection volunteerism legal and institutional system;
- discussing procedures and process which the Italian Red Cross undertook to become a certified/recognised civil protection volunteerism organisation in Italy;
- guiding Partner Countries through the normative evolution of civil protection volunteerism in the EU context; and
- presenting the EU Aid Volunteers Initiative as a potential source of further support for the development of civil protection volunteerism in Partner Countries.

The workshop was delivered by the PPRD East 2 experts and by external lecturers representing the Education, Audiovisual and Culture Executive Agency of the European Commission and the Italian Red Cross.

To support the process of development of civil protection volunteer organisations and their certification procedures, and to harmonise these certification conditions and parameters amongst the Partner Countries themselves, and between the Partner Countries and EU, the programme adjusted the three documents listed below. These documents follow the conceptual scheme of requirements for certification as a Hosting Organization by DG ECHO under the EU Aid Volunteer Initiative:

- Assessment Tool for Comparative Analysis of Civil Protection Volunteerism;
- Application for Registration with Central Registry of Civil Protection Volunteer Organisations; and
- Set of Templates and Guidelines for Certification of CP Volunteer Organisations.

A fourth document - Recommendations on the Evaluation of the Economic Value of Civil Protection Volunteerism - was developed at the specific request of Belarus' inter-institutional working group on civil protection volunteerism raised during its 2nd meeting held on 27 February 2018. The document provides a brief overview of existing studies and tools that are most suitable and applicable for the development of a national system for calculation of the economic value of civil protection volunteerism. All documents were produced and distributed in English and Russian and are available at the PPRD East 2 web site (<http://pprd-east2.eu/en/category/publications/>).

On several occasions, some of the Partner Countries requested the programme's support in promoting the civil protection volunteerism concept in their countries. They stated that one of the challenges which they face is a low interest among the population in actively participating and becoming registered and organised

as volunteers. The programme team, after thorough analysis of how to respond to this request, decided to develop a short video to promote the civil protection volunteerism concept and bring this new concept to the attention of the Partner Countries' population. The video was developed as a public service announcement in a form of 2D animation in national languages of all Partner Countries to be used and disseminated by the programme's key-beneficiaries. All videos are available at the PPRD East 2 web site¹¹ and on the European Commission's knowledge sharing platform Capacity4dev. The videos were also linked to the EU Neighbours East portal of the OPEN Neighbourhood Programme (<https://www.euneighbours.eu/en/east/stay-informed/news/eu-video-promotes-civil-protection-volunteerism-eastern-neighbourhood>) and promoted on the OPEN Neighbourhood Programme social media channels in mid-May 2019, around the Eastern Partnership 10 years celebration week.

NATIONAL LEVEL ACTIVITIES

In order to establish an implementing framework for the development of the legal and institutional basis for civil protection volunteerism in those Partner Countries that have selected this thematic topic as priority, Azerbaijan, Belarus, Moldova and Ukraine were invited to appoint a National Focal Point for Civil Protection Volunteerism and to establish a national inter-institutional working group for civil protection volunteerism. Specific targets for each working group were defined as follows:

- Azerbaijan:
 - Draft a set of by-laws and specific thematic legal framework on civil protection volunteering; and
 - Development and maintenance of a database of volunteers and volunteering organisations accounting for personal skills and available equipment;
- Belarus:
 - Draft a general law on volunteerism in civil protection activities; and
 - Refining of volunteer national database, development of Standard Operating Procedures for the update of the database, and communication guidelines among Ministry of Emergency Situations and all stakeholders involved in volunteering activities;
- Moldova:
 - Draft a law on volunteerism in civil protection activities, including mandatory insurance for civil protection volunteers and the chain of command & control within civil protection activities for both volunteers and volunteer organizations; and
 - Development and maintenance of a database of volunteers and volunteering organisations accounting for personal skills and available equipment;
- Ukraine:
 - Draft a set of by-laws and specific thematic legal framework for civil protection volunteering; and
 - Study and discuss insurance of volunteers deployed for civil protection activities and draft a minimum set of juridical and technical requirement for the involvement of the volunteer organisations in civil protection system.

Expected outcomes, based on the recommendations and road maps, of the working groups were: drafted by-laws/Standard Operating Procedures for civil protection volunteerism, developed database of volunteers and volunteering organisations (Azerbaijan); drafted law on volunteerism, an updated volunteer national database (Belarus); drafted law on civil protection volunteerism, developed database of volunteers and volunteering organisations (Moldova); drafted by-laws/Standard Operating Procedures for civil protection

¹¹ <http://pprdeast2.eu/en/2019/are-you-ready-to-become-civil-protection-volunteer/>

volunteerism, guidelines for minimum requirements of involvement of volunteering organisation in civil protection system (Ukraine).

The appointment of National Focal Points for Civil Protection Volunteerism and establishment of a national inter-institutional working groups for civil protection volunteerism was delayed, thus the study tour, the starting point of the work on civil protection volunteerism, was postponed. The PPRD East 2 approach was that the study tour should be attended by those national experts who will lead the development of the legal and institutional frameworks for civil protection volunteerism in their respective countries – the national focal points - and the civil protection volunteerism working group members. Only this way it would be guaranteed that the knowledge gained by the Partner Countries during the study tour would be properly and adequately used and transformed into national legislative and institutional frameworks for civil protection volunteerism. As stated above, the study tour took place in September 2016.

Azerbaijan

At the 3rd National Advisory Group meeting held on 10 November 2016, the programme team was informed that although civil protection volunteerism remains a priority for Azerbaijan, it will not be addressed within the PPRD East 2 (meeting report can be found in Progress Report 4, Annex 37). Consequently, no national level activity on civil protection volunteerism was implemented in Azerbaijan.

Belarus

Two meetings of the national inter-institutional working group for civil protection volunteerism were organised, on 02 December 2016 and on 27 February 2018. The draft of the amended Law on Fire Safety which introduces new volunteer fire-fighting units in Belarus (Annex 11) and the Resolution of the Government were developed (both are at the final stage of approval by the Government). The Resolution of the Ministry of Emergency Situations which should elaborate the concept of the volunteer fire-fighting units in details will be developed once the Resolution of the Government is approved.

The new Law on Fire Safety introduces the following improvement:

- four additional articles will regulate voluntary fire-fighting units;
- three types of voluntary units are envisaged: a fire-fighting team (to assist in fire-fighting with use of fire-fighting equipment), a fire-fighting brigade (to assist in fire-fighting with use of only fire protection equipment) and a fire-technical commission (experts with technical education able to identify how to bring an object into the safe conditions to minimise or prevent the risk of fire); and
- the new Law will introduce the following division: professional emergency services will be regulated by the Law on Emergency Services and the Status of Rescuer; “freelance” (voluntary) fire-fighting units by the Law on Fire Safety and Resolution of Government, whereas voluntary public unions and their fire-fighting units by the legislation for public associations.

The Ministry of Emergency Situation is annually updating a database on existing volunteer teams and their resources and capacities, but once the new Law on Fire Safety is adopted the database will also include information on trained and certified volunteers, which is not the case now.

Moldova

The inaugural meeting of the national inter-institutional working group for civil protection volunteerism was held on 15 November 2016. It served as a basis for discussion and definition of ideas for the initial drafting of national civil protection volunteerism legislation. The initial draft was developed after the meeting (Annex 12) but then the development process was slowed down due to the involvement of the key-beneficiary staff in the planning, preparation and organisation of EU MOLDEX 2017, and due to the Governmental reform, that took place in Moldova afterwards. Nevertheless, the key-beneficiary repeatedly confirmed on various occasions that civil protection volunteerism remains their priority, that the draft “Regulation on the organization and functioning of volunteer activities within the Civil Protection and Emergency Situations Service”

will be finalised, and the process for certification of civil protection volunteer organisations will be established. Additionally, with an aim to promote the concept of civil protection volunteerism in Moldova, the General Inspectorate for Emergency Situations organised on 28 June 2018 a Round table meeting - Fostering Civil Protection Volunteerism in the Republic of Moldova in which the PPRD East 2 took active part.

Ukraine

The situation in Ukraine was influenced by the fact that the key beneficiary – the State Emergency Service – failed, despite the programme’s effort, to appoint the National Focal Points for Civil Protection Volunteerism and to establish the national inter-institutional working group for civil protection volunteerism. However, despite the non-existence of the National Focal Points for Civil Protection Volunteerism and the national inter-institutional working groups for civil protection volunteerism, a new concept of a national civil protection volunteerism system was developed by the working group created as a part of the on-going decentralization and reconstruction process of the national civil protection system. This process included development of a new Law introducing the new civil protection volunteerism system. The programme established informal contact with this working group during the regional workshop on civil protection volunteerism, so the programme managed to provide comments and recommendations on the draft Law "On Amendments to Certain Legislative Acts of Ukraine on Improving Legislation on Civil Protection" which is still under development (Annex 13).

Armenia

Although Armenia did not select civil protection volunteerism as a priority activity to be addressed within the programme, positive progress in civil protection volunteerism was achieved. A draft “Law on Volunteer Activities and Volunteer Work” was developed under the auspices of the Ministry of Social Affairs, but due to contradictory opinions of some national stakeholders, the adoption of this Law is delayed. Despite this unfortunate situation, the Ministry of Emergency Situations plans to define the concept of civil protection volunteers in another legislative act – in the Law of rescue forces and rescuer status. Additionally, the draft Decree “Procedure and amount of State Compensation to Volunteer Rescuers for Leaving for Emergency Scene for a Term of up to 15 Business Days within a Calendar Year”, to which the PPRD East 2 team contributed in a form of expert advice and recommendations (Annex 14), was adopted by the Armenian Government on 22 February 2018 as the Government Decree №_186-N.

A fair number of voluntary rescue and fire-fighting units were already established in Armenia, Belarus, Moldova and Ukraine, and although this was not part of the PPRD East 2 programme, it can be seen as indirect result of the programme’s activities:

Armenia – 13 voluntary fire-fighting units formed since 2015;

Belarus – 662 fire-fighting voluntary units formed within enterprises, companies, etc. and 133 fire-fighting voluntary units formed in rural areas;

Moldova – first eleven fire-fighting voluntary units established; and

Ukraine – in December 2017, 38 villages received first fire-fighting voluntary units, and in 2018, 99 fire-fighting volunteers were trained.

2.2.5. ACTIVITY AREA E – VISIBILITY AND PROGRAMME MANAGEMENT

2.2.5.1. PROGRAMME VISIBILITY

Due to the complexity of the PPRD East 2 programme and with an aim to ensure visibility and promotion of the programme’s achievements at the national, regional and international levels, the information and visibility component of the programme was implemented by focusing not only on key beneficiaries, but also

on other disaster risk management stakeholders, and the population at large. Visibility activities in the Partner Countries were implemented in collaboration with the EU Delegations, in line with the Communication and Visibility Manual for EU External Actions. Through its promotion, the PPRD East 2 programme increased the visibility of EU-funded cooperation in the Eastern Partnership region.

TARGET GROUPS

PPRD East 2 visibility was multi-stakeholder and multi-level, i.e. it addressed various disaster risk management and international development stakeholders at different levels (national, regional and the EU level). Through its visibility activities the PPRD East 2 programme reached:

- National civil protection and disaster risk management authorities of the six Partner Countries – key beneficiaries;
- Other Ministries involved in disaster risk management (environment, natural resources, infrastructure, development, land planning, industry, education, health, transport etc.) in the six Partner Countries;
- Non-Governmental/Civil Society Organisations working on disaster risk management in Partner Countries;
- International organisations, projects and initiatives working on disaster risk management in the region;
- Directorates and agencies of the European Commission working on disaster risk management;
- National civil protection and disaster risk management authorities of the EU Member States; and
- Journalists, media and population at large.

TOOLS AND APPROACHES

Visibility of the PPRD East 2 programme was also multi-subject as it reflected on specific disaster risk management priorities of each Partner Country, and multi-media because various media were combined in order to get key messages through identified stakeholders depending on national cultural and social frameworks. The following tools and approaches were utilised:

PPRD East 2 web portal

A high-quality, user-friendly internet portal was created to boost the outreach of the PPRD East 2 programme actions and results and to facilitate the circulation of information on disaster risk management in the Eastern Partnership Region. The Portal includes a static section illustrating main features of the programme and making available key documents and reports produced by the programme, and a dynamic news section covering PPRD East 2 activities and outcomes and more generally the EU and regional disaster risk reduction agenda and relevant ongoing activities and initiatives (Progress Report 1, Annex 25). The portal also includes direct links to the web-portals of key beneficiaries in Armenia, Belarus and Moldova, as well as a section on the European Media Monitor – a search engine that searches and presents around 40.000 news items per day from around 1000 sites worldwide. The contents of EMM are their sole responsibility, and do not represent the point of view of the European Union or of the PPRD East 2 programme. The link to PPRD East phase 1 web site <http://phase1.pprdeast2.eu/en/> and to the regional node of ERRA <http://erra.pprd-east.eu> were also included.

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Dec 2018	6,541	20,059	473,515	602,462	12.03 GB
Jan 2019	6,016	19,837	473,515	603,778	11.61 GB
Feb 2019	8,517	23,534	325,549	506,312	13.08 GB
Mar 2019	8,938	27,927	514,238	679,897	13.61 GB
Apr 2019	7,639	22,801	320,375	447,200	10.96 GB
Total	31,110	94,099	1,633,677	2,237,187	49.26 GB

Figure 2: Programme web site statistics December 2018 – April 2019

The PPRD East 2 web portal was handed-over to the Consortium implementing the PPRD South III programme with the objective to facilitate the creation of a common PPRD.eu platform.

PPRD East 2 newsletters

These products are mainly addressed to the primary stakeholders of the programme: persons working in the civil protection and disaster risk management sectors in the Eastern Partnership region and in the EU, involved at different levels in the implementation of the programme and interested in being informed about the PPRD East 2 activities and outcomes and more generally about the regional disaster risk reduction agenda and on-going initiatives in the field of civil protection and disaster risk reduction at national, regional and EU levels.

The newsletters were issued and distributed on a bi-annual basis through the comprehensive programme mailing list. They contained articles regarding the implementation of the programme and specific actions undertaken, including outputs and results highlighting success stories, and upcoming activities such as scheduled capacity building and other programme events.

PPRD East 2 e-mailing list

It was built and maintained in collaboration with the National Programme Coordinators and Local Coordinators. It includes e-mail addresses of interested officials Union Civil Protection Mechanism Participating States and Partner Countries civil protection authorities, other national institutions and national technical and research organisations involved in disaster risk management, international organisations working on disaster risk management in the Eastern Partnership region, EC Directorates, offices and agencies, international organisations and initiatives, other EU programmes and projects active in the region, NGOs, parliamentarians etc..

Social media

The PPRD East phase 1 Facebook page has been taken over and transformed into phase 2 Facebook page. Photos of events, news about programme activities and information on interesting issues related to programme's subjects have been posted.

Synergies with other international civil protection/disaster risk management initiatives

International organisations, agencies, projects and programmes were identified, contacted and informed about the PPRD East 2, its objectives and activities, as well as its anticipated outcomes. They were invited to provide information on their activities in the targeted countries and sectors. Regular contacts, including the exchange of information on activities were established and maintained.

A dedicated contact was established with the EU Neighbours East portal of the OPEN Neighbourhood Programme (used to be the EU Neighbourhood Info Centre) thus raising awareness, increasing knowledge and understanding of the PPRD East programme as the Flagship Initiative of the European Neighbourhood Policy.

Informing and involving media in PPRD East 2 visibility

Media relations were addressed mainly through established collaboration with the EU Delegations in the Partner Countries. Information was made available to the EU Delegations in the Partner Country where programme activities took place. EC Delegations, through their Press & Media department, disseminated after-the-event press releases developed by the PPRD East 2. Attempts were also made to establish a PPRD East 2 journalists network, but were not successful (more information is available above in Chapter 2.2.4.1.3 Work with Journalists).

Bringing programme achievements to the attention of decision makers

In agreement with the key beneficiaries and in coordination with the EU Delegations in Partner Countries, the programme organised high level meetings to present and illustrate the programme's achievements to the decision makers. These meetings usually involved PPRD East 2 Team Leader, Key Experts and Local Coordinators, and relevant national political and programmatic decision makers. Policy briefs were presented. They summarised the importance of the achievements accomplished and emphasised the potential impact should the activities initiated within the programme be continued by the national authorities.

PPRD East 2 visual identity

A visual identity for the programme was designed to characterize all visibility and promotional material. A Graphical Chart was developed to ensure that the style adopted for the communication products (font, colours, use of the logo) is consistent throughout programme implementation (Annex 15). The Communication and visibility manual for EU external actions (http://ec.europa.eu/europeaid/sites/devco/files/communication_and_visibility_manual_en.pdf) was strictly followed.

Special attention was paid for the development of the PPRD East 2 logo and motto. The logo was designed to reflect following concepts:

- Cooperation and partnership between EU and the six Partner Countries;
- Bridging EU experiences, acquis and good practices to the six Eastern Partnership countries;
- Dialogue and exchange; and
- Working together.

The bridge represents the PPRD East 2 programme which essentially worked as a bridge between EU and the Eastern Partnership countries. The bridge is also a place that allows to cross divisions, to meet with others and to exchange experience and expertise.

The star represents the EU and its contribution to the programme.

The six round symbols represent the Partner Countries.

The motto indicates in explicit manner the objective of the programme - to bring together the EU, its Member States and Partner Countries and collaborate towards the improvement of protection and safety of populations.



Figure 3. PPRD East 2 logo and motto

PROMOTIONAL MATERIALS

The following promotional material was developed and used during programme implementation:

- For the overall promotion of the programme as a whole to the institutional partners and beneficiaries: programme templates, folders, USB sticks, banners were distributed or displayed at the events; and
- For the promotion of specific messages to the programme stakeholders, disaster risk management community and the public at large: fact sheets, articles for web site, newsletters, press-releases, final brochure and final video.

All materials with the regional focus were produced in English and Russian, whereas materials with national focus were produced in English and the Partner Country's national language.

Programme final video

With an aim to report the programme achievements in a captivating manner a final video was developed. The objective was to provide a general and comprehensive overview of the programme and its results encompassing all the variables – results achieved in each of the six Partner Countries as well as results achieved at the regional level. In addition to contributing to the programme visibility, final video informs about the programme activities and objectives, and offers necessary and well-deserved recognition of the Partner Countries for all the efforts and dedication done during the programme implementation.

The statement from Mr Christos Stylianides, EU Commissioner for Humanitarian Aid and Crisis Management, raises the understanding of the programme and of the importance of the topic and the region.

A voice in the background complements the statement and images. Narration is in English and Russian.

The final video is aimed for the civil protection community and the general public both in the EU and the Partner Countries. Final video was shown at the Final Conference, is shared on the programme's website and programme's Facebook page, and was forwarded to the key beneficiaries for dissemination in the Partner Countries.

Programme final brochure

Similar as with final video, the programme final brochure was developed with an aim to report the programme's key results and achievements but in more comprehensive manner. Data and information related to each thematic topic were collected and selected for presentation in a clear and structured format. Photos and infographics are complementing the narrative information, whereas the narrative is the combination of information and statements. Although the representation of Partner Countries in the brochure is proportional to their achievements within the programme, efforts are made to have a balanced presentation of all six Partner Countries to the extent possible. At the same time, duplication of the key achievements was avoided on purpose, again with the intention to have a balanced (as much as realistically possible) presentation of all thematic topics addressed within the programme. Final brochure was developed in English and Russian, uploaded on the programme web site (http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.EN_.pdf, http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.RU_.pdf) and disseminated in hard copies to DG ECHO, EU Delegations in the Partner Countries and the key beneficiaries, and electronically via programme mailing list and the Facebook page.

ACHIEVEMENTS AND RESULTS

Visibility of the PPRD East 2 programme was implemented through the preparation, development, maintenance, distribution and/or dissemination of:

- Programme final video (Annex 16);
- Programme final brochure (in English http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.EN_.pdf and in Russian http://pprdeast2.eu/wp-content/uploads/2019/05/FinalBrochure-2019.RU_.pdf);
- Programme web-site (in English <http://pprdeast2.eu/en/> and Russian <http://pprdeast2.eu/ru/>);
- 48 after-the-event press releases (<http://pprdeast2.eu/en/category/news/>);
- 7 PPRD East 2 newsletters (<http://pprdeast2.eu/en/category/publications/>);
- 1555 subscribers on the programme e-mailing list;

- Programme promotional material – roll-up banners in English, Russian, and Partner Countries’ national languages (Progress Report 1, Annex 23), leaflet, one-pager, and 2 factsheets (<http://pprdeast2.eu/en/category/publications/>);
- Updated PPRD East 2 Facebook page (<https://www.facebook.com/PPRDEast2/>) with 1444 subscribers; and
- EU MOLDEX 2017 logo, info sheet (<http://pprdeast2.eu/en/category/publications/>), and long (<https://youtu.be/2fnhUBJS1dE>) and short video (Annex 17).



Figure 4. EU MOLDEX 2017 logo and motto

2.2.5.2. PROGRAMME MANAGEMENT

Any programme of this size, scope and complexity requires strong commitment from all parties involved – from beneficiaries, Contracting Authority, Consortium and from the expert team – to ensure that the knowledge and experience and new tools and approaches presented and brought by the programme take hold and are sustained in the future. Strong sense of partnership and ownership amongst the beneficiaries was encouraged throughout the programme’s lifetime in every possible way.

At the level of the **Contracting Authority**, the programme was managed by DG NEAR from the EU Delegation in Ukraine from 2014 to 2018, and afterwards by DG NEAR from the headquarters in Brussels along with DG ECHO.

To implement the programme, to decide at the strategic and policy level how the step by step implementation of the agreed upon work plan would be, was the responsibility of the **Steering Committee**. Its establishment and successful functioning contributed to the political commitment from which the programme has benefited. The Steering Committee members met usually once per year to steer the programme, to give an opinion on the implementation progress or relevant documents developed by the programme, and to endorse the plan of action for next implementation period. The PPRD East 2 held in total five Steering Committees meetings, the last one on 28 March 2019 back-to-back with the PPRD East 2 Final Conference (agenda, list of participants and meeting report are available in Annex 18).

The appointment of the **National Programme Coordinators**, and the close collaboration the expert team has established with them, contributed to the high level of participation and involvement in programme activities. National Programme Coordinators were pivotal in the PPRD East 2 implementation. Appointed by the key beneficiaries as main national interlocutors, they were the first contact points, permanent and active partners in the implementation of the programme. In addition to this task, they were in charge, ahead of each Steering Committee meeting, of addressing and clarifying any operational and technical issue, for providing inputs to the Steering Committee members for strategic decision-making and endorsement of the programme progress and the work plans. In total, five National Programme Coordinators’ meetings were held, the last one on 25 October 2018 (meeting report can be found in Progress Report 8, Annex 14). The National Programme Coordinators are recognised by DG ECHO as the National Training Coordinators in the context of the Union Civil Protection Mechanism.

Addressing disaster risks management implied to have more than one national institution and more than one ministry on board. **National Advisory Groups** (or **Country Advisory Group** as in the case of Georgia) were established during the PPRD East phase 1, and the PPRD East 2 continued working with them, thus facilitating the engagement of the wide spectrum of national disaster risk management stakeholders into the programme implementation. The NAG/CAG had a “consultative/operational mandate”, i.e. to oversee

and/or monitor the implementation of the programme to ensure that the results were produced on time and entirely in line with selected national priorities. Additionally, the NAG/CAG also served as an information sharing mechanism at the national level thus enhancing the partnership, networking and the country's ownership of the programme. Each Partner Country held in total five National Advisory Groups meetings (Azerbaijan held four). The last round of NAG/CAG meeting, held in February-March 2019, was used to present and discuss programme results achieved at the regional and national level.

Also at the national level, the programme established and maintained close collaboration with the **EU Delegations**. PPRD East 2 systematically informed the EU Delegations about the programme events organised in their respective countries and the expert missions, invited EUDs to participate, and always offered to meet bilaterally. Particularly noteworthy was the active participation of the EU Delegation in Moldova while preparing and conducting the EU MOLDEX 2017. Not only that His Excellency Peter Michalko, EU Ambassador in Moldova, gave the speech at the occasion of the EU MOLDEX 2017 Closing Ceremony, but the EU Delegation in Moldova actually actively participated in the exercise, practicing the role that EU Delegations have in the case of disasters.

As the programme involved numerous stakeholders, not only beneficiaries, but also the service providers – individual experts and commercial companies as well, strong lines of communication, information sharing and cooperation with all parties involved were critical to properly coordinate the activities. The eyes, the ears and the voice of the programme in their respective countries were the **Local Coordinators**. Local Coordinators had the key responsibility to facilitate the exchange of information in Partner Countries and provided logistic, administrative and technical support to the National/Country Advisory Groups.

The National Programme Coordinators, in their role of the first contact points from the Partner Countries, the Local Programme Coordinators, being the programme main faces in the countries, and the programme experts, bringing European experience and expertise, created a strong network of dedicated professionals, working hand in hand and contributing to the success of the programme.

While implementing this kind of programmes there is always a risk to overlap and/or duplicate the efforts with other actor(s) present in the region or in the particular Partner Country. Information dissemination and communication activities were closely coordinated with other past and on-going disaster risk management initiatives in Partner Countries. Wherever possible complementarities and potential synergies were identified and put in practice, and duplication of efforts carefully avoided. The programme, on one side, built upon results achieved and the lessons learnt by other initiatives, and, on the other side, tried to extend, replicate and/or adapt activities which already revealed success.

The Inception Report and all eight Progress Reports are approved by Contracting Authority.

3 LESSONS LEARNT AND RECOMMENDATIONS

The PPRD East 2 programme successfully contributed, on the one hand, in enhancing disaster risk management skills and capacities in the Eastern Partnership countries and, on the other hand, in strengthening dynamic cooperation among these countries and between them and the EU Member States, including through bringing them closer to the Union Civil Protection Mechanism. The PPRD East 2 programme established effective collaboration promoting exchange of information and experiences, encouraging Partner Countries and EU disaster managers to learn from each other, thus reinforcing sustainable partnerships founded on familiarity, solidarity and trust.

Regional activities implemented within the programme encouraged and ensured harmonisation and compatibility of approaches, procedures and results. In the region there is a lot of knowledge and practice already in place. What is needed is enhanced cooperation and coordination of all sectors at the national level, and of all countries at the regional level.

At the national level, the following is recommended:

Armenia

- Align the national legislation to the EU Floods Directive based on the policy brief developed by PPRD East 2.
- Revise the National Disaster Risk Reduction Strategy and the national legal framework to reflect the requirements of the EU Risk Assessment and Mapping Guidelines for Disaster Management. In particular, define key national disaster risks and specific institutional roles and responsibilities for each disaster risk as a first step in developing national DRA guidelines.
- Continue developing a disaster loss data collection form based on the recommendations provided by PPRD East 2, and use them to amend the current national legislation and align it with the Sendai framework reporting requirements. Adopt a conceptual schema for the functioning of the disaster loss data collection system (developed by PPRD East 2 in cooperation with the World Bank funded project “Improving Post-Disaster Damage Data Collection to Inform Decision Making”).
- Further foster the use of ERRA by re-installing the second node in the Institute of Geological Sciences of the National Academy of Sciences, by regularly updating the ERRA content, and by disseminating the usefulness of the ERRA system to the national DRM stakeholders other than the Ministry of Emergency Situations.
- Use every opportunity to let the national INSARAG certified USAR team participate in international exercises, roll-out national workshops on coordination of international emergency response to the regional level and invest in improving the rescue teams’ training facilities.
- When the draft Governmental Decree „On Approving the Procedure for Arranging Civil Protection and Disaster Management in Emergencies“ and the draft “Standard Operating Procedures for Republic of Armenia Commission, LEMA and HNS team” are adopted, appoint HNS liaison officers, and develop (and implement) a training programme for the HNS country team and the HNS liaison officers.
- Establish the inter-institutional working group for raising awareness about disasters with an objective to develop the national communication strategy for raising awareness about disasters (and the respective action plan).
- Finalise and adopt the draft “Law on Volunteer Activities and Volunteer Work” and the draft “Law of rescue forces and rescuer status”.

Azerbaijan

- Align the national legislation to the EU Floods Directive based on the policy brief developed by PPRD East 2 and develop the new *State Programme for prevention of floods and mudflows on the territory of the Republic of Azerbaijan* based on PPRD East 2 recommendations.
- The inter-institutional DRA working group should define and adopt the timelines for the implementation of the adopted DRA action plan. Defining the key national disaster risks should be the first implementation step, followed by the amendment of the national legal framework to reflect requirements of the EU Risk Assessment and Mapping Guidelines for Disaster Management.
- Enhance the use of ERRA by connecting the national ERRA installation with the real time information and/or with the early warning system, and by installing the second ERRA node in the Institute of Geography.
- Complete the efforts to obtain INSARAG certification of the USAR team. Ensure that CBRN training and equipment is maintained at high level, and not only centrally but also in the regions. Roll-out national workshops on coordination of international emergency response to the regional level.
- Follow the adoption of the draft “Rules on provision of Host Nation Support in emergency situations” with the development and adoption of the HNS standard operating procedures, appointment of the HNS liaison officers, and with the development and implementation of the training programme for the HNS country team and the HNS liaison officers.
- Establish an inter-institutional working group for raising awareness about disasters to develop the national communication strategy for raising awareness about disasters (and the respective action plan for its implantation).
- Establish an inter-institutional working group for civil protection volunteerism to develop and adopt a legal and institutional civil protection volunteerism framework.

Belarus

- Develop national DRA guidelines reflecting the requirements of the EU Risk Assessment and Mapping Guidelines for Disaster Management before developing a national DRR strategy in order to make the strategy concrete, holistic, efficient and its’ results measurable.
- Improve the IT capacity to manage the ERRA system, and integrate the ERRA system with other institutional portals to disseminate risk information in the country.
- Maintain the very high standard of trainings and equipment, and organise international trainings and exercises involving UCPM Participating States at the Institute for retraining and professional development of the Civil Protection University of the Ministry of Emergency Situations in order to foster cooperation and to inspire other countries to develop similar arrangements.
- Adopt the draft “Regulations on the procedures for the provision of Host Nation Support by the Republic of Belarus during emergencies”, develop and adopt HNS standard operating procedures, appoint HNS liaison officers, and develop and implement a training programme for the HNS country team and the HNS liaison officers.
- Finalise the development of the national communication strategy for raising awareness about disasters, including the action plan for the strategy implementation.
- Adopt the amended Law on Fire Safety and the Resolution of the Government, and thus introduce new volunteer fire-fighting units in Belarus. Develop and adopt the consequent Resolution of the Minister of Emergency Situations to elaborate the concept of the volunteer fire-fighting units in more details.

Georgia

- Finalise the development of methodologies for the preliminary flood risk assessment, the flood hazard and risk mapping and the flood risk management plan based on PPRD East 2 regional guidance on flood risk management.
- Revise the existing national risk assessment process and its compliance with the EU Disaster Risk Assessment and Mapping Guidelines, especially regarding inter-sectoral cooperation, using all relevant scientific opinions and data in the assessment process as well as risk maps, risk matrixes and risk evaluation.
- Finalise and adopt the damage assessment methodology developed by UNDP in cooperation with PPRD East 2.
- Reinforce the connection between the two ERRA nodes (i.e. between EMS and NEA) in order to improve the update of the information in the ERRA system. Link the ERRA system with the ongoing DLD development process and with the national spatial data infrastructure.
- Whilst having the state-of-the-art crisis management arrangements, Georgia is lacking behind in regards to training and equipment of rescue personnel including fire-fighters thus recommendations made by the PPRD East 2 (Annex 6) should be acted upon, and urgent efforts should be made to build a CBRN capacity outside Tbilisi.
- Adopt the draft Governmental Decree for „Developing rules of Host Nation Support Activities in the Field of Civil Safety“, develop and adopt HNS standard operating procedures, appoint HNS liaison officers, and develop and implement a training programme for the HNS country team and the HNS liaison officers.

Moldova

- Finalise the endorsement and adoption of the Preliminary Flood Risk Assessment and Flood Hazard Mapping developed by the EIB funded Study on preliminary flood risk assessment and flood hazard and risk mapping as a national reference maps. Adopt, within the framework of the Dniester River Basin Commission, the Draft Protocol for Flood Risk Management developed by PPRD East 2.
- Use the inter-sectoral communication initialised at the DRA inter-institutional working group meeting in 2019 to officially define institutional roles and responsibilities. Nominate the coordinator of the national disaster risk assessment process. Define key national disaster risks, formalise the working group membership, their roles and responsibilities, and define the national disaster risk assessment process deadlines with an official governmental decision.
- Adopt the amendments of the “Decree of the Chief of Civil Protection and Emergency Situations Service n 139 of 04 September 2012 on the statistical record of emergency situations and their consequences in the Republic of Moldova”, and upgrade the existing disaster loss data software by integrating the provision of the new amendment into the operational system.
- Take over the management of the GIS information system from the external company in order to properly manage the ERRA system.
- Maintain the high level of planning and arrangements for Host Nation Support, arrange national workshops on coordination of international emergency response and include these aspects in the national civil protection training curricula. Upgrade training facilities and equipment (vehicles, technical equipment, personal protective equipment).
- Adopt the draft Law „On exemption of taxes and legal fees connected to the entry/exit into/from Moldova of international intervention teams/modules“, appoint HNS liaison officers, and develop and implement a training programme for the HNS country team and the HNS liaison officers.
- Finalise the reformulation of the existing service level communication strategy into the national communication strategy, and develop the action plan for its implementation.

- Finalise and adopt the draft “Regulation on the organization and functioning of volunteer activities within the Civil Protection and Emergency Situations Service” and set-up the process for certification of civil protection volunteer organisations.

Ukraine

- Continue the implementation of the EU Floods Directive as approved by the new national legislation, i.e. endorse the preliminary flood risk assessment prepared by the Ukrainian Hydro-Meteorological Institute, and start the preparation of the flood hazard mapping. Adopt, within the framework of the Dniester River Basin Commission, the Draft Protocol for Flood Risk Management developed by PPRD East 2.
- Finalise the revision of the legislative framework to reflect the DRA responsibilities for all the sectors. Define the national DRA approach to reflect the requirements of the EU Risk Assessment and Mapping Guidelines for Disaster Management with a single legal act.
- Adopt the amendments of the current legislation (proposed by PPRD East 2) to align it to the JRC - Disaster Loss Data Guideline and the Sendai Framework reporting requirements.
- Establish the link between the ERRA system and other national institutions that collect disaster risk information and upload other national institutions’ information to the ERRA system.
- Upgrade the rescue teams’ training facilities and equipment, obtain INSARAG certification of the USAR team, and include the aspects of the Union Civil Protection Mechanism and international coordination arrangements for disaster response into a national civil protection training curriculum.
- Adopt the draft “Resolution of Cabinet of Ministers of Ukraine on Approval of the Procedure for Host Nation Support in Civil Protection”, develop and adopt HNS standard operating procedures, appoint HNS liaison officers, and develop and implement a training programme for the HNS country team and the HNS liaison officers.
- Finalise the establishment of the inter-institutional working group for raising awareness about disasters, develop and adopt the national communication strategy for raising awareness about disasters, including an action plan for its implementation.
- Finalise and adopt the draft Law "On Amendments to Certain Legislative Acts of Ukraine on Improving Legislation on Civil Protection” and thus introduce the new civil protection volunteerism system in Ukraine.

As a conclusion related to the national level, formation of inter-institutional working groups was not without challenges, but all Partner Countries recognized the added value and benefits having this kind of multi-stakeholder mechanisms established and functioning, and especially when addressing specific disaster risk management thematic topics. By continuing their functioning and proceeding with the implementation of the next steps as per the adopted action plans, Partner Countries will reconfirm their dedication to the already started reform processes of aligning national legislation and institutional set-ups to the *EU acquis communautaire* and EU good practice.

In this regard, it would be desirable for the break between phase 2 and phase 3 to be as short as possible, so that momentum and dynamics set by the programme would not disappear. It would be highly prudent to establish the mechanism to monitor this continuation of activities, either through EU Delegations in Partner Countries or directly by DG ECHO.

Establishing peer-networks in the region facilitated the exchange of good practices and served as accelerator for transferability of these good practices among different institutions. The combination of regional and national activities brought by the programme demonstrated to be an incentive for improving legal and institutional frameworks, as well as skills and capacities.

Our recommendation would be to keep the regional approach to disaster risk management in the Eastern Partnership region as there is no other EU opportunity provided for Partner Countries for their mutual civil protection cooperation. In addition, continuation of participation of Partner Countries in the Union Civil Protection Mechanism Training Programme, in the ModEx field exercises, in the EU Working Group on Floods, in the EU Working Group on Disaster Loss Data, and inclusion of Partner Countries in the Prevention Experts Working Group would be highly recommendable and beneficial.

From the practical point of view, interpretation into Russian and/or national languages remains a necessity, at training courses and workshops, but also during study tours and exchanges of experts. The Exchange of Experts Programme proved to be a highly useful and practical tool, nevertheless, the lesson learnt is that exchanges require a clear indication of the objectives to be achieved, and sound preparation undertaken both by the participants and by the hosts.

The scope of future civil protection training courses should be broadened - BAT courses should also include aspects of disaster prevention, disaster risk assessment, as well as industrial accidents and disasters caused by climate change.

The experience from EU MOLDEX 2017 showed that using a regional TTX as lead-in to a full-scale field exercise is an excellent innovation. Another lesson learnt is that a field exercise should not be over-planned. The OSOCC and LEMA should have some free play to decide on the assignment of individual rescue teams to different tasks. Night-time operations should be included. Further on, we would recommend that the exercise starts immediately when rescue teams arrive, not after a formal opening ceremony. Lessons from the ModEx exercises should be applied in this regard.

As an overall conclusion, we would recommend to further nurture the PPRD East 2 approach based on flexibility, partnership, ownership and networking and focused on legal approximation and institutional sustainability complemented with extensive capacity building. Additional disaster risk management topics, such as industrial hazards, early warning systems, post disaster recovery, reconstruction and rehabilitation, might be introduced in phase 3.

While future technical assistance should take into consideration the needs of each individual Partner Country and each specific national context, it is important to maintain the regional dimension with an aim to ensure dialogue, cooperation and disaster risk management exchange of expertise within the framework of the Eastern Partnership.

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