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IPA DRAM

DISASTER RISK ASSESSMENT AND MAPPING IN THE WESTERN BALKANS AND TURKEY

Grant contract ECHO/SER/2016/740641

Disaster Risk Assessment and Mapping in Western Balkans and Turkey

Progress Report

(June 2018 - November 2018)

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IPA DRAM implementing consortium

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ADMINISTRATION FOR CIVIL PROTECTION AND DISASTER RELIEF

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This report has been prepared with the financial assistance of the European Commission. The considerations and interpretations expressed in this report are those of the IPA DRAM implementing Consortium and do not necessarily reflect the views of the European Commission. The information reported herein does not imply any judgement of the legal status of any territory.

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** This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the IC J Opinion on the Kosovo Declaration of Independence*

ACRONYMS AND ABBREVIATIONS

ACPDR	Administration of the Republic of Slovenia for Civil Protection and Disaster Relief
AFAD	Republic of Turkey Prime Ministry Disaster and Emergency Management Presidency
CCG	Consortium Coordination Group
CMC	Crisis Management Center (Former Yugoslav Republic of Macedonia)
CIMA	International Centre on Environmental Monitoring
DEM	Directorate for Emergency Management (Montenegro)
DLD	Disaster Loss Data
DG ECHO	Directorate General for European Civil Protection and Humanitarian Aid Operations
DG ENV	Directorate General for Environment
DPC	Italian Civil Protection Department
DPPI SEE	Disaster Preparedness and Prevention Initiative for South Eastern Europe
DRMKC	Disaster Risk Management Knowledge Center
DRA	Disaster Risk Assessment
DRM	Disaster Risk Mapping
DRR	Disaster Risk Reduction
EC	European Commission
EMA	Emergency Management Agency (Kosovo)
ERRA	Electronic Regional Risk Atlas
GDCE	General Directorate for Civil Emergency (Albania)
IPA	Instrument for Pre-accession Assistance
JRC	Joint Research Center
KMS	Knowledge Management System
M&E	Monitoring and Evaluation
MSB	Swedish Civil Contingencies Agency
NATECH	Natural Hazard Triggering Technological Disasters
NC	National Coordinator
NGO	Non-governmental Organisation
NPRD	National Protection and Rescue Directorate of the Republic of Croatia
PPRD East	Prevention, Preparedness and Response to Natural and Man-made Disasters in the Eastern Partnership Countries
SEM	Sector for Emergency Management (Serbia)
TOR	Terms of Reference
UCPM	Union Civil Protection Mechanism
UNISDR	United Nations International Strategy for Disaster Reduction

INTRODUCTION

The implementation of the Disaster Risk Assessment and Mapping in Western Balkans and Turkey programme (IPA DRAM) has been commissioned to a Consortium established by the Swedish Civil Contingencies Agencies (MSB), as lead agency, jointly with the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR), the National Protection and Rescue Directorate of the Republic of Croatia (NPRD), Italian Civil Protection Department (DPC) and CIMA Research Foundation (Italy) and started on the 1st December 2016.

During the reporting period (1 June 2018 – 30 November 2018) of IPA DRAM, the Team successfully implemented a number of activities through the commitment of national partners and national coordinators and with a strong support from Consortium members.

Core activities besides national technical workshops and advisory missions, have been regional and cross-border activities. No less than two regional workshops have taken place during this period; the first co-hosted by AFAD in Turkey, focused on Risk assessment methodology and risk scenarios in combination with earthquake. The second, co-hosted by ACPDR in Slovenia, focused on Disaster loss data systems in combination with wild fires. During the workshops, emphasis was put on sharing good practices and experiences between EU-member states and Partners, as well as among Partners themselves, who took active part and contributed to the agenda. The involvement of partners and transfer of knowledge are important parts of the programme's capacity development approach to achieve sustainable partnerships and exchange of expertise to make progress on the regional arena. What these regional workshops, as well as the national ones, support – are also an inter-institutional and cross-sectoral exchange, as well as the participation from the civil society mainly from the academia, which gives added value and brings important perspectives on the understanding of disaster risks.

IPA DRAM continues to value and nurture partnership with other organisations to find synergies and strengthen results. UNISDR remains the most important partner to support partners' progress in the Sendai implementation and reporting and has shown great commitment to find synergies and to achieve common goals. The Programme is also in cooperation with the regional IMPULSE project implemented by the Swedish and the Croatian cadastre agencies within the area of risk mapping based on the EU directive Inspire.

With one year to go, the Programme discussions on ensuring sustainable results have intensified. Besides the built-in parts based on the Partnership approach and the Capacity development strategy, the Programme has initiated a dialogue with the Disaster Preparedness and Prevention Initiative in South East Europe (DPPI SEE) to find ways to work together and to identify areas where DPPI SEE can continue some of the work started by the Programme. This discussion will continue and to be concretised over the course of the next programme period.

1. PROGRAMME SYNOPSIS

Contracting authority	**EC DG ECHO** **EuropeAid/137857/DH/SER/MULTI**
Budget	2 999 250 EUR
Duration	1 December 2016 – 30 November 2019 (36 months)
Consortium	Swedish Civil Contingencies Agency (MSB) – Coordinator/ Technical secretariat Italian Civil Protection Department (DPC); Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR); National Protection, Rescue Directorate of the Republic of Croatia (NPRD); CIMA Foundation, Italy
Partners	Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo*, Montenegro, Serbia and Turkey
Target group	Civil protection agencies and disaster risk management institutions with responsibilities for disaster loss data, risk assessment and mapping
Technical components	1) Disaster loss data 2) Risk assessment 3) Risk mapping and Electronic Regional Risk Atlas
Overall objective / Purpose	To improve effective, coherent and EU oriented national systems for disaster loss data collection, risk assessment and mapping, and alignment and integration into the Union Civil Protection Mechanism
Expected results	Result 1: Further developed and improved national systems for disaster loss data collection based on the EU guidelines and good practices; modalities for regional data sharing and linkages to European or global disaster loss databases established. Result 2: Further developed and improved national risk assessments following EU guidelines and good practices, in particular including identification of risks of cross-border and regional aspects. The accomplishment of national risk assessments should lay the foundations for improving the national risk management planning and risk management capabilities assessments. Result 3: Further developed and improved national and regional risk mapping, and establishment Electronic Regional Risk Atlas (ERRA).
Activities	Activity 1.1: Undertaking a fact finding mission and producing a report on the state of loss data collection in each of the beneficiary countries, linking to the EU loss data Guidance, in the first six months of the project Activity 2.1: Undertaking fact-finding missions, studies and desk research on the state of risk assessments in each of the partner countries. Activity 3.1: Collecting existing national and regional risk data and maps in the partner countries, identifying gaps and analysing the consistency of the applied methodologies for risk mapping and data; identifying at least 5 hazard types which are most relevant for the region and provide recommendations for improvement by ensuring common regional approach compatible with EU directives, guidelines and good practices 1. Pre-study 2. Fact-finding missions 3. Desk research, fact-finding report and recommendations 4. Partner meetings on plan of Action 5. Country-specific plans of Action Activity 1.2: Organising at least one technical workshop per partner country and at least one regional workshop (based on the outcome of activity 1.1) as required 1.2.1 – Technical workshops on regulatory/operational procedures and national indicators 1.2.2 – Regional workshop on disaster loss data collection and sharing Activity 1.3: Setting up at least seven advisory missions in the partner countries 1.3.1 Advisory missions on national indicators for disaster loss data

	1.3.2 Technical missions on disaster loss data collection Activity 2.1: Largely described in the integrated activity block. Additional sub-activities not to be jointly implemented: 2.1.6 – Overview of risks in the region 2.1.7 Regional workshop: overview of risks in the region and regional roadmap 2.1.8 Regional roadmap Activity 2.2: Organising at least one technical workshop per partner country and at least one regional workshop (based on the outcome of activity 2.1) as required 2.2.1 – Regional workshop on risk assessment and mapping 2.2.2 – Technical workshops risk assessment and mapping 2.2.3 – Local technical workshops on risk assessment Activity 2.3: Setting up at least seven advisory missions in the partner countries 2.3.1 Advisory missions on risk assessment methodologies Activity 2.4 Gathering good practices, research projects and operational results relevant to risk assessments, to be made available via a dedicated online platform, closely linked to the DRMKC and the KMS 2.4.1 Online platform 2.4.2 Online platform manual Activity 3.2: Providing technical support for the further development of national risk maps to cover at least 5 hazard types which are most relevant for the region. 3.2.1 Regional workshop on risk mapping and the ERRA. 3.2.2 Technical workshops on risk mapping methodology Activity 3.3: Setting up at least seven advisory missions in the partner countries. The aim is to share good practices, experience, identify areas for improvements and key recommendations for the further development of national risk maps and the ERRA installation. 3.3.1 Advisory missions on risk mapping and the ERRA Activity 3.4: Establishing an Electronic Regional Risk Atlas (ERRA) as a combination of hazard maps with vulnerability and asset maps, linked to the national early warning systems and European monitoring tools, with the capacity to assess the potential impact of disaster and monitor the real time progression of disaster, and provide inputs to determine the most effective use of resources and funds. 3.4.1 Further improved and developed the ERRA 3.4.2 The ERRA installments Activity 3.5: Providing training for the duty officers of these two institutions and other relevant staff how to use the ERRA. 3.5.1 The ERRA training 3.5.2 The ERRA manual Supporting package A: Launching and promoting the project A.1: Country-visits to the partner countries A.2: Kick-off meeting with the European commission A.3: director Generals' meeting among partner and consortium countries A.4: Media and PR events A.5: Final conference Supporting package B: Facilitating the exchange of expertise and networking B.1: Study visit to Swedish Civil Contingencies Agency (MSB) B.2: Visit to European Working group on Disaster loss data/ Risk Assessment B.3: Exchange of Experts B.4: Cross-border meetings B.5: Triangular meeting: Academia, Civil society and governmental practitioners

2. PROGRAMME DESCRIPTION

2.1 Programme overview

The programme is divided into four phases; inception, development, implementation and consolidation phases. The current reporting period was bridging the inception phase and the implementation phase with a strong focus on development. Based on the recommendations made in the baseline report established during the inception phase, partner-specific plans of action have been developed through a consultative process, which is guiding the implementation of the activities on national and regional level.

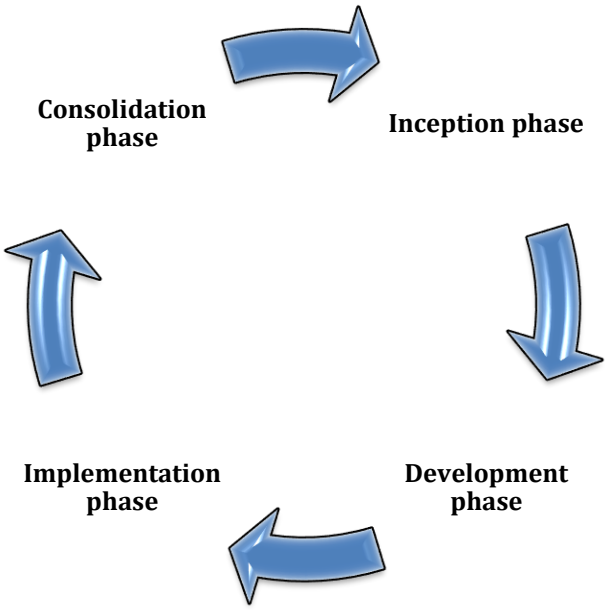

Figure 1

2.2 Programme approach

The overall programme approach is based on four pillars, which aim at increasing the effectiveness and the efficiency of the actions as well as enhancing the ownership of the service delivered and consequently the sustainability of the programme outcomes.

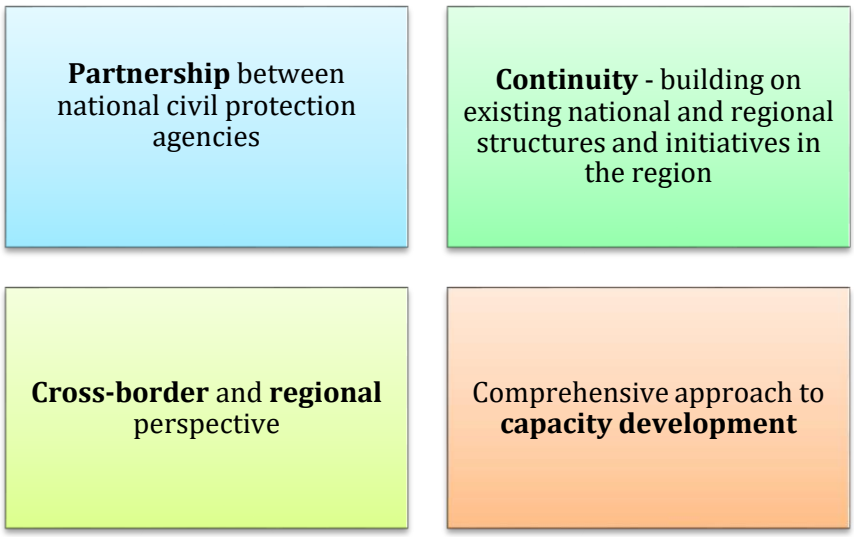

Figure 2

2.3 Operational considerations

The programme has made a number of operational considerations related to the activities, all chosen to ensure effective and efficient programme implementation. They include a i) **start-up activity**, ii) a **holistic approach** between the technical components, iii) **creating opportunities for regional networking and exchange**, iv) ensuring the **capitalisation on programme activities**, v) **creating mechanisms for strong partner participation** and vi) the **additional support beyond requirements** made in Terms of Reference.

During the reporting period, technical workshops and advisory missions on national level based on contextual analysis have been carried out with a holistic perspective on the three technical components disaster loss data, risk assessment and mapping. The technical workshops and the advisory missions have contributed to bringing representatives together, across sectors who are also part of the IPA DRAM working groups, an important cooperation mechanism with the aim to work beyond the programme. Moreover, IPA DRAM has offered its partners several opportunities to exchange knowledge and experience among each other, such as during regional workshops and exchange of experts, as well as in forums such as the UNISDR Training of trainers for Sendai Monitoring Framework and the European Forum for DRR.

2.4 Monitoring and evaluation (M&E)

Progress in the implementation of the monitoring and evaluation approach and plan has continued as planned. Under the current reporting period, process indicators in form of progress markers were finalised by the expert team. Progress markers are qualitative progress indicators that focus on identifying expected observable changes in the partners' organisations that correlate, with a degree of plausibility, to the programme's deliverables. The finalisation of progress markers and development of progress markers monitoring journals marked also the total completion of the necessary tools as foreseen in the monitoring and evaluation framework.

As previously planned, the monitoring and evaluation activities have focused on increasing partners' active engagement in the monitoring process. Towards the end of the implementation period covered by this report, partners have implemented self-assessments of the programme's progress towards expected results. During the Steering Committee meeting in Ljubljana, in November 2018, Partners presented these assessments., Together with the assessment of progress markers monitoring journals, the Partners' assessments were also assessed by the expert team. The analyses of these have served as base for the assessment and revision of the programme's activity plans for the last year of the programme.

Focus during the forthcoming period, in terms of monitoring and evaluation, will be to continue implementing the monitoring process as well as to prepare and implement the programme evaluation. The purpose of the evaluation will be to document the programme's results and contribution towards the development and strengthening of national systems for disaster risk management, as well as the identification of lessons learned that could help partners in the implementation of future initiatives with similar goals to the current programme. The evaluation is meant to include active participation of the partner countries and the consortia partners and it is foreseen for in the second half of 2019.

3. TECHNICAL COMPONENTS

Overall strategies

National disaster risk management systems require development of all three technical components, in order to be effective in line with the programme results framework. As such, all activities are strongly connected to the disaster loss data (DLD) activities, in order to enhance the use of DLD in the definition of the risk scenarios at the basis of disaster risk assessment (DRA) and to the development of a proper catalogue of maps that would present also visually the created scenarios and the risk conditions on the territory, ultimately contributing to the development of the Electronic Regional Risk Atlas (ERRA).

Based on the overall strategy, briefly described below, activities included in the Plans of action are drawn from the interactions with partners and are therefore strongly country-specific in their elaboration.

3.1 Disaster Loss Data (DLD) collection, recording and sharing

The work is being guided by the Plans of Action of each Partner, based on the different priorities identified jointly with the IPA DRAM national WG. An important part of all Plans of Action is the Sendai Monitoring Framework, which was launched in 2017 and is now operational. The IPA DRAM approach is to recognise the high value of the Sendai Framework and the importance of the reporting indicators to the Global Community to assess the global effects of disasters and to implement a global policy for DRR. Although Partners did not fully start the reporting yet, IPA DRAM is promoting the opportunity of the Sendai reporting, providing to reflect on the national systems for recording disaster loss data, in order to improve and to modernise with new technologies and procedures. To enable this, and as described in previous reporting, IPA DRAM and UNISDR have developed a strong partnership and agreed to jointly promote the adoption of DesInventar-Sendai on national level.

The Plans of Action address five priorities:

1. Increase institutional awareness on Sendai Framework requirements and harmonisation of existing Disaster Loss Data collection and recording system and methodologies, with the requirements of Sendai targets and JRC- DLD Guidance;
2. Further development of regulatory and institutional framework for Disaster Loss Data collection and Recording;
3. Systematically include gender and diversity into DLD system, by promoting the collection of disaggregated data (sex, age, disability, income level in accordance with Sendai recommendations);
4. Further improvement and utilisation of IT solutions for DLD collection, recording and sharing starting from existing IT tools adopted by Partners;
5. Improve the accessibility and sharing of DLD by integrating DLD system with ERRA system.

During the reporting period, priority 1, 3, and 4 have been mostly addressing by means of national workshops, regional workshops, advisory missions, remote assistance, and improvement of IT tools for data collection and registration. DesInventar has been upgraded to DesInventar-Sendai version in Albania, Kosovo* and Serbia. The establishment of a DLD collection system based on DesInventar-Sendai is on-going in Montenegro and historical loss data from the last 10 years is being recorded. Further, Bosnia and Herzegovina has, on state level, adopted a resolution for the use of DesInventar-Sendai and similar resolutions are being approved by the three governing entities. IPA DRAM will support the “Crisis

Management Center of Macedonia" (CMC) to further develop the existing system for loss data collection. Finally, Turkey is currently evaluating which system to be adopted.

3.2 Disaster Risk Assessment (DRA)

The focus of IPA DRAM is on the processes and methods of national risk assessments and mapping to support the countries in being compliant with the requirements of the UCPM. A specific objective is to ensure that methodologies and studies are in compliance with the EU Guidelines (and Sendai words into action guidelines on DRA). IPA DRAM shared practices from EU MS /consortium countries, neighbours and lessons learnt, where at technical level experts could and can openly discuss and anticipate possible obstacles and solutions. The programme experts make analyses of existing DRA and methodologies to identify gaps and are making recommendations on how to reach EU/ Sendai standards.

Technical Guidelines have been prepared by IPA DRAM and shared with all Partner Countries. The guidelines, based on the EU guidelines and on the UNISDR-WIA guidelines, have been adopted at various levels as the official reference for the compilation or the revision of the NDRA in the Partner country. As a result, in the next iteration of the NDRA all the Partner countries will have used a comparable and homogeneous methodology in the determination of the targets to be protected and the templates used for the scenarios description and evaluation.

Technical workshops and advisory missions have been delivered introducing the technical guidelines and the methodology to implement it with theoretical and practical sessions. In many cases, new sets of scenarios have been created that will contribute to the revision of the current NDRA produced by the countries.

The technical guidelines also focus on important cross-cutting aspects that are at the hearth of the IPA DRAM approach: environment and gender. Along these lines, the scenarios templates include explicit reference to the environmental damage as a target to protect, as well as the possibility to breakdown the descriptive indicators per gender, age, income and disabilities, if present. Such terms of diversification are fundamental for a full understanding of the risk-scape and the planning of effective counter measures.

3.3 Risk Mapping (RM)

The Risk Mapping and ERRA activities are proposed according to one single approach in all Partner Countries and then tuned in consequence of local conditions or precise requests.

This component of IPA DRAM is designed as a mosaic of different aspects considering:

What is needed for the effective provision and availability of Risk Maps: this means that a path has to be traced and different steps have to be considered both regarding technical and scientific issues; these steps can be summarized in:

<u>Understanding the local milieu on the production of risk maps:</u> this contains itself many aspects to catalog, related both to the GIS/IT expertise and to the production of maps as a consequence of a legal and/or scientific regulated process:

- GIS/IT expertise: analysis on the availability of human and hw/sw resources at national level, if a network of experts exist and how it can be supported by IPA DRAM to reinforce Civil Protection activities;
- Geospatial Information Systems regulations: adoption of international directives at Country level, local laws and rules on the implementation of National Spatial Data Infrastructures;
- Geospatial Information Systems main services: analysis of providers of geospatial information through IT platforms and web services;
- Risk maps production: analysis of providers of risk maps in the scientific community for hazard-related studies (earthquakes, floods and forest fires);
- Damage scenarios map production: analysis of National Disaster Risk Assessment studies, if present, mainly related to earthquakes, floods and forest fires.

Archiving data: this task is the fundamental step to transfer knowledge about data to data usage and data sharing; inside IPA DRAM this priority is developed through the following activities:

- Creation of national IPA DRAM Working Groups: each IPA DRAM WG at national level contains at least one reference member expert on GIS and Risk Mapping, who in charge for leading activities on the specific component, in strict collaboration with IPA DRAM team;
- Identification of a list of Key datasets: a reference datasets of key data needed for DRA and Civil Protection purposes in representing risk maps and damage scenarios is drafted by IPA DRAM and consolidated with WG's experts contributes;
- Data collection and management: the action of collecting information foreseen in the key datasets list is needed and it has to be driven by the joint efforts of WG's experts and IPA DRAM team; a specific package is developed and financially supported to tender local companies to facilitate the process of data harvesting and data analysis, working under the strict supervision of WG's experts and IPA DRAM team.

What is needed for the effective implementation of ERRA IPA DRAM: this means that a path has to be traced taking into account technical and operational and protocols issues; these steps can be summarized in:

- Definition of ERRA IPA DRAM concept and acceptance; Design of ERRA IPA DRAM and fine tuning; Deployment of ERRA IPA DRAM; Population and usage of ERRA IPA DRAM: as a consequence of ERRA IPA DRAM deployment, each Partner Country receives credits and training to populate the platform with data previously collected and optimized for the purpose; some officers are trained and entitled to further maintain the existing information and to updated it; Presentation of ERRA IPA DRAM:

What can be derived from on-going projects, international initiatives, scientific and technical communities working on IPA DRAM selected hazards or on GIS topics: this suggests the need to maintain a wide network of connections with international donors active in the Region, also promoting the participation to international events or workshops and harmonizing results of the Programme for trans-boundary and Regional approaches.

The expected results of this activity are also the possibility to avoid duplication of data and to seek for optimization of resources, linking information through standard protocols and accessing to national, regional, European or global platforms as direct providers.

4. PROGRESS TOWARDS EXPECTED RESULTS

4.1 Overview

- *Legal and Institutional change:* Partners that have assessed the need for legal, regulatory and institutional arrangements development have already initiated those and completion in most of the cases will be achieved during 2019. These changes create the bases for compliance with the EU framework for DRA, DLD and RM.

- *Increased awareness and knowledge of partner countries regarding the EU frameworks as well as good practices:* This has been reported by most of the partners and is enabling them to identify strategies for the development of national systems with support of IPA DRAM and well as other international cooperation programmes and ongoing national initiatives.

- *The partnership with UNISDR*: is proving successful in effectively enabling partners to develop and strengthen national systems for DLD as well as getting partner countries ready for their Sendai framework reporting. Also through the population of the national DLD databases with historical data.

- *Initiation of the development and revision of NDRAs:* This follows the agreement with partner countries on the methodological improvements that were required at country level. There is also a harmonization of methodologies based on the IPA DRAM-established technical guidelines which are being modified and used according to Partners' need.

- *The functioning of the national working groups:* has proved effective not only in ensuring the implementation of programme activities, but also in increasing the coherence of the national systems development and increased internal coordination in the implementation of relevant international and national initiatives with synergies.

4.2 Partners' priorities and progress

Disaster loss data (DLD) collection
• ALB: DesInventar system is in place and has been updated to DesInventar-Sendai in order to align DLD with the Sendai Framework. New personnel have been trained and the population of DesInventar-Sendai is on-going. DesInventar-Sendai has been configured for Albania and has been translated to the local language. GDCE is committed to report to Sendai in the next year. The draft Civil Protection law contain an article that introduce the DLD system in Albania and envisage the development of a secondary dedicate law.
• BIH: the process for establishing a DLD system in BiH based on DesInventar- Sendai is on-going and BiH IPA DRAM Working Groups is actively working on this directive. A technical workshop has been conducted in collaboration with UNISDR; the workshop has the aim to present DesInventar-Sendai and to mainstream DLD and Sendai into State and Entities institutions. BiH is firmly moving into this direction. DesInventar-Sendai has been configured for BiH and translated to the local language
• KOS*: DesInventar system is in place and has been updated by IPA DRAM to DesInventar-Sendai. Training has been provided, however there is a need to appoint a duty officer for the regular maintenance of the system. DesInventar-Sendai has been configured for Kosovo* and translated to the local language.

• MNE: IPA DRAM and UNISDR are jointly supporting Montenegro in establishing a DLD system based on DesInventar-Sendai. A national workshop has been organised and DesInventar-Sendai has been configured for Montenegro. Two data collectors are collecting and digitalizing DLDl data from municipalities and line-ministries with the aim to gather about 10 years of historical dataset
• MKD: Crisis Management Centre has a system for DLD collection from forest fires and it is currently extending to other hazards. IPA DRAM will support CMC to align the system with Sendai requirements and to automatically report to the Sendai Monitoring Framework. Furthermore, IPA DRAM will promote the sharing of data and the access to CMC system by other institutions
• SRB: DesInventar system is in operation at SEM and has been upgraded to the new DesInventar-Sendai- IPA DRAM will continue to support SEM by organizsng Training of Trainer and by supporting in the operation of the system. IPA DRAM will also support the Working Group in the preparation of disaster loss damage assessment methodology;
• TUR: AFAD is currently evaluating the best technological option for the national DLD system. the establishment of a unique comprehensive DLD database will consolidate existing databases with the support of IPA DRAM
Risk assessment (DRA)
• Technical guidelines for Disaster risk assessment (TG for DRA) to be developed in ALB, BIH, KOS*, MKD, MNE, TUR; IPA DRAM provided draft structure and IPA DRAM WGs lead the process that TG will be adopted (country-specific);
• ALB, KOS*: to re-evaluate the National Risk Assessment developed (in ALB with the support of OSCE and in KOS with UNDP) to be exposed again to the process that led to the scenarios definition where the adaptation of TG for DRA shall be in place as well as the proposed adaptation of existing legislation; the process started and will be followed through in 2019.
• SRB: will focus more on hazard specific methodologies and IPA DRAM will support particularly the capacity for GIS analysis, production of risk maps and damage scenarios, geospatial data management, mainly through the provision of study visits and training;
• MNE: IPA DRAM will closely support the newly established NDRA WG to compile the NDRA by jointly develop a roadmap to NDRA development and following and supporting the roadmap in 2019;
• TUR: AFAD is beneficiary of IPA Capacity Building (IPA CB) project that supports AFAD in developing NDRA. AFAD, IPA DRAM and IPA CB cooperated closely to define the technical guidelines adopted by AFAD and now the cooperation continues with a final objective to obtain NDRA for Turkey as required by UCPM.
Risk Mapping (RM) and ERRA
• RISK MAPPING: The final list of categories of datasets considered of primary importance in developing the identification, analyses and representation of disasters has been released for MNE, ALB, KOS, MKD, SRB as the definition of logical criteria for approaching geospatial data management and their organization into ERRA
• ERRA: Electronic platform development exists as draft version and is in the last phase of development
• The operational collection of local data for the population of ERRA is at the starting blocks in ALB, KOS, MNE, MKD; at Regional Level, agreements with on-going initiatives are at work, in particular IMPULS project will provide institutional mapping and a significant amount of data through web services of western Balkans

Table 1

4.3 Sustainability

Sustainability is considered an on-going process to maintain the progress made in which resources, development and institutional change enhance the current and future potential of strengthened disaster risk management.

The IPA DRAM Programme's two main strategies in order to ensure sustainability of the programme results are 1) the *Partnership approach* which aims atinvolving Partners throughout the programme planning and implementation to ensure alignment of activities to national on-going processes and priorities, and 2) the *Capacity development strategy*, where the partnership approach still is at centre, but also the mix of activities for the transfer of knowledge.

Further, the Programme has from the very start, applied the principle of *transparency and openness,* which in practical terms has meant that other international partners have been invited to take part in the activities and that produced outputs have been shared to avoid duplication and overlap and to find synergies.

Besides the most tangible cooperation with UNISDR and IMPULSE project, the Programme has intensified the discussions with DPPI SEE during this reporting period. During the most recent IPA DRAM steering committee meeting in Ljubljana (November 2018), it was agreed together with the DPPI SEE Secretariat who was present at the meeting, to organise a joint workshop in early 2019 to further develop the discussions on a joint sustainability plan.

In preparation, IPA DRAM has identified five main areas in which the programme results can be sustained and at the same time contribute to the strengthening of DPPI SEE, which all aim at increasing the understanding of risk in the region:

1. Hosting and maintenance of a **regional ERRA**;
2. Updating and upgrading the South Eastern Europe **Knowledge Management System** (SEE KMS);
3. Hosting and maintenance of a **regional DesInventar/ Sendai** for collection of disaster loss data and Sendai reporting;
4. Facilitation of **hazard-specific regional working groups** (WG) established in IPA DRAM (i.e. WG on seismic risks, floods and wild fires);
5. Building on IPA DRAM successful **capacity building methods** (e.g. exchange of experts, cross-border learning and support, participation in EU/ international forums) and the support of a regional pool of experts.

<u>Hosting and maintenance of a regional ERRA</u>

The Electronic Regional Risk Atlas (ERRA) aims to provide an inter-linkage between different sources of risk maps, disaster loss data and risk assessments and is based on principles indicated in the EU Risk Assessment and Mapping Guidelines for Disaster Management and on INSPIRE Directive. The national as well as regional ERRA will be fully developed and rolled out by June 2019. This will be followed by trainings on national level to inform about the operational use and maintenance of the platform, as well as regionally to ensure effective use on regional level.

The regional ERRA needs to be hosted and maintained in a regional body to reach its full potential and effective use. IPA DRAM suggests that DPPI SEE is in the best and most strategic position, as the platform will link to national resources for data sharing in the region, the regional SEE KMS as well as include the

Overview of Risk developed by IPA DRAM.

If agreed with DPPI SEE, IPA DRAM will engage selected member states and draw on their expertise to ensure a smooth hand-over process.

Updating and upgrading the South Eastern Europe Knowledge Management System (SEE KMS)

The aim is to have a useful online platform in order to gather good practices, research projects and operational results relevant to risk assessment. The online portal will enable civil protection agencies and other organisations to share, learn from and build on the results made available.

Instead of building something new or duplicate existing system, IPA DRAM will, in agreement with DPPI SEE, further upgrade and update the existing see.KMS (South East Europe - Knowledge management system), currently hosted by DPPI SEE.

The online portal will contain an archive of disaster risk assessment information and will allow users to retrieve data by using a user-friendly interface. It will assist with coordination among different stakeholders involved in disaster risk assessment in the region and minimise duplication of initiatives and studies and will be connected to the ERRA. IPA DRAM and DPPI SEE member states came to this agreement in November 2017.

Hosting and maintenance of a regional DesInventar/ Sendai for collection of disaster loss data and Sendai reporting

The regional approach for disaster loss data collection system has been proposed under the IPA DRAM Programme to promote the sharing of loss data in compliance with EU guidelines, to inform national and regional risk- and capability assessment (harmonized with EU and Sendai guidelines) as well as to facilitate the Sendai reporting. The Regional DesInventar-Sendai would be a regional database, with jointly agreed disaster loss data indicators in line with Sendai requirements and targeted to the region. For that to be effectively used and sustainable over time, IPA DRAM suggests that DPPI SEE as an established regional mechanism would be in the best position to host such a database. IPA DRAM would, if agreed, support DPPI SEE through capacity building to enable the operation of the database and on the broader issue of disaster risk assessment, Sendai Framework, Disaster Loss Databases and Sendai Framework Monitoring.

Facilitation of hazard-specific regional working groups (WG) established in IPA DRAM

In the baseline assessment, the three most serious hazards for the region were identified – *floods*, *earthquake* and *wildfires*. These were also the focus of the IPA DRAM Overview of risks (shared in June 2018).

IPA DRAM Programme has organised three regional workshops (WS) so far, the first one was “levelling-up” in all three components (risk assessment, mapping and DLD), second was hazard-specific (earthquake) related and the third focused on DLD relevance, also in view of evidence-based support to RA, taking wildfires as a hazard common to all Partners. In discussions with Partners, it was evident that the exchange of expertise, lessons learnt and views on harmonised approaches on regional levels are added values and should be continued.

Recommendations from the second WS (held in June 2018) were to *create a regional network of seismic experts and the development of a regional roadmap.* IPA DRAM, with strong support from Partners and other EU experts, produced a “Regional Gaps in Seismic Risk Assessment” report with the findings of the survey done and which lists the gaps identified, as well as propose some concrete actions for the working

group of seismic experts.

There is thus a solid basis for a continuation (beyond the IPA DRAM) of the work of three hazard-specific WGs on seismic risks, floods and wildfires at the regional scale. This work can be easily extended to DPPI SEE members, sharing the same hazards and to continue the work started (based on identified needs, to systematic strengthen national and regional capacities and to maintain the involvement of civil society (e.g. academia, researches) in the work of civil protection. If the Partners, perhaps under the facilitation of DPPI SEE, agree on modalities for this type of regional cooperation, and make progress in the field of joint preparedness and prevention, there is also potential for future joint EU project funding.

Building on IPA DRAM successful capacity building methods and the support to a regional pool of experts
The Programme has used different types and a mix of capacity development methods to strengthen the disaster risk management in the region. All activities are well documented through pre-activity concept notes and post-activity evaluations and reports. Everything is available for DPPI SEE and partners to use.

The Programme has identified two activities, which have been particularly appreciated among partners – 1) Exchange of experts: This builds on the initiative of partners to assess their own gaps and need of capacity – and the willingness of the counterpart to host and to share knowledge and experience. This concept is not unique for IPA DRAM, but the Programme has encouraged and facilitated this opportunity with positive results based on the Programme's indirect confidence building measures. This modality is also available at the EC, which could be further explored among the partners in the region and potentially facilitated through the DPPI SEE. 2) Participation in EU/ international events and forums: IPA DRAM has facilitated Partner participation with the aim at exposing them to the ongoing work in disaster risk management on EU- and international level and to promote the importance of networking and building partnership. In doing so, particularly within the field of Sendai framework monitoring – enforced by technical workshops on national level, IPA DRAM is supporting the strengthening of technical expertise among Partners which could, if there is an interest, contribute to a regional pool of experts.

The next step to establish a Programme Sustainability plan and a Regional road map (as envisioned in the Project proposal), is to meet with the DPPI SEE members and Secretariat to agree on a joint way forward with concrete steps.

5 OVERVIEW OF ACTIVITIES

5.1 Regional activities

Regional workshop on Risk assessment & Earthquakes (Antalya, June 2018)

IPA DRAM "Regional Workshop on Seismic risk" was intended to support the regional network of earthquakes experts and to improve the knowledge related to seismic risk scenarios. The participants were mainly composed by IPA DRAM NCs, technical experts in the field of seismic risk assessment, technical experts in the field of geology with experience on landslides and rock-falls triggered by earthquakes.

- The main objectives of the workshop were: 1) to support the Partner Countries in exchanging experiences on the status of the Seismic risk assessment in the Region in connection to landslides and rock-falls and to improve the knowledge of how these topics are tackled internationally and specifically in EU MS; 2) to define common grounds for a homogeneous approach to seismic risk assessment and management in the Region; 3) to improve the Regional cooperation and the cooperation with EU MS on the technical level on the specific theme of multi-hazard approach, namely seismic risk and landslides/rock-falls.

- Based on the request from Partners and commonly mentioned in the Plans of action, the workshop also aimed to analyse how the current methodologies for Earthquake risk assessment applied in the different countries can contribute to the NDRA in compliance with the EU DRA guidelines (PoA various points depending on the country).

- The workshop successfully resulted in: 1) the creation of a regional network of experts; 2) identification of regional gaps and; 3) the development of a regional roadmap, which aims to ensure the cross-comparability of the national scenarios included in the NDRAs, that the regional/cross-border dimension of the scenarios is discussed and tackled in the NDRAs and to analyse the opportunity to include the multi-hazard and cascading effects in some of the scenarios considered in the NDRAs.

- With this aim, IPA DRAM will favor the inclusion of the cross-border/regional dimension into the technical guidelines, and the inclusion of cross-border/regional scenarios into the NDRAs to complement the national scenarios, taking into consideration also consequences that strongly affect the capability assessment that will follow the NDRA preparation.

Figure 3: Field-visit to AFAD:s ware house in Antalya

Regional workshop on Disaster loss data & Wild fires (Ljubljana, November 2018)

The third Regional Workshop of IPA DRAM focused on Evidence-based disaster risk management: Disaster Loss Data and Wildfires. IPA DRAM National Coordinators, Partners' experts in the field of wildfire risk management and DLD experts with experience and knowledge with disaster loss data collection system, participated in the workshop and exchanged approached and practices with Member States peers from IPA DRAM consortium.

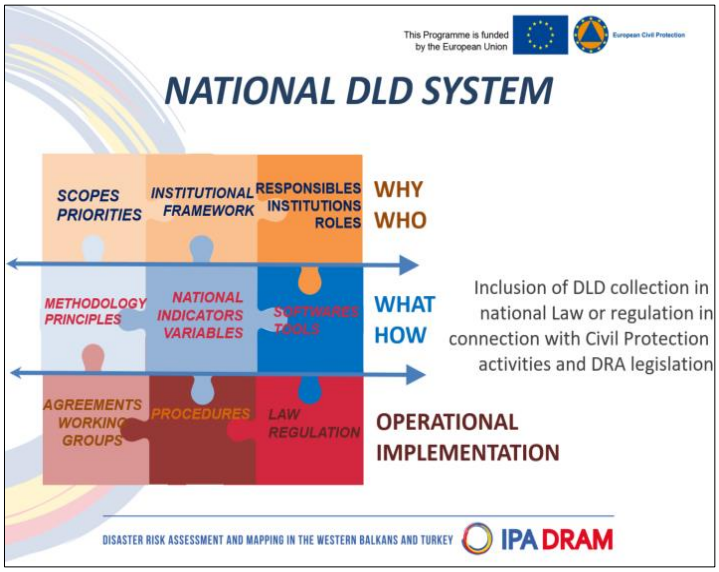

Figure 4: From regional workshop presentation on national DLD

Some of the learnings from the workshop:

- Partner and EU MS are facing similar challenges in collecting and registering reliable data on disaster damages. The workshop was an opportunity to learn from others' experiences, to share good practices and approaches as well us to reflect on both the positive and negative lesson learnt in implementation of DLD system at national level. Many Partners are using DesInventar-Sendai while some countries have developed own technology, i.e. Former Yugoslav Republic of Macedonia. The Slovenian system AJDA was also presented.

- Participants examined the benefit of Sendai Framework and concluded that the reporting mechanism of Sendai is an opportunity for Countries to reflect on their national system for Disaster Loss Data collection and recording and to eventually improve it. Furthermore, the reporting is also helping countries identifying the gaps of DLD system and maintaining the high political commitment and attention of the topic itself. Experts from Serbia and Bosnia and Herzegovina shared the content of the recent Training of Trainers conducted by UNISDR in Bonn on Sendai Monitoring Framework and DesInventar-Sendai and provided recommendations on regional level.

- Partners and EU member states (Sweden, Italy and Croatia) exchanged on current practices and experiences on wildfire risk assessment and management with the aim to share good practices and lesson learnt as well as to consolidate the network of experts in the Region. Furthermore, the workshop demonstrated how DLD can contribute to the improvement of National Disaster Risk Assessment (NDRA), in compliance with the international Sendai Framework and EU DRA guidelines. Participants elaborated forest fires risk scenarios and reflected on how DLD can improve the description of scenarios.

- On a regional level, the workshop highlighted the need to establish an expert working group for drafting simplified Sendai Technical Guidance translated into national languages. Moreover, there is a need to capacitate DPPI SEE for being a sustainable regional hub for exchange of

knowledge and experience with regard to disaster risk assessment, Sendai Framework, Disaster Loss Databases and Sendai Framework Monitoring.

5.2 National technical workshops & advisory missions

As the three technical components are closely inter-linked and institutions are working interdependently, IPA DRAM in consultation with Partners decided to organise different activities and where possible, back-to-back to cover all three components, which will both strengthen the link between components, institutions and the results. All geared towards implementation of country specific POAs towards harmonized approach in the region in RA, DLD and RM. Each POA was discussed and amended, mainly in synchronizing timings for specific activities, where presence of IPA DRAM KEs is requested in the field.

IPA DRAM Team is continuously and on regular basis interacting with all Partners, also through remote assistance, using different means of exchange (skype conference calls, phone, e-mail exchange), to support the implementation of the Plans of Action.

Specific results from the national technical workshops and advisory missions are addressed under *Progress towards expected results* chapter.

Figure 5: Technical workshop in Montenegro (September, 2018) on disaster loss data collection and the use of DesInventar/ Sendai. The workshop was co-hosted by the Directorate of Emergency Management and supported by UNSIDR.

Implemented national technical workshops, advisory mission and other support:
Table 1

	ALB	BIH	KOS*	MKD	MNE	SRB	TUR
July		Technical Workshop DLD		Consultation/ planning meeting			Expert support to national RA workshop
August							
September					Adv. Mission DLD, RM +training Desinventar/ Sendai		
October	Adv mission RA, DLD, RM + training on Desinventar/ Sendai		Adv mission RA, DLD, RM + training on Desinventar/ Sendai	Consultation meeting GIS			
November							

5.3 Electronic Regional Risk Atlas (ERRA) (3.4.1) and Online Platform (2.4.1)

ERRA IPA DRAM

ERRA IPA DRAM will be built as a web platform comprehensive of different types of knowledge: risk maps, historical events, real-time data, documents.

ERRA IPA DRAM will be based on principles and approaches indicated in the EU Risk Assessment and Mapping Guidelines for Disaster Management and on INSPIRE Directive, and it should allow easy accessibility and interoperability with National Spatial Data Infrastructures. Data on disasters, hazards, exposure, vulnerability and resilience could be harvested through the proper usage of standard web services and data formats from Partner countries as well as from international sources.

The ERRA IPA DRAM proposal will encompass:

- DRA schema, scenarios, vulnerability studies;
- Risk Maps from existing studies at national/entity/local level
- a catalogue containing a collection of Disaster Loss Data;
- a list of baseline layers and core risk data;
- a catalogue for metadata;
- results from external projects;
- data from regional initiatives and programmes;
- disaster risk assessment documents organized through an archive.

The identified IT solution is built on the possibility to capitalize resources from past projects and to guarantee that actions envisaged in IPA DRAM can be developed according to the timeline of the Programme proposal: the ERRA IPA DRAM is proposed reengineering the IPA FLOODS Flood Risk Information System and widening it, also considering its core MyDewetra and its updated technologies.

Progress

The platform has been developed in draft version, it is working and is accessible through the link http://erradram.mydewetra.org

The single applications dedicated to manage the different aspects have an asynchronous development, in particular:

- the we GIS portal is already well designed and will proceed with a phase of optimization for data visualization
- the tools for building scenarios are under process
- the link with DesInventar and historical events has been produced in test mode
- the metadata catalogue has been identified
- the accessibility to external web-services has been enabled
- the link with KMS is under design

The feed to the platform has been initialized with open data prepared by IPA DRAM team and will continue with collection of data in each Partner Country in the next 6 months.

IPA DRAM Knowledge Management System

IPA DRAM obtained approval to capitalizes the UNISDR Knowledge Management System for Disaster Risk Reduction and Climate Change Adaptation (here and after seeKMS), which is currently hosted by Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) at the address www.seeKMS.dppi.info, presently not maintained, and to renew it, adding also a connection with ERRA IPA DRAM platform.

The new KMS is a web-based knowledge broker, meant to strengthen the capabilities in sharing documents, publications and media dealing with Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA), that can be retrieved using a multiple language interface, helping the coordination among different stakeholders dealing with Disaster Risk Management and CCA in the region and contributing to avoid duplication of initiatives and studies.

Since an important aspect of the KMS usefulness derives from feeds from the local Countries, IPA DRAM proposed to facilitate the renewal of commitment of DPPI secretariat and member states to maintain, upgrade and update KMS: DPPI has welcomed the proposal that is presently under discussion among DPPI members.

The contribute of IPA DRAM can be divided in two parts: renovation of the visual approach to already present documentation, to complement with the management of new information via database. In details:

- Review of graphical interface of seeKMS, identification of gaps and needs for improvement : under process
- Review of Content organization and themes, identification of gaps and needs for improvement: to be done with Partners, has to be further discussed with DPPI
- Review the content of each Partner session on legal and institutional framework: to be done by Partners, has to be further discussed with DPPI
- Search of content and upload document, information and data: complemented with additional database to serve unique identification and traceability of documents, under design
- Upgrade of Manuals: to be executed at the end of the process
- Maintenance: has to be further discussed within DPPI

5.4 Activity B: Facilitating the exchange of expertise and networking

This activity is two-folded and builds on 1) that the consortium members, as national civil protection agencies, are involved in many different forums covering disaster risk management and will introduce the partner countries to EU-related expert groups, platforms and networks and 2) the expertise that the partner countries already holds and can be used to capacitate other partner countries through the enabling of exchanges and study trips. All participation is followed-up and reported upon.

During the reporting period, partners participated in the following events through the support of IPA DRAM:

EVENT	PLACE/ DATE	PARTNER
SENDAI MONITORING TOT	Bonn, September 2018	Serbia (SEM), BiH (MoS)
EUROPEAN FORUM ON DRR	Rome, November 2018	BiH (MoS)
EXCHANGE OF EXPERTS (DLD/ RM)	Savonna, November 2018	Serbia (SEM)/ FYROM (NRPD, CMC) to CIMA

5.4.1 Visits to European working groups and platforms (B2)

With the purpose to network and exchange knowledge on a European (and in certain cases on global) level, the programme can provide a unique opportunity for partner countries through the facilitation of visits to European working groups or platforms. This is made possible through the active participation of consortium members in different European civil protection forums.

Figure 6: From presentation in Sendai Framework Monitoring ToT, UNISDR

- **UNISDR Sendai Framework Monitoring Training of Trainers (Bonn, September 2018)**

As a result of the excellent cooperation between IPA DRAM and UNISDR Europe, IPA DRAM was invited to send participants to the global UNISDR-organized event – Training of Trainers for Sendai Framework Monitoring. With the aim to strengthen the technical capacity on national level, as well as contributing to the aggregated capacity on regional level, two experts from Bosnia and Herzegovina and Serbia participated.

Twenty-six participants, mostly from regional organizations from all regions of the world, were engaged on hands-on training and intensive discussion. These efforts improved the understanding and use of the online Sendai Framework Monitor (SFM), launched in March 2018, to monitor progress on implementing the Sendai Framework for Disaster Risk Reduction 2015-2030. Workshop participants had an opportunity to review the Sendai Framework Monitoring Process and got first-hand experience in using both the SFM System and DesInventar (widely used Disaster Loss Database). Participants learnt to master the use of both systems through hands-on exercises, gaining in-depth knowledge and understanding, and will now be able to act as trainers supporting countries in their monitoring and reporting requirements. In addition, participants benefited by trainers and trainers-to be from all over the world and learned together how to provide practical and technical support to countries facing common challenges. (Full report in Annex 6.2)

As part of the IPA DRAM capacity development strategy, the invited experts brought back recommendations and are integrating and capitalizing the learnings on national level. Additionally, they presented recommendations on regional level and shared their experiences in the Regional workshop on Disaster loss data with all IPA DRAM partners. With their expertise, as trainers they can support other IPA DRAM partners and DPPI SEE member states, building a valuable technical expertise on regional level – which is yet scarce in many regions.

5.4.2 Exchange of experts (B3)

The aim is to encourage exchange between civil protection agencies, and to support the objective of the programme, partner countries will be offered the opportunity to take part in experts' exchange within the region.

- **Exchange of experts to CIMA Foundation (Savonna, November 2018)**

The Exchange of Experts on the RM and ERRA IPA DRAM component took place in CIMA Foundation Headquarter, and invited experts from the requesting partner countries Serbia and the former Yugoslav Republic of Macedonia.

The learning objectives focused on the main activities under development inside IPA DRAM risk mapping and ERRA component, and engaged experts on:

- GIS analyses for DRA, classification of data and application of IPA DRAM proposed key datasets to risk mapping
- ERRA as platform for the management of static and dynamic components for risk assessment
- Desinventar Sendai in relation to ERRA
- Building scenarios of risks, also with the analysis of the RASOR tool
- Visit one municipality to exchange on GIS and RM management at local level
- Visit JRC, to exchange on GIS and RM management at European and international level, and to network with the Disaster Risk Data Hub team

The activities comprehended interactive working groups, oral presentations and practice on GIS maps and ERRA and supported the implementation of the partner countries' own jointly prepared country-specific Plans of Action, where many priorities are connected to the management of geospatial information and the exchange with local personnel supporting risk mapping and damage scenarios representation.

5.5 IPA DRAM cooperation and coordination

IPA DRAM has from the very start of the programme, prioritised and fostered the cooperation with other stakeholders in the region, to ensure synergies as well as sustainability for the effective programme implementation and use of funds. During this reporting period, IPA DRAM key experts participated in the following events:

EVENT	PARTNER	PLACE/ DATE	PARTICIPANTS
ERRA COORDINATION MEETING	Italian Civil Protection Department (DPC)	Rome, July 2018	KE Stefania Traverso
IMPULSE WORKSHOP	Swedish Lantmäteriet	Mostar, Sep 2018	KE Stefania Traverso
UR BALKANS CONFERENCE	World Bank	Belgrade, Sep 2018	TL Cvetka Tomin, KE Stefania Traverso, Marco Massabo (DLD expert)
REGIONAL DPPI SEE MEETING	DPPI SEE Secretariat and member countries	Sarajevo, Nov 2018	TL Cvetka Tomin
EUROPEAN FORUM FOR DRR (EFDRR)	UNISDR/ Italian Civil Protection Department (DPC)	Rome, Nov 2018	KE Stefania Traverso, Silvia Paraisi (COM officer), Johanna Rixer (Admin officer), Partner (BiH)

Table 4

6. CROSS-CUTTING ISSUES

In order to strengthen the results of the programme, IPA DRAM aims at ensuring that the perspectives of gender, environment and civil society involvement are considered throughout the planning, implementation and monitoring and evaluation of the programme. During the reporting period, Gender- and Environmental experts have been involved in the programme activities to ensure these perspectives have been considered and to strengthen the capacity within the team of experts. Gender and environment have also been included in the development of the Plans of action and the M & E framework.

6.1 Gender

Policy framework (priorities, objectives in gender and diversity)

The programme integrates a gender and diversity perspective in order to enhance the quality and effectiveness of the programme and at the same time contribute to internationally and by the EU identified results and targets to achieve gender equality. On an overall level, the Sendai Framework for Disaster Risk Reduction recognises the importance of gender-dimensions in disaster risk reduction and calls for "inclusiveness and engagement of all society […] to be integrated into all disaster risk management policies, plans and decision making processes, including those related to risk assessment, early warning, information management and education and training[…]." The programme will also be guided by the Gender Action plan 2016-2020 (Council of the European Union), which makes reference to the Sendai Framework for Action and highlights the need of systematic gender analysis in all new external actions as well as the use of sex-and age-disaggregated data. More specifically, the European Commission is in the Strategic engagement for gender equality (2016-2019) committed to continue its efforts to integrate a gender mainstreaming perspective into all relevant projects funded through the IPA, under the thematic priority areas to promote gender equality and women's rights across the world.

Gender and diversity during the reporting period: actions and results

As part of the gender and diversity integration, the programme strives at strengthening the **participation of gender-aware stakeholders**. Therefore, Partners are encouraged to invite representatives from the national gender equality agencies in order to strengthen the cooperation between civil protection and gender experts, to increase the understanding of both fields and how it can be beneficial.

In order to strengthen this approach and care for the sustainability of having a gender perspective in DRR, IPA DRAM will organise a Gender & DRR workshop with the intention to bring together civil protection agencies and gender equality agencies and with the aim to identify key entry points for gender mainstreaming in DRR, to be shared among partners in the region. This activity will support the strengthening of a **regional network of agencies with gender expertise; t**he collection and sharing of **case studies and/ or good practices** from the region to raise awareness on the importance of applying a gender perspective in working with prevention of natural hazards; **Capacity strengthening and networking** through joint activity with representatives from civil protection agencies and gender equality agencies, and **Awareness raising** through highlighting good practise on website, social media and through special events.

The programme also aims at continuing providing **equal opportunities** and striving towards gender balance in the selection of non-key experts, working group members, workshop participants as well as steering committee and consortia coordination group members.

June-November 2018	Female	Male
Key experts	2	1
Non key experts	9	4
Partner National Coordinators	1	7
Participants in national workshops	47	65
Consortium Coordination Group	2	2
Participants in regional workshops	37	40

Table 5

The M&E framework for the programme has been developed in a way that assesses to what extent the country complies with good practice in DRA, DLD and risk mapping. The establishment of **gender-sensitive indicators** during the inception phase and further localised to partners' conditions, forms the backbone of the long term programme.

6.2 Environment

Sendai Framework for Action, in its guiding principles, underlines the need of coherence between the development, strengthening and implementation of relevant policies, plans, practices and mechanisms on one hand and across to sustainable development and growth, food security, health and safety, climate change and variability, environmental management and disaster risk reduction agendas on the other hand. The aim is therefore to ensure this coherence all through the different parts of project implementation.

Environmental hazards, impacts and risks are all at the centrepieces of the Risk Assessment and Disaster loss frameworks within the UN and the European Union and have a prominent presence in existing, relevant legislation, working papers and guidance tools. According to the EU guidelines Risk Assessment and Mapping Guidelines for Disaster Management there are environmental components that should be included in the process of national risk assessments.

In IPA DRAM the environmental aspects as a cross cutting issue are included in all three components of the programme at the general level. In relevant parts of the project, where applicable, the nexus to other relevant EU legislation will be addressed. For example, the Floods directive, Seveso directive and the Convention on the transboundary effects of industrial accidents. More concretely, the environmental component has been included in the plan of action of Kosovo as per the expressed need of the Partner, based on its many former mineral extraction sites and tailings. To identify how and where the programme can best work to address environmental risks, IPA DRAM initiated a cooperation with UNDP office in Kosovo through the programme's Environmental expert. This aims at exchanging information and views, inform each organisation of possible synergies and nexuses between ongoing projects and activities. UNDP Kosovo activities are in close connection to the IPA DRAM (e.g. UNDP is supporting the construction and implementation of a Geoportal in Kosovo and this is an essential part for the implementation of ERRA part of IPA DRAM). The environmental impacts from former and ongoing industrial activities are severe and IPA DRAM has limited possibilities to engage in construction activities, however raising the awareness and

making industrial remnants an integrated part of the national risk assessment as well as sharing of the information and providing other possible donors inputs could be IPA DRAM contribution.

6.3 Civil society involvement

Civil society plays an important role; in risk assessment and data collection non-governmental organisations), with links to the communities, can be instrumental in providing both information and expertise and at the same time distribute information about the findings of the project. The same in risk mapping and relevant for IPA DRAM for implementation of ERRA – it is a big potential still to be more in use.

IPA DRAM is consistent in encouraging these approaches and results are evident at national level as well as in a regional approach. At national level, in composition of the working groups, where different experts from academia, research institutions and others are regularly participating and contributing to implementation of the national POAs. In regional IPA DRAM events, the participation of representatives from universities and other relevant organisations in the process is also evident. We believe that it will contribute to sustainability of implemented activities and results of IPA DRAM and beyond, connecting experts in the region and with the European Union. IPA DRAM will continue the commitment to include the above mentioned where possible and acceptable by Partners as primarily responsible for risk assessment, mapping and disaster loss data collection but also share lessons learnt and good practises from consortium members (e.g. cooperation of DPC Italy and CIMA, MSB and Swedish universities). A similar approach is noted also in the DPPI SEE framework and this might be an additional topic to elaborate as a joint activity.

7. ORGANISATIONAL AND IMPLEMENTATION STRUCTURE

7.1 Implementing consortium

The programme is jointly implemented by a consortium composed of four national civil protection agencies and one prominent research institute founded by a national civil protection agency. The IPA Disaster Risk Assessment and Mapping programme is characterised by cooperation between sister agencies on equal terms.

The implementing consortium members are: Swedish Civil Contingency Agency (MSB) which is the lead organisation, Italian Civil Protection Department (DPC), Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR), National Protection and Rescue Directorate of the Republic of Croatia (NPRD) and CIMA Research Foundation, Italy.

Overarching areas	Lead organisation
Programme management	MSB
Monitoring and evaluation	MSB
Cross-cutting issues	MSB
Capacity development	DPC with support of MSB
Visibility and communication/ IT	DPC and CIMA with support of MSB

Table 4

Technical components	Main backstopping organisation
1. Disaster loss data collection and databases	CIMA with support of DPC and ACPDR
2. Risk assessment	MSB with support of DUSZ, DPC and CIMA
3. Risk mapping and ERRA	CIMA with support of DPC and MSB

Table 5

Division of roles and responsibilities
Based on the need from partners expressed in the plans of action, the consortium has made a plan for respective agency's roles and responsibilities that will be further specified in accordance with the master activity plan.

Consortium member	Role/ responsibility
MSB	RA/support MNE; Gender&Env all Partners; participation in selected TWs, Advisory missions and RWs
CIMA	Concept DESINVENTAR, ERRA, On-line platform, participation in TWs, Advisory missions and RWs
DPC	RA, Rm & ERRA, participation in selected TWs, Advisory missions and RWs, lead in regional events e.g. Earthquake RA and post-disaster RA
ACPDR	Concept AJDA to share, participation in selected TWs, Advisory missions and RWs; EoE to Slovenia
DUZS	RA/support fYR MAK and BIH, participation in selected TWs, Advisory missions and RWs

Table 6

7.2 Steering Committee

The Steering Committee (SC) has an overall role to support and supervise the implementation of the programme through giving general direction and concrete advice. The SC includes at least two representatives from each partner country, representatives from the Joint Research Centre of the European Commission (JRC), the Regional Cooperation Council (RCC), the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) and representatives from the consortium members. In addition, UNISDR has been invited to participate as an observing member.

The programme also intends to invite experts from a broader spectrum of countries in or outside EU, and representatives from organisations with documented experience in disaster risk management or in other way relevant in the region, as observers in the Steering Committee.

Two Steering committee meetings were held during this period, in Antalya in June and in Ljubljana in November. Partners contributed with reports on their respective progress and gave feedback on the IPA DRAM activities. During the November meeting, there was a specific focus on how to ensure the sustainability on regional level. The Head of the DPPI SEE Secretariat contributed to this discussion.

#	PLACE	DATE	ANNEX
3	Antalya	20-21 June 2018	10
4	Ljubljana	14-15 November 2018	11

Figure 7: Steering committee meeting, Ljubljana, November 2018

7.3 National Coordinators

All partners have appointed a national coordinator who is the key entry point for IPA DRAM planning and implementation and who facilitates the programme multi-stakeholder participation and communication.

In this regard, IPA DRAM would like to praise the engagement, professionalism and motivation of the national coordinators. Their role and overall contribution to the progress of IPA DRAM cannot be under-estimated. It also shows the importance of the partnership building from early on.

(Annex 1: List of National Coordinators in partner countries)

7.4 IPA DRAM Working Groups (WG)

The national working groups (WG), which were established on the grounds of IPA DRAM draft Terms of Reference (TOR), adjusted to the national contexts in line with partner countries' own structures and core organisations, to steer the implementation of IPA DRAM at national level, and beyond, are working well. The IPA DRAM WGs are led by IPA DRAM National Coordinators (NCs) and consist of relevant governmental agencies represented by core experts from all three components, disaster risk assessment, disaster loss data and risk mapping. The mandate includes ensuring the fulfilment of the national POA implementation, inter-institutional cooperation and including civil society (e.g. academia, research organizations) in activities.

Cross-sectoral and inter-institutional cooperation is essential for a strong disaster risk management system, with special mentioning of NDRA, DLD and RM processes. Therefore, the Programme is pleased to have seen positive developments reflected in the broad participation in regional events where cross-learning have been much appreciated and contributed to a stronger regional approach across sectors and actors.

8 PLANNING

Tentative work plan and timeline

Based on the work plan (Annex 12) which includes an estimated time schedule with milestones and specific outputs (also in Annex 13), the following core activities are planned for the next 6-month period:

	Dec 2018	January	February	March	April	May	June
ALB							
BiH	EoE to Croatia, 17-19 Adv. Mission RM, 21	Adv. Mission DLD, 28-29, Savona and TOT DESINVENTAR coordinators					
KOS*							
MKD	EoE to Croatia, 17-19		Adv. Mission ERRA	Adv. Mission DRA Adv. Mission DLD			
MNE	National Technical WS DRA, 17		Adv. Mission DRA			Adv. Mission DRA	
SRB		Adv. Mission DLD, 28-29, Savona and TOT DESINVENTAR coordinators					
TUR			Adv. Mission DRA Adv. Mission DLD Adv. Mission ERRA				
REGIONAL				Gender & DRR workshop, 5-6 March, Sweden Exchange of experts (ERRA) to CIMA/ IT	Study-visit wild fires tbc	WG meetings (seismic risk)	**Regional Workshop ERRA/ SCm** 10-14 June, Rome/IT

Table 7

9 VISIBILITY AND COMMUNICATION

Based on the IPA DRAM Communication plan which was launched in March 2017 and based on the Communication strategy presented in the Programme proposal, the Programme has developed a number of information and communication products to ensure proper visibility of the programme activities. The objectives of the communication is to raise awareness of the programme and strengthen the knowledge of its content among national and international stakeholders, through a systematic dissemination of the programme activities and results.

The contribution of the European Union to IPA DRAM visibility and the visual identity of the Programme are ensured through the design of dedicated visibility materials and the development of communication tools in line with the EU visibility manual for external actions.

IPA DRAM has a dedicated Media and Press expert who is working to ensure proper visibility and communication around the programme. The following information and communication products have been developed;

Website: The IPA DRAM website was launched in June 2017 and contains detailed information on current activities including programme reports such as the Baseline report and the Inception report. The website will include links to the online platform and the ERRA portal, for a better and broader dissemination of the programme results. The website will also aim to include media contributions (i.e. video, interviews) and extras aiming at spreading programme's results and key messages while looking for innovative ways of interaction with the project stakeholders and beneficiaries.

IPA DRAM Facebook page (https://www.facebook.com/ipadram/): One of the first communications channels established was the IPA DRAM facebook account. The page displays information and photos from the on-going activities and updates on coming events.

IPA DRAM LinkedIn page (https://www.linkedin.com/company/ipa-dram/): the latest addition to the social networks of the Programme. It displays information from the on-going activities and provides a further connection with the national delegates and national experts who take part to the programme.

IPA DRAM promotional material: A leaflet with basic information about the programme, its objectives and technical components together with main contacts was developed and disseminated during activities in June 2017. Based on the need, more print material will follow.

Press releases: Press releases are being published on the main events.

Newsletters: The E-Newsletters are published quarterly and sent out via email as well as published on the website.

- *Newsletter no 4 (July 2018):* Covered IPA DRAM Technical meetings held in every partner countries and IPA DRAM's participation in the European Civil Protection Forum in Brussels, and the UNISDR expert meeting in Geneva, as well as a focus on the platform See KMS.

- *Newsletter no 5 (November 2018):* Covered IPA DRAM Steering Committee and Regional Workshop on seismic risk held in Antalya, Turkey and IPA DRAM participation in the IMPULS project held in Mostar, BiH, and the "Training of Trainers" workshop held by UNISDR in Bonn.