Project Fiche No 10

Building Resilience to Disasters in Western Balkans and Turkey

1. Basic information

1.1 CRIS Number: 2011/022-964

1.2 Title: Building Resilience to Disasters in Western Balkans and

Turkey

1.3 ELARG Statistical code: 03.27 - Environment

1.4 Location: Albania, Bosnia and Herzegovina, Croatia, the former

Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo¹ and Turkey

Implementing arrangements:

1.5 Contracting Authority (EU): The European Union, represented by the

European Commission on behalf of the

Beneficiaries

1.6 Implementing Agency: World Meteorological Organization (WMO) and

United Nations International Strategy for Disaster Reduction (UNISDR)

1.7 Beneficiary (including details of project manager): DRR authorities and

National Meteorological and Hydrological Services

 $(NMHS)^2$

Financing:

1.8 Overall cost (VAT excluded)³: EUR 2 590 000

1.9 EU contribution: EUR 2 200 000

1.10 Final date for contracting:
1.11 Final date for execution of contracts:
1.12 Final date for disbursements:
31 December 2012
30 November 2014
31 December 2012
32 November 2015

¹ under UNSCR 1244/99

² Details in the Annex VI: "Details on beneficiaries"

³ The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated

2. Overall Objective and Project Purpose

2.1 Overall Objective:

To reduce vulnerability of IPA Beneficiaries to natural disasters, in line with the Hyogo Framework for Action (HFA), and increase their resilience to climate change.

2.2 Project purpose:

To enhance the capacity of IPA Beneficiaries to address disaster risk reduction in both today's and the future predicted climate.

2.3 Link with AP/NPAA / EP/ SAA

Disaster Risk Reduction is not a sector considered a priority as such in the European Partnerships or in the Accession Partnerships. However, sustainable development is not possible without a proper disaster risk reduction agenda and IPA Beneficiaries are among the 168 governments that adopted in 2005 a 10-year plan to make the world safer from the impact of natural hazards: "Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters", global blueprint for disaster risk reduction (DRR) efforts until 2015 which emphasizes that disaster risk reduction is a central issue for development policies.

2.4 Link with MIPD

Disaster Risk Reduction is addressed under chapter 3.6 of MIPD 2011-2013 – Environment and Climate Change, whose objectives for the next three years include provision of support to candidate countries and potential candidates to align with the environmental aquis, strengthening of the regional cooperation in strategic planning for environmental policy, as well as development of the capacities and mechanisms in the area of disaster risk management and adaptation to climate change.

2.5 Link with National Development Plan (where applicable)

Not applicable.

2.6 Link with national/ sectoral investment plans(where applicable)

Not applicable.

3. Description of project

3.1 Background and justification:

Countries of Western Balkans and Turkey are exposed to a range of disasters caused by the impact of natural hazards, including earthquakes, prolonged cold and heat waves, heavy precipitation causing floods and landslides, drought, forest fires and hailstorms. It is expected that the impact of climate change, accompanied by changes in land-use patterns and increased human settlements in areas that are prone to disasters will increase risk from such weather-related hazards in the coming years. Disasters already have a significant impact in the South Eastern Europe (SEE) region and might affect any country's economic standing. Disaster risk reduction represents therefore an issue which can directly impact the candidate countries and potential candidates' capacity to plan and achieve a long term sustainable development and,

more or less directly, it has an influence on their capacity to meet the Copenhagen criteria. In addition, the perspective of accession requires the candidate countries and potential candidates to comply with the EU's requirements in the field of disaster (risk) mitigation and be familiar with its mechanisms and tools for fighting disasters, such as the Community Mechanism for Civil Protection.⁴

Given its importance, disaster risk reduction represents one of the key issues addressed under IPA Multi-beneficiary programming 2011-2013. As a consequence, the IPA Multi-beneficiary Working Group on Environment and Disaster Risk Reduction (the "Working Group") was established in 2009, with the objective to identify as far as possible the strategic choices for IPA multi-beneficiary support for the period 2011 – 2013 in the area of environment and disaster risk reduction, as well as the plan for implementing these choices, namely the IPA Multi-beneficiary 2011-2013 Sector Plan on Environment and Disaster Risk Reduction ("the Sector Plan").

Also, a number of *regional reviews* and *Ministerial Declarations* highlight recommendations and needs to be addressed in the context of disaster risk reduction by IPA beneficiaries, as follows:

The Risk Assessment for South Eastern Europe Desk Study Review⁵ undertaken in the context of the SEEDRMAP⁶ where national, regional and international actors shared their information, concludes that "data - in SEE - should be aggregated and, where not available, should be generated and organised in a usable formats which would provide a crucial tool for hazard prevention strategy planning" and recommends that "Considering the common and shared hazards, the increasing vulnerability across political boundaries, it is important to develop a framework for regional cooperation. An organisation such as DPPI SEE⁷ having capacity and resources should coordinate efforts on DRR.... The coordinating organisation should also act as a technical clearinghouse and information dissemination centre. It should disseminate best practices and exercise, maintain databases and web portals; and promote the exchange of technical, research and development information on DRM"; "The region should develop mechanisms for information sharing and networking among the countries in the region....", "SEE countries must ensure a very close working relationship between the policy formulating body""Harmonized disaster management plans and procedures in the region will help in the identification and prioritization required in the region";

The Hyogo Framework for Action in Europe: Advances and Challenges: Report for the period 2007-2009⁸ highlights that "Awareness and knowledge on natural hazards and their impact is crucial..." ... "but only 50% of the countries reported substantial achievements" .. and "however, the levels of knowledge and awareness regarding natural hazards are much lower, especially among the public".

http://www.preventionweb.net/files/2214_DRmitigationadaptation.pdf

⁴ The Community Civil Protection Mechanism (CCPM) was established in 2001 to facilitate the mobilization of support and assistance from Member States in the event of major emergencies. The CCPM is managed by the Civil Protection Unit, currently within DG Environment, Details can be found in the sub-chapter 1.2.

⁵ http://www.unisdr.org/europe/publications/v.php?id=7650

⁶ The full document can be accessed at

⁷ Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI), launched in November 2000 under Stability Pact. DPPI was intended to play a key role in ensuring a cohesive regional development in the area of disaster preparedness and response. See http://www.dppi.info for details

⁸ http://www.unisdr.org/europe/publications/v.php?id=7650

The Structure, Role and Mandate of Civil Protection in DRR for SEE⁹, 2008, undertaken in the context of the SEEDERMAP, finds that "throughout the SEE region there is a shortage of information on potential vulnerabilities". "This lack of important data means that the ability of SEE countries to interface with the EU-led Global Monitoring for Environment and Security initiative is seriously compromised" and recommends "strengthen capacity building of technical and scientific bodies and enhanced communication between scientific bodies and Civil Protection sectors" and overall highlights the need of integrating SEE countries practices and standards in DRR and DRM with EU standards.

The Declaration of the Ministerial Conference of the SEE Cooperation Process on Disaster Preparedness and Prevention in SEE¹⁰, held in Sophia, April 2008, "invite all partners from the international community involved in disaster management to seek further synergies, to develop complementarities and to interact with the DPPI thereby further enhancing regional cooperation and collaboration in this field;" "call for a DPPI strategy, including a bi-annual action plan that would provide support and would complement national activities in the field of disaster management and further enhancement of regional cooperation in close collaboration with the DPPI partners".

The Declaration of the South East European Cooperating Process Ministerial Meeting on Disaster and Emergency Management, held in Antalya, May 2010, "invites member states to share and to make available best practices, lessons learnt and relevant data on vulnerability vis-à-vis disasters"; "Stressing the need for a more comprehensive approach in disaster risk reduction, tracking status of and protecting critical infrastructure, coordination and active participation of the competent national authorities in these processes", "have agreed to: encourage national disaster and emergency management authorities in SEE to strengthen their capacities in community resilience and preparedness for disasters..."," invite all partners form the international community involved in DRR ... to promote synergy and compatibility and to interact with DPPI SEE thereby further enhancing regional cooperation and collaboration in the field" "ensure that new initiative seek synergies and avoid duplication with all existing structures, tools and programmes".

The need for coordination and enhanced knowledge management in the field of DRR was stressed as well in the *XXVIII Regional Meeting* ¹¹. February 2010, by a member of SEE countries which pointed out the need of a regional management information system to timely inform SEE governments on DRR priorities and provide coordinated guidance for SEE countries policy makers.

In this context, it was established that the assistance to be provided under IPA Multibeneficiary 2011 will build on the results of the Regional Programme on Disaster Risk Reduction in South-East Europe¹², implemented under IPA MB 2008, and be aimed at enhancing the regional cooperation and capacity in addressing disaster risk reduction, with focus on (i) building/enhancing regional networking and coordination in the area of disaster risk reduction, (ii) strengthening the cross-border cooperation in the area of disaster risk management, and (iii) enhancing the regional capacity to supply/share/exchange

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⁹ http://www.unisdr.org/europe/publications/v.php?id=7650

http://www.unisdr.org/preventionweb/files/1410_Jointstatement.pdf

¹¹http://www.dppi.info/?q=system/files/FinalMinutes%20of%20XVIII%20DPPI%20SEE%20Regional%20Meet ing%20Sarajevo%206-7%20April%202009.pdf

¹² See section 3.6 "Link activities" for details and

data/information in the area of disaster risk reduction. The project has been prepared starting from these priority areas identified by the Sector Plan for IPA Multi-beneficiary 2011 and, implicitly, considers the recommendations made by IPA Beneficiaries and other relevant stakeholders during the consultation process that accompanied its preparation.

The project was prepared and will be implemented by two specialized organizations, UNISDR and WMO, in consultation with IPA beneficiaries¹³, HFA focal points and NMHS.

UNISDR is the focal point in the United Nations system to promote links and synergies between, and the coordination of DRR activities in the socio-economic, humanitarian and development fields, as well as to support policy integration concerning DRR. UNISDR is the secretariat of the International Strategy for Disaster Reduction (ISDR), a network of partnerships among governmental institutions, academia, NGOs and community based organizations which have a role in climate change adaptation and DRR at all level, from the international to communities.

UNISDR operates globally through the presence five main regional offices. In Europe, its regional office is based in Brussels and actively operates in the Western Balkans and Turkey jointly with ISDR partners such as the World Bank, WMO, UNDP and other regional organizations such as DPPI SEE and RCC SEE.

WMO is a specialized agency of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. In collaboration with other UN agencies and the National Meteorological and Hydrological Services, WMO supports the implementation of a number of environmental conventions and is instrumental in providing advice and assessments to governments on related matters. These activities contribute towards ensuring the sustainable development and well-being of nations.

Disaster risk reduction is at the core of the mission of the World Meteorological Organization and the National Meteorological and Hydrological Services of its 189 Members. WMO, through its scientific and technical programmes, its network of Global Meteorological Centres and Regional Specialized Meteorological Centres, and the NMHSs, provides scientific and technical services. This includes observing, detecting, monitoring, predicting and early warning of a wide range of weather—, climate— and water-related hazards. Through a coordinated approach, and working with its partners, WMO addresses the information needs and requirements of the disaster risk management community, effectively and in a timely fashion.

WMO's strategic goals in disaster risk reduction are derived from key activities of the Hyogo Framework for Action (HFA) falling under the mandates of the NMHSs. The strategic goals were approved by WMO Congress (the supreme governing body of WMO) in 2007:

 Development, improvement and sustainability of early warning systems, in particular related to scientific and technical infrastructures, systems and capabilities for research, observing, detecting, forecasting and warning of weather-, water-, climate-related hazards;

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¹³ Due to its special status, Kosovo was not directly involved in the consultation process; however, the communication with Kosovo took place through UNMIK

- O Development, improvement and sustainability of systems, methods, tools and applications of modern technologies such as geographic information systems for recording, analyzing and providing hazard information for risk assessment, sectoral planning and other informed decision-making;
- Development and delivery of warnings, specialized forecasts and other products and services that are timely, understandable to those at risk, and driven by requirements of disaster risk reduction decision processes and operations;
- O Stimulate a culture of disaster preparedness through strengthening of capacities for better integration of NMHSs' products and services in disaster risk reduction, and continued public education and outreach campaigns;
- Strengthen WMO and NMHSs cooperation and partnerships for implementation of disaster risk reduction in national, regional and international mechanisms and structures.

The activities proposed in this project are in line with the IPA beneficiaries' DRR actions guided by the framework provided by the Hyogo Framework for Action and their DRR national strategies (n.b. UNISDR has in each beneficiary a senior level governmental counterpart, the HFA Focal Point, who is entrusted with monitoring DRR national interventions and progresses and reports in the HFA monitoring report¹⁴). They have been established in coordination with IPA beneficiaries and are based on the identified needs for addressing DRR and achieve further enhancements of their national meteorological and hydrological systems, products and services through regional cooperation and collaboration, being therefore complementary to and consistent with the national development efforts in the target region.

In implementing the project, UNISDR and WMO will closely liaise with DPPI SEE which could facilitate knowledge sharing and act as an information dissemination centre for regional activities.

3.2 Project impact, catalytic effect, sustainability and cross border impact

Concerning the Disaster Prevention and Risk Reduction component of the project (results 1, 2, 7 and 8) the following medium and long term impact of the project is expected:

- Increased political and financial commitments of Western Balkans and Turkey towards Climate Adaptation and DRR investments. This is achieved through the results 1 and 8 aimed at strengthening the capacity and knowledge of senior level policy makers in DRR and increase the awareness of local administrators and citizens of urban community on the benefits of investments in disaster prevention and risk reduction.
- Increased efficiency and effectiveness of regional investments in DRR through the benefits of improved knowledge and coordination of the DRR actors in the Western Balkans and Turkey achieved through the result 2 on enhancement of the regional knowledge basis on climate change adaptation and risk reduction.

¹⁴ See Annex VI for details.

- Reduced risk of severe fiscal impact on public budgets of Western Balkan countries and Turkey through an effective regional mechanism for disaster risk transfer such as the SEE Catastrophe Risk Insurance Facility. This will be achieved through the outcomes envisaged under the Task 7 on supporting the access of beneficiary countries to insurance and reinsurance products for disasters.

The effectiveness, sustainability and catalytic effect of the project will be guaranteed by the fact that the activities have being designed in participation with the beneficiary countries and based on the achievements of previous regional DRR projects (such as UNISDR – WB SEEDRMAP, IPA MB 2008 DRR projects, etc...). This will avoid duplications and assure that identified needs are demand-driven by the beneficiary countries.

The regional approach adopted by the identification of the project activities, outputs and outcomes, considered the cross-boarder issues that are embedded in DRR interventions (such as regional coordination, capacity building, knowledge management, etc...) and the integration of Western Balkans and Turkey DRR measures with those already adopted by the EU countries

The action component related to capacity development of the hydro-meteorological sector in support of DRR (results 3, 4, 5 and 6) is expected to have the following medium and long term impact:

- 1) Improved knowledge and awareness of the risks associated with hydro-meteorological hazards will allow for better sectoral planning and effective disaster preparedness, as well as for more focused early warning systems.
- 2) The improved potential of the NMHSs of the beneficiaries for delivering timely and accurate warnings for hydro-meteorological hazards, as well as, the better cross-border data sharing, will lead to effective prevention and post-disaster response, thus contributing to significant reductions in loss of live, property and economic productivity.
- 3) The improved capacity in climate risk management and provision of information to support climate change adaptation as part of national and regional DRR agenda will enable decision-makers to make informed decisions in the process of medium to long term operational and strategic planning.
- 4) Significant impact for the region will be achieved through designing a regional Multi-Hazard Early Warning System (MHEWS) and promoting its adoption in the region at both national and regional level. It is expected that such regional MHEWS, composed of harmonized national MHEWS elements, would contribute to achieving the overall objective of the action, i.e. reducing the vulnerability to natural disaster of weather, water and climate origin.

The capacity development of the hydro-meteorological sectors of the beneficiaries will have a catalytic affect at national and regional level by providing the basis for informed decision-making, thus reducing the uncertainties related to the weather factor. This in turn will allow refinement of operational procedures, contingency planning and medium to long term planning of DRR activities.

The need for investment in modernization and securing budget for covering the running operational costs of the hydro-meteorological services should be better understood by the

governments in order to ensure sustainability of these services. It is expected that, through the project activities, the hydro-meteorological sector will be better integrated in the national DRR plans and the understanding of the role and potential of the hydro-meteorological services among the DRR stakeholders will be improved, resulting in increased sustainability and continuous improvement.

The regional approach adopted for this action ensures impact and benefits to all and real cross-border harmonization and collaboration. In particular, issues related to the cross-border nature of the hydro-meteorological hazards (such as, forest fires, floods, droughts) will be addressed through establishing relevant multi-national procedures, data and recourse sharing. The potential of the existing regional centres of excellence (e.g. the Drought Management Centre for SE Europe (DMCSEE), the SE European Virtual Climate Change Centre (SEEVCCC), the Regional Instrument Centre (RIC)) will be better utilized resulting in effective capacity building and harmonization. The cooperation with other international and regional organization will also ensure the cross-border dimension of the action.

3.3 Results and measurable indicators:

Results and measurable indicators in relation with Task 1: - UNISDR

Results:

Result 1: Enhanced regional institutional capacity and coordination with respect to disaster risk reduction and climate change adaptation measures.

- 1.1. A number of relevant IPA Beneficiaries' officers who have responsibilities in their institutions on issues related to DRR acquire relevant knowledge in the areas of climate change adaptation and risk reduction through their engagement in the Exchange DRR Programme with EU selected countries in the context of the European Forum for DRR (EFDRR).
- 1.2. Improved institutional DRR capacity and coordination at regional level, as a result of participation of IPA beneficiaries in regional and national workshops on DRR and climate change adaptation.

- o At least 70% of the IPA beneficiary countries' participants at the DRR Exchange Programme achieve a score assessed as useful.
- o At least 70% of the IPA beneficiaries take part in the EU-SEE DRR Exchange Programme for experts.
- o The report with the results and lessons learnt from the Exchange Programme is published by the end of the intervention and shared among the IPA beneficiaries.
- o At least one national DRR workshop for each IPA beneficiary is organized by the end of the intervention.
- o One regional workshop on DRR in Western Balkans and Turkey is organized by the end of the intervention.

Results and measurable indicators in relation with Task 2 - UNISDR

Results:

Result 2: Strengthened regional capacity and cooperation towards data and knowledge sharing on risks.

- 2.1. Develop a Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information specific to disaster risk reduction. The KMS will be hosted by DPPI SEE. The KMS will function as a hub of information on risks in IPA countries and a database of publications on DRR from relevant academic institutions and ISDR partners. In a restricted area it will contain a roster of DRR regional experts which IPA and EU countries can consult and use as needed.
- 2.2. Published guidelines on the use of the KMS and capacity building of IPA Beneficiaries' officers on its use and functions.

Indicators

- o By the end of the intervention the KMS is fully functional in all its components and used by IPA beneficiaries and the general public.
- o By the end of the intervention KMS guidelines are published and shared with the IPA beneficiaries' officers and relevant national and regional stakeholders as necessary.

Results and measurable indicators in relation with Task 3 - WMO

Results

Result 3: Enhanced regional risk assessment capacities.

- 3.1. Hazard databases archived per standards aligned with EU requirements.
- 3.2. A number of relevant professionals from IPA Beneficiaries trained on hazard mapping and modelling.
- 3.3. Risk modelling tools available to and implemented by IPA Beneficiaries.
- 3.4 Establishment of links and collaboration with European institutions maintaining hazard data bases.

Indicators

o Utility/Effectiveness of the databases created and utilized¹⁵.

o Conformity of the databases created with the EU requirements.

¹⁵ To be measured based on assessment/evaluation by IPA Beneficiaries (specific evaluation sheets will be distributed by the project team to the relevant national stakeholders, in this regard).

- o Completeness of the database (percentage of the country surface covered, number of hazards for which data are available).
- o Utilization of the databases created.
- o Participation in the mapping and modelling workshops (percentage of participant IPA Beneficiaries and number of participants-total number, as well as the number per participant IPA Beneficiary/other stakeholders).
- o Utility/Effectiveness of the risk modelling tools produced.
- o Number of national institution regularly using the mapping and modelling tools provided by the project.
- o Percentage of the country area on which mapping and modelling tools deliver operational products

Results and measurable indicators in relation with Task 4 - WMO

Results

Result 4: Enhanced capacity of IPA Beneficiaries to prepare and deliver accurate and timely warnings for hazardous meteorological and hydrological phenomena.

- 4.1. Harmonized Numerical Weather Prediction capabilities in support of Early Warning Systems in IPA Beneficiaries.
- 4.2 Increased accuracy (in terms of increased probability of detection (POD), reduced false alarms ratio (FAR), forecast of intensity and time of occurrence/cessation of events) and timeliness (sufficient lead time to allow relevant action) of the warnings.
- 4.3 Improved flood forecasting capabilities (in terms of timeliness, accuracy, dissemination)
- 4.4. Increased cross-border exchange of real-time data, forecasts and warnings.
- 4.5 Increased qualification of meteorological and hydrological forecasters providing products and services in support of DRR.
- 4.6 Issues related to quality of observations in some IPA beneficiaries resolved through assistance in calibration and maintenance
- 4.7. Increased capacity in introduction of quality assurance standards/guidelines in support of DRR, including improved forecast verification techniques.

- o Number of IPA beneficiaries capable of using "state-of-the-art" Numerical Weather Prediction products in predicting hazardous weather and issuance of warnings.
- o Number of IPA beneficiaries utilizing the developed flood forecast guidance.
- o Ratio current to previous real-time data cross-boarder exchanges

- o Number of meteorological and hydrological forecasters trained.
- o Number of IPA beneficiaries compliant with the international standards for calibration and maintenance of observing equipment.
- o Increased compliance with the quality assurance standards/guidelines developed with relevant international standards and best practices.

Results and measurable indicators in relation with Task 5 - WMO

Results

Result 5: IPA Beneficiaries' improved capacity in climate risk management and in provision of information to support climate change adaptation as part of national and regional DRR agenda.

- 5.1. Increased capacity of IPA Beneficiaries' to utilize the tools specific to drought management.
- 5.2. A number of IPA Beneficiaries' specialized staff trained on the use and application of long-range forecasts tools and climate watches.
- 5.3. Increased NMHSs awareness of their role and new type of services to be provided in support of the activities in the field of insurance.
- 5.4. Ensuring sustainability of the South-East Europe Climate Outlook Forum (SEECOF) as a regional cooperation mechanism for capacity-building in long-range forecasting and climate watch.
- 5.5 Elaboration of sector-specific Statements of Requirements related to LRF, Climate Change and Climate Watches in support of climate risk management
- 5.6. Assessment of climate data existing at regional level.
- 5.7. IPA beneficiaries provided with a common methodology for transferring climate data to digital media; majority of existing national hard-copy data archives transferred to digital media.

- o Utility/Effectiveness of the developed tools specific to drought management.
- o Number of staff from IPA Beneficiaries trained in the use of drought management tools.
- o Number of staff from IPA Beneficiaries trained in the use and interpretation of long-range forecasts, climate change scenarios, and climate watches.
- o Number of NMHSs receiving assistance in climate data rescue.
- o Amount of national hard-copy data archives digitized.

- o Number of seconded staff from IPA Beneficiaries to the Drought Management Centre.
- Number of participants in the regional training on the role of NMHSs in support of activities in the field of insurance; number of NMHSs providing or having plans for provision of specific service to insurance sector.
- o Number of SEECOF sessions conducted;
- o Number of climate experts from IPA beneficiaries in SEECOF capacity-building component;
- o Number of representatives of users participating in the SEECOF dialogue;
- o Assessments of seasonal outlooks produced by SEECOF and feed-back from users on the usefulness of seasonal outlooks in decision-making process.

Results and measurable indicators in relation with Task 6 -WMO

Results

Result 6: A seamless regional Multi-Hazard Early Warning System (MHEWS) designed and promoted for adoption at national and regional level, with proper consideration of the existing specific needs and situation in the Western Balkans and Turkey.

- 6.1. A design document developed through regional collaboration providing adequate technological and institutional solutions for building the business case for a regional MHEWS, composed of inter-operable national Early Warning Systems.
- 6.2. Cost-benefit analysis for the realization of the designed regional MHEWS.
- 6.3 Addressing relevant institutional and procedural issues necessary to enable the implementation of effective and efficient MHEWS.
- 6.4 Introduction of the underpinning Quality Assurance concept to become integral part of NMHS's management.
- 6.5. Raising awareness of Governments of the need for and expected benefits from the implementation of the national and regional components of the regional MHEWS.
- 6.6. Identification of potential sources for funding the required infrastructure through proactive interaction with relevant financial institutions and development partners.

- o Realism and comprehensiveness of the design document prepared.
- Realism and utility of the cost-benefit analysis accompanying the preparation of the design document.
- o Number of NMHSs of IPA beneficiaries introducing QMS elements in the provision of products and services for DRR.

o Promotion and adoption of the regional MHEWS design at the level of IPA beneficiaries' governments and commitment to support its realization.

Adoption by potential financing institutions of the proposed MHEWS design and commitment to participate in the financing.

Results and measurable indicators in relation with Task 7 - UNISDR

Results

Result 7: Insurance and reinsurance products for disaster risks are promoted among the IPA beneficiaries (Albania, Bosnia and Herzegovina – including the Republic of Srpska -, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey) in collaboration with the private sector, the World Bank and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF).

- 7.1 Developed a comprehensive training package for IPA beneficiaries on the use of insurance and reinsurance tools and regional insurance facility such as the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF).
- 7.2. Five training sessions on insurance and reinsurance products and the CRIF delivered to IPA beneficiaries in collaboration with the World Bank.
- 7.3 Increased awareness among the general public and Small-Medium Enterprises on the economic benefits provided by insurance products for disasters.

Indicators

- o Training package on insurance and reinsurance is fully developed
- o At least five training sessions delivered by the end of the intervention
- o By the end of the intervention a senior level meeting on insurance for DRR has been organized and attended at least by 70% of the IPA beneficiaries.
- O Visibility material for the awareness of insurance to mitigate the effect of disasters has been developed by the end of the intervention.

Results and measurable indicators in relation with Task 8 - UNISDR

Results

Result 8: Increased public awareness on disaster risk reduction.

- 8.1. Citizens of Western Balkans countries and Turkey living in urban areas are better aware of the importance of disaster risk reduction to preserve their livelihoods and assets.
- 8.2. Western Balkans countries and Turkey enhanced their knowledge on communication and DRR through capacity building activities involving governments, media and other relevant stakeholders.

- At least a city in each IPA beneficiary countries joined the World Disaster Campaign to promote awareness of DRR among their urban communities. Compendium of good practices in urban risks in Western Balkans countries and Turkey is published by the end of the intervention.
- At least 70% of the IPA beneficiaries participate to the project regional workshop on urban risks organized by the end of the intervention in collaboration with the Council of Europe and DPPI SEE.

By the end of the intervention, relevant ISDR material on urban risks and DRR awareness is published and distributed.

3.3 Activities:

Task 1: Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change. - UNISDR

Activities:

1.1. Organization of study tour covering 3 EU study countries for 2 participants for each IPA beneficiary.

The Programme will involve IPA beneficiary's expert/governmental representatives (including National Platforms coordinators, HFA Focal Points) and will address DRR climate risk management issues. The programme will also address the needs identified by IPA Beneficiary countries towards sharing good practices in DRR with EU countries.

- 1.2 Development of the Exchange Programme Study material.
- 1.3 Development of a final report of the DRR Exchange Programme
- 1.4 Organization of a workshop on DRR, HFA and NP coordination in each beneficiary by the end of the intervention
- 1.5 Organization of a senior level regional workshop on climate change adaptation and DRR cross-bordering issues in Western Balkans and Turkey.

Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. - UNISDR

Activities:

- 2.1 Development of a KMS consisting of a web-accessible database of national and regional information specific to disaster risk reduction, including regional experts' contacts and resource material
- 2.2 Consolidation of relevant information and publication and other content to be included in the KMS taking into account the DRR material developed nationally, regionally and internationally in the last 10 years.
- 2.3 Preparation of training guidelines on the use of the KMS to be shared with IPA beneficiaries countries

Task 3: Enhance the regional risk assessment and mapping capacities. – WMO

Activities

- 3.1. Historical hazard data rescue:
 - meteorological and hydrological variables available on paper will be rescued by digitizing and hazard databases will be archived per standards aligned with EU requirements;
 - hazard data quality assurance, homogenization and standardization.
- 3.2. Delivery of hazard mapping and modelling workshops.
- 3.3. Data analysis, development and pilot testing of risk modelling tools (development and implementation of probabilistic hazard modelling tools and modules customized for IPA Beneficiaries).
- 3.4 Implementation and operation of risk modelling tools.
- A 3.5 Conduct survey of available hazard databases in Europe and collaborate with European institutions that host such databases.

Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR. - WMO

Activities:

- 4.1. Enhancement of Numerical Weather Prediction (NWP) capabilities of IPA beneficiaries in support of Early Warning Systems.
- 4.2. Enhancement of the cross-border exchange of real-time data (weather radar, hydrological data, etc).
- 4.3. Development of floods forecast guidance and integrated flood forecast capacity.
- 4.4. Enhancement of qualification of forecasters required for 24/7 operations in support to Early Warning Systems, including training in severe-weather forecasting and warning.
- 4.5 Training of hydrology forecaster in the integration of NWP in hydrological forecasting models.
- 4.6. Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS) training, resolving deficiencies related to quality of observational data (calibration and maintenance of instruments), improved forecast verification.

Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda - WMO

Activities:

- 5.1. Enhancing capacity in drought risk management through strengthening the role and operation of the Drought Management Centrefor South-East Europe (DMC/SEE), through secondment of staff from IPA Beneficiaries to this Centre and provision of training on specialized drought-management tools.
- 5.2. Organisation of regular sessions of the South-East Europe Climate Outlook Forum (SEECOF) at the South-East European Virtual Climate Change Center (SEEVCCC) comprising capacity-building of climate experts from IPA beneficiaries, collaborative production of regional climate outlooks and interpretation of regional climate change scenarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of respective sector-specific Statements of Requirements.
- 5.3. Training in the use and interpretation of long-range forecasts, climate watch related aspects, and climate scenarios in application to various user sectors, including through secondment of staff from IPA beneficiaries to SEEVCCC.
- 5.4. Training on the role of NMHSs in support of activities in the field of insurance.
- 5.5. Climate data rescue including assessment of existing national data archives and applying a common methodology for transferring data to digital media.
- 5.6 Implementation of QMS features, such as user-friendly webpages for climate service access including user feedback functions, provision of contact information, provision of methodology information etc.

Task 6: Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework. - WMO

Activities:

6.1. Assessment of the existing national Early Warning Systems, gap analysis with respect to the four components of effective early warning systems¹⁶ and preparation of a concept document identifying the technological and institutional needs for building the business case for a regional Multi-Hazard Early Warning System.

- 6.2 Development of capacity of IPA beneficiaries in quality assurance of services as underpinning element of the early warning systems.
- 6.3. Preparation of a technical design document describing a seamless regional Multi-Hazard Early Warning System, encompassing optimized monitoring networks, forecasting facilities, telecommunications, institutional and procedural aspects, human resources. Cost-benefit analysis will accompany the preparation of this document, which should provide also the expected costs and possible sources of funding.

¹⁶ The four components of effective early-warning systems are (i) detecting, monitoring and forecasting hazards; (ii) analysing risks and utilizing this information in the emergency preparedness and planning as well as the warning messages; (iii) disseminating timely warnings, which should carry the authority of government; (iv) activating emergency plans to prepare and respond

- Regional meetings and workshops addressing the design of the four components of Early Warning Systems and their inter-linkages for development of a harmonized regional Multi-Hazard Early Warning System.
- 6.4. Organization of a regional forum to present the design document and promote it for adoption at national and regional level.
- 6.5. Presentation of the design to potential donors and financing institutions with the view to get support for implementation.

Task 7: Insurance and reinsurance products for disaster risk transferred are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank and the Catastrophe Risk Insurance Facility (CRIF) - UNISDR

Activities:

- 7.1 In collaboration with the World Bank recruitment of an highly –reputed consulting firm to develop the training package needed to promote the use of insurance and reinsurance products in Western Balkans and Turkey and build the beneficiary countries capacities for joining the SEE CRIF.
- 7.2 In collaboration with the World Bank and other ISDR partners, organization of five regional sessions of training for delivery the package on insurance and reinsurance developed through the activity 7.1 to create a standardized approach to settling insurance claims, public information campaigns on the benefits of catastrophe insurance and how to join the existing SEEC Catastrophe Risk Insurance Facility.
- 7.3 Organization of a high level event and press conference with IPA countries and EU countries media to enhance the visibility of the insurance component and overall the project intervention for sensitization of the public opinion and policy makers on issues related to DRR.
- 7.4 Flyers, brochures and other material developed to enhance the awareness on the importance of insurance against disasters and enhance the visibility of the intervention among the general public in beneficiary countries.

Task 8: Increase public awareness in relation to disaster risk reduction. - UNISDR

Activities:

8.1 Implementation of the World Disaster Reduction Campaign 2011-2012 "Making Cities Resilient: My City Is Getting Ready" in the Western Balkans and Turkey¹⁷ through specific launching events in collaboration with the mayors and local authorities.

The World Disaster Reduction campaign, started in 2010, aims at enhancing the awareness of local mayors and decision makers on the importance of investing resources in DRR.

¹⁷ The campaign will build on the work previously undertaken by several International Strategy for Disaster Reduction partners (UNICEF, World Health Organizations, local NGOs) on school and hospital safety

- 8.2 Development of brochure, flyers and other communication/visibility material such as videos to be published on web social networks and PreventionWeb on the importance of DRR for IPA countries citizens.
- 8.3 Organization of a regional workshop in collaboration with EUR-OPA and DPPI SEE on Urban Risks and lessons learnt from the implementation in the Western Balkans and Turkey of the World Disaster Reduction Campaign.
- 8.4 Development of a compendium of good practices in urban risk reduction collected from the experiences of the Western Balkans and Turkish cities which participated in the World Disaster Reduction campaign
- 8.5 Development of common/regional communication and media strategies standard for disaster risk reduction through the translation of relevant DRR materials for communication into local languages (and web publishing).
- 8.6 Organization of a regional event on communication and DRR The event targets the main national media (TV, Radio & Newspapers) and relevant governmental officers such as the IPA HFA Focal Points.

A mid-term project evaluation and a final evaluation will be performed by an external consultant.

3.5 Conditionality and sequencing:

The project builds on the results of IPA MB 2008 DRR Programme and therefore the prior achievement of the IPA MB 2008 deliverables which serve as grounds for its implementation represents a pre-requisite.

At the start of the project, a baseline assessment will be performed to check the extent to which the assumptions and conditions at the time of the implementation are in line with the ones initially expected, collect the benchmarks for project monitoring and evaluation and consult the IPA beneficiaries and partners to tune up the implementation timeframe.

3.6 Linked activities

Under IPA MB 2008, a Regional Programme on Disaster Risk Reduction in South-East Europe has been implemented. It consists of 2 Activities, implemented by UNDP (Activity 1), respectively by WMO (Activity 2). Under the Activity 1, UNDP provides technical assistance to candidate countries and potential candidates for eventual integration/mainstreaming of DRR into the National Development Plans, as well as for strengthening of the National Platforms, development of the disaster management authorities' human resources and cross-border cooperation and coordination on DRR issues. Under the Activity 2, WMO provides assistance to the same beneficiaries for integrating the National Meteorological and Hydrological Services into Disaster Risk Management Planning, as well as for developing the human, technical and institutional capacity needed to support networking and trans-boundary sharing of weather and climate data and information products. The project also envisages integration of the SEE NMHS into the European Meteorological Networks.

Under IPA MB 2009, support is provided to candidate countries and potential candidates in the area of Civil Protection Cooperation. The project activities envisage increasing the IPA Beneficiaries' capability to work with the Community Civil Protection Mechanism and to

contribute to the development of their civil protection capacities through specific trainings, workshops, exchange of experts and exercises.

South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP), developed by the WB and UN/ISDR, based on the findings and recommendations of several strategic reports/reviews/studies commissioned by the same organizations and the World Meteorological Organization (WMO), represents a key initiative in the area of disaster risk management. SEEDRMAP builds on World Bank experience, as well as on the experience of many countries in disaster risk reduction. Its objective is to reduce vulnerability of SEE countries to natural and man-made disasters by building the capacity and promoting a coordinated approach in disaster risk mitigation, risk transfer, preparedness and response. In this regard, SEEDRMAP provides a menu of options for SEE countries to reduce the risk of disasters and to strengthen preparedness and capacity response which include measures for (i) disaster risk mitigation; (ii) disaster risk reduction and hedging instruments; (iii) adaptation; and (iv) disaster preparedness.

3.7 Lessons learned

Important lessons to be considered in future programme and project design have been learnt so far from previous/ongoing multi-beneficiary programmes and projects in the field of environment and disaster risk reduction, including as result of "Thematic evaluation of EU pre-accession multi-beneficiary assistance to Western Balkans and Turkey in the fields of environment and disaster risk reduction" carried out during 2010. They emphasize the direct proportionality between the success of a programme/project and its beneficiaries' sense of ownership over and involvement in it, as well as the fact that a need driven approach is essential in order to achieve effectiveness for an action. It has been also learnt that good communication and coordination among all key stakeholders are crucial for any programme/project's success and therefore proper communication "protocols"/"procedures" are to be established from the very beginning and complied with throughout the process and proper coordination mechanisms/structures are to be in place. Also, in order to be effectively secured for the "after implementation" stage, sustainability is to be thoroughly considered in the "planning" stage.

4. Indicative Budget (amounts in EUR)

							sou	RCES OF FU	INDING			
TOTAL EXP.RE			IPA EU CONTRIBU	IPA EU CONTRIBUTION NATIONAL CONTRIBUTION PRIVATE (PRIVATE CONTRIE	BUTION				
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(c)+(d)	EUR (b)	%(2)	Total EUR (c)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Activity 1												
contract 1	_	Х										_
TOTA	L IB		2590000	2200000	85%		390000	15%				
TOTAL	_ INV		-	-	-				-	-		
TOTAL P	ROJEC	Т	2590000	2200000	85%						390000	15%

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROW

Amounts net of VAT

- (1) In the Activity row use "X" to identify whether IB or INV
- (2) Expressed in % of the **Total** Expenditure (column (a))

5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1	n/a	Q 4 2011	Q 4 2013

6. Cross cutting issues

6.1 Equal Opportunity

Equal opportunity principles and requirements have been considered in designing the Action and will be thoroughly considered during its implementation.

6.2 Environment

The project does not have a direct immediate impact on the environment but is intended to build institutional and technical capacities which will have a positive impact on the environment in the medium and long term perspective.

6.3 Minorities

The project will not allow for any discrimination, be it related to minorities or other issues.

ANNEXES

- I Logical framework matrix in standard format
- II Amounts (in EUR) contracted and disbursed per quarter over the full duration of project
- III Description of Institutional Framework
- IV Reference to laws, regulations and strategic documents:
- V Details per EU funded contract
- VI Details on beneficiaries
- VII List of acronyms

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR	Project Fiche	Programme name and number	CRIS No.: 022-964
Building Resilience to Disasters i	n Western Balkans and Turkey	Contracting period expires: 31 December 2012	Disbursement period expires: 30 November 2015
		Total budget: EUR 2 590 000	IPA budget: EUR 2 200 000
Overall objective	Objectively verifiable indicators	Sources of Verification	
To reduce vulnerability of IPA Beneficiaries to natural disasters, in line with the Hyogo Framework for Action (HFA), and increase their resilience to climate change.	HFA indicators.	HFA reports for SEE region. Statistical reports from IPA Beneficiaries'	

¹⁸ n.a. EMDAT is the international database on disasters

Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
To enhance the capacity of IPA Beneficiaries to address disaster risk reduction in both today's and the future predicted climate.	Increased number of IPA beneficiaries exchanging hazard monitoring data and hydro-meteorological warnings. Increase in accuracy and timeliness of warnings issued. A regional Multi-Hazard Early Warning System (MHEWS) design developed	HFA reports for SEE region. Minutes of the regional forum aimed at promoting the Multi-Hazard Early Warning System (MHEWS) for adoption at national and regional level, organized under Activity 6. Project reports. Other reports and studies regarding DRR in the region. Newspaper articles.	National Platforms coordinators, Hyogo Framework for Action (HFA) focal

¹⁹ The database will be designed in a way that will allow keeping track on its utilization.

Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
	Region-specific tools and guidance in coping with floods and droughts.	Reports of HFA focal points and NMHS to UNISDR, respectively to WMO ²⁰ .	Stable socio-political conditions in the region are maintained.
	Significant increase in the qualification and competence of meteorological and hydrological forecasters and experts	Mid-Term and Final Evaluation report of the project. Regular verifications of forecasts and warnings. Feed-back from users on usefulness of warnings, long-range forecasts and outlooks. National climate archives.	Feasible solutions for future sustainability of the capacities created during project implementation (i.e. the Knowledge Management System created, the design of the regional Multi-Hazard Early Warning System, etc) will
	Number of countries developing their own National DRR strategies and programmes.		

²⁰ A system that would allow keeping track of developments that the project contributed to through the capacities created/"value added" during its implementation (i.e. regarding preparation of specific strategic documents, changes in legislation, etc) is to be set up in the project preparatory phase; they will very probably involve long term reporting to implementing organization by their national counterparts in IPA Beneficiaries.

Result 1: Enhanced regional institutional capacity and coordination with respect to disaster risk reduction and climate change adaptation measures. 1.1. A number of relevant IPA At least 70% of the IPA beneficiaries and surface programme achieve a score assessed as useful. 1.1. A number of relevant IPA At least 70% of the IPA beneficiaries take Beneficiaries' officers who have responsibilities in their institutions on issued relevant knowledge in the areas of climate change adaptation and risk reduction through their engagement in the Exchange Drogramme for experts. The report with the results and lessor adaptation and risk reduction through their engagement in the Exchange Drogramme in the context of the European Forum for DRR (EFDRR). At least one national DRR workshop for each IPA beneficiaries. In regional and national workshops on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR and climate change adaptation. At least one national DRR workshop on DRR in Western Balkans and Turkey is organized by the end of the intervention. Agenda and list of participants in the program/rations carried out (i.e. trainings carried o	Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Management System created.	Result 1: Enhanced regional institutional capacity and coordination with respect to disaster risk reduction and climate change adaptation measures. 1.1. A number of relevant IPA Beneficiaries' officers who have responsibilities in their institutions on issues related to DRR acquired relevant knowledge in the areas of climate change adaptation and risk reduction through their engagement in the Exchange DRR Programme with EU selected countries in the context of the European Forum for DRR (EFDRR). 1.2. Improved institutional DRR capacity and coordination at regional level, as result of participation of IPA beneficiaries in regional and national workshops on DRR	At least 70% of the IPA beneficiaries' participants at the DRR Exchange Programme achieve a score assessed as useful. At least 70% of the IPA beneficiaries take part in the EU-SEE DRR Exchange Programme for experts. The report with the results and lesson learnt from the Exchange Programme is published by the end of the intervention and shared among the IPA beneficiaries. At least one national DRR workshop for each IPA beneficiary is organized by the end of the intervention. One regional workshop on DRR in Western Balkans and Turkey is organized	Program/action evaluation sheets ²¹ filled in by the participants in the program/various actions carried out (i.e. trainings, workshops, study tour, etc). Project reports. Action (i.e. training, study tour, etc) reports. Minutes of the meetings organized. Monitoring reports ²² . Training curricula. Training materials. Guidelines produced. Agenda and list of participants in the events organized (workshops, etc). Agreement document between implementing organization(s) and DPPI with regard to future maintenance and	Participants in each action of the Program are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action). Timely availability of relevant participants in the Program ensured by all IPA beneficiaries. Sustainability and effective use of capacities and coordination developed through the project will be effectively ensured ²³ . Effective commitment of key regional actors, such as the Disaster Preparedness and Prevention Initiative for South-East Europe (DPPI), in line with the project requirements and based on a clear mandate from the key stakeholders. IPA MB 2008-DRR Programme ²⁴ on whose outcomes the project builds successfully finalized and its outputs

²¹ The template for evaluation sheets should include a section/question referring to the extent to which the action evaluated has been indeed relevant and to the probability that the knowledge acquired will be effectively used by the participant and/or the event's relevance/utility of organized events (workshops, etc) for coordination, planning and legislation (depending on the type of action evaluated). Such evaluation sheets are to be distributed to participants for each action taken under theprogram.

²² i.e. Results Oriented Monitoring (ROM) reports.

²³ This requires clear identification of the ways to ensure such sustainability from an early stage of the project by the project team, in close cooperation with IPA beneficiaries.

²⁴ See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
		Evidence on the awareness campaign (i.s. awareness materials disseminated, etc).	
		Press releases.	
		Newspaper articles.	
		Mid-Term and Final project Evaluation.	
Result 2: Strengthened regional capacity			Participants in all project activities are
and cooperation towards data and knowledge sharing on risks.2.1. Developed a Knowledge Management	and used by IPA beneficiaries and the general public.		selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action).
	guidelines are published and shared with the IPA beneficiaries' officers and		Timely availability of relevant participants in the project activities ensured by all IPA beneficiaries.
hub of information on risks in IPA countries and a database of publications on DRR from relevant academic institutions and ISDR partners. In a restricted area it will contain a roster of DRR regional experts which IPA and EU countries can			Sufficient relevant information regarding DRR (i.e. regional expertise, contacts, resource material) available and timely accessible to the project team.
consult and use as needed. 2.2. Published guidelines on the use of the KMS and capacity building of IPA beneficiaries' officers on its use and			IPA MB 2008-DRR Programme ²⁵ on whose outcomes the project builds successfully finalized and its outputs made available to the project team.
functions.			

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²⁵ See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 3: Enhanced regional risk assessment capacities. 3.1. Hazard databases in line with EU standards 3.2. A number of relevant professionals from IPA Beneficiaries trained on hazard mapping and modelling. 3.3. Risk modelling tools available to and implemented by IPA Beneficiaries. 3.4 Establishment of links and collaboration with European institutions maintaining hazard data bases.	 Utility/Effectiveness of the databases created and utilized²⁶. Conformity of the databases created with the EU requirements. Completeness of the database (percentage of the country surface covered, number of hazards for which data are available). Utilization of the databases created. Participation in the mapping and modelling workshops (percentage of participant IPA Beneficiaries and number of participants-total number, as well as the number per participant IPA Beneficiary/other stakeholders). Utility/Effectiveness of the risk modelling tools produced. Number of national institution regularly using the mapping and modelling tools provided by the project. Percentage of the country area on which mapping and modelling tools deliver operational products 	Satisfaction surveys on training events. Reports.	Meteorological and hydrological variables/data needed available on paper and timely put at the project team's disposal. Participants in all project activities are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action). Timely availability of relevant participants in the project activities ensured by all IPA beneficiaries. IPA MB 2008-DRR Programme ²⁷ on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

²⁶ To be measured based on assessment/evaluation by IPA Beneficiaries (specific evaluation sheets will be distributed by the project team to the relevant national stakeholders, in this regard).

²⁷ See details at "Linked projects" section

- Result 4: Enhanced capacity of IPA Beneficiaries to prepare and deliver accurate and timely warnings for hazardous meteorological and hydrological phenomena.
- 4.1. Harmonized Numerical Weather Prediction capabilities in support of Early Warning Systems in IPA Beneficiaries.
- 4.2 Increased accuracy (in terms of increased probability of detection (POD), reduced false alarms ratio (FAR), forecast of intensity and time of occurrence/cessation of events) and timeliness (sufficient lead time to allow relevant action) of the warnings.
- 4.3 Improved flood forecasting capabilities (in terms of timeliness, accuracy, dissemination)
- 4.4. Increased cross-border exchange of real-time data, forecasts and warnings.
- 4.5 Increased qualification of meteorological and hydrological forecasters providing products and services in support of DRR.
- 4.6 Issues related to quality of observations in some IPA beneficiaries resolved through assistance in calibration and maintenance
- 4.7. Increased capacity in introduction of quality assurance standards/guidelines in support of DRR, including improved forecast verification techniques.

- Number of IPA beneficiaries capable of using "state-of-the-art" Numerical Weather Prediction (NWP) products in predicting hazardous weather and issuance of warnings.
- Number of IPA beneficiaries utilizing the developed flood forecast guidance.
- Ratio current to previous real-time data cross-boarder exchanges.
- Number of meteorological and hydrological forecasters trained.
- Number of IPA beneficiaries compliant with the international standards for calibration and maintenance of observing equipment.
- Increased compliance with the quality assurance standards/guidelines developed with relevant international standards and best practices.

Regional survey of NWP capacity.

Monitoring results of data exchange.

Satisfaction surveys on training events.

Reports.

Forecast verification statistics.

Participants in all project activities are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action).

Timely availability of relevant participants in the project activities ensured by all IPA beneficiaries.

IPA MB 2008-DRR Programme on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

- Result 5: IPA Beneficiaries' improved capacity in climate risk management and in provision of information to support climate change adaptation as part of national and regional DRR agenda.
- 5.1. Increased capacity of IPA Beneficiaries to utilize the tools specific to drought management.
- 5.2. A number of IPA Beneficiaries specialized staff trained on the use and application of long-range forecasts tools and climate watches.
- 5.3. Increased NMHSs awareness of their role and new type of services to be provided in support of the activities in the field of insurance.
- 5.4. Ensuring sustainability of the South-East Europe Climate Outlook Forum (SEECOF) as a regional cooperation mechanism for capacity-building in longrange forecasting and climate watch.
- 5.5 Elaboration of sector-specific Statements of Requirements related to LRF Climate Change and Climate Watches in support of climate risk management
- 5.6. Assessment of climate data existing at regional level.
- 5.7. IPA beneficiaries provided with a common methodology for transferring climate data to digital media; majority of existing national hard-copy data archives transferred to digital media.

- Utility/Effectiveness of the developed tools specific to drought management.
- Number of staff from IPA Beneficiaries trained in the use of drought management tools.
- •Number of staff from IPA Beneficiaries trained in the use and interpretation of long-range forecasts, climate change scenarios, and climate watches.
- Number of NMHSs receiving assistance in climate data rescue.
- Amount of national hard-copy data archives digitized.
- Number of seconded staff from IPA Beneficiaries to the Drought Management Centre.
- Number of participants in the regional training on the role of NMHSs in support of activities in the field of insurance; number of NMHSs providing or having plans for provision of specific service to insurance sector.
- Number of SEECOF sessions conducted;
- Number of climate experts from IPA beneficiaries in SEECOF capacity-building component;
- Number of representatives of users participating in the SEECOF dialogue;

Assessments of seasonal outlooks produced by SEECOF and feed-back from users on the usefulness of

Result 6: A seamless regional Multi-Hazard Early Warning System (MHEWS) designed and promoted for adoption at national and regional level, with proper consideration of the existing specific needs and situation in the Western Balkans and Turkey.

- 6.1. A design document developed through regional collaboration providing adequate technological and institutional solutions for building the business case for a regional MHEWS, composed of inter-operable national Early Warning Systems.
- 6.2. Cost-benefit analysis for the realization of the designed regional MHEWS.
- 6.3. Addressing relevant institutional and procedural issues necessary to enable the implementation of effective and efficient MHEWS

design document prepared.

- Realism and utility of the cost-benefit analysis accompanying the preparation of the design document.
- Number of NMHSs of IPA beneficiaries introducing **OMS** elements in the provision of products Feed-back from financial institutions. and services for DRR.
- Promotion and adoption of the regional MHEWS design at the level of IPA beneficiaries' governments commitment to support its realization.
- Adoption by potential financing institutions of the proposed MHEWS design and commitment to participate in the financing.

• Realism and comprehensiveness of the Satisfaction surveys on meetings and workshops.

Reports.

Concept and Design documents.

Feed-back from IPA beneficiaries.

Participants in all project activities are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action).

Timely availability of relevant participants in the project activities ensured by all IPA beneficiaries.

Support to design developments from leading international experts.

Willingness of the governments of IPA beneficiaries to cooperate in realization of the regional MHEWS.

Proposed design fits to requirements for financing by international financing institutions.

IPA MB 2008-DRR Programme²⁸ on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

²⁸ See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
6.4. Introduction of the underpinning Quality Assurance concept to become integral part of NMHS's management.			
6.5. Raising awareness of Governments of the need for and expected benefits from the implementation of the national and regional components of the regional MHEWS.			
6.6. Identification of potential sources for funding the required infrastructure through proactive interaction with relevant financial institutions and development partners.			

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 7: Insurance and reinsurance products for disaster risks are promoted among the beneficiary countries (Albania, Bosnia and Herzegovina – including the Republic of Srpska -, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey)	reinsurance is fully developed At least five training sessions delivered by the end of the intervention By the end of the intervention a senior		Participants in all project activities are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action). Timely availability of relevant
in collaboration with the private sector, the World Bank and the Catastrophe Risk Insurance Facility (CRIF)	been organized and attended at least by 70% of the IPA beneficiaries.		participants in the project activities ensured by all IPA beneficiaries. IPA MB 2008-DRR Programme ²⁹ on
7.1 Developed a comprehensive training package for IPA beneficiaries on the use of insurance and reinsurance tools and regional insurance facility such as the SEEC CRIF.	insurance to mitigate the effect of disasters has been developed by the end		whose outcomes the project builds successfully finalized and its outputs made available to the project team.
7.2. Five training sessions on insurance and reinsurance products and the CRIF delivered to IPA beneficiaries in collaboration with the World Bank.			
7.3 Increased awareness among the general public and Small-Medium Enterprises on the economic benefits provided by insurance products for disasters.			

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²⁹ See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
	joined the Word Disaster Campaign to promote awareness of DRR among their urban communities. Compendium of good practices in urban		Participants in all project activities are selected based on criteria objective and relevant for the action concerned (participant profile tailored to the specifics of the action). Timely availability of relevant participants in the project activities
communication and DRR through capacity building activities involving governments,	intervention At least 70% of the IPA beneficiaries participate to the project regional workshop on urban risks organized by the end of the intervention in collaboration with the Council of Europe and DPPI SEE.		ensured by all IPA beneficiaries. IPA MB 2008-DRR Programme ³⁰ on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

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³⁰ See details at "Linked projects" section

Activities	Means	Costs	Assumptions
Task 1: Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change. – UNISDR **Activities:* A 1.1. Organization of study tour covering 3 EU study countries for 2 participants for each IPA beneficiary. The Programme will involve IPA beneficiaries expert/governmental representatives (including National Platforms coordinators, HFA Focal Points) and will address DRR climate risk management issues. The programme will also address the needs identified by IPA Beneficiary countries towards sharing good practices in DRR with EU countries.	the Exchange Programme and the workshops 1 Consultant (1-2months) to develop and support the Exchange Programme. 1 Consultant (1-2 months) for the update of the DRR training package. 1 Consultant (1-2 months) for the DRR the Task 1 publication lay out. Support to int. staff and expert in the region		Sustained political commitment of IPA beneficiaries. Effective commitment of key regional actors, such as the Disaster Preparedness and Prevention Initiative for South-East Europe (DPPI), in line with the project requirements and based on a clear mandate from the key stakeholders. Timely availability of relevant national and regional stakeholders/target beneficiaries and key partners, for participation in project activities. Regional expertise, contacts and resource material timely identified and available.

Activities	Means	Costs	Assumptions
A 1.2 Development of the Exchange Programme Study material.			National non-meteorological statistical data is readily available to produce risk maps.
A 1.3 Development of a final report of the DRR Exchange Programme			Meteorological and hydrological variables available on paper and timely
A 1.4 Organization of a workshop on DRR, HFA and NP coordination in each beneficiary by the end of the intervention			accessible to the project team.
A 1.5 Organization of a senior level regional workshop on climate change adaptation and DRR cross-bordering issues in Western Balkans and Turkey			
in ostorii Zumung unu Turkey			

Activities	Means	Costs	Assumptions
Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. – UNISDR	Consultant Expert in KMS / MIS (8 months) to develop the system (6 months)		
Activities: A 2.1 Development of a KMS consisting of a web-accessible database of national and regional information specific to disaster risk reduction, including regional experts' contacts and resource material. A2.2 Consolidation of relevant information and publication and other content to be included in the KMS taking into account the DRR material developed nationally, regionally and internationally in the last 10 years. A 2.3 Preparation of training guidelines on the use of the KMS to be shared with IPA beneficiaries countries	Lay out consultant (1 month) to develop the publication related to result 2 Travel of int staff and expert to provide technical support and monitoring		

Activities	Means	Costs	Assumptions
Task 3: Enhance the regional risk assessment and mapping capacities. – WMO	Consultancy Assistance by WMO staff	EUR 250 000	
 Activities: A 3.1. Historical hazard data rescue: meteorological and hydrological variables available on paper will be rescued by digitizing and hazard databases will be archived per standards aligned with EU requirements; hazard data quality assurance, homogenization and standardization. A 3.2. Delivery of hazard mapping and modelling workshops. 	 National workshops for training of IPA beneficiary's staff Specialized software / models Identification of pilot areas, customization and calibration of models Collaboration with institutions maintaining hazard data bases 		
A 3.3. Data analysis, development and pilot testing of risk modelling tools (development and implementation of probabilistic hazard modelling tools and modules customized for IPA Beneficiaries). A 3.4 Implementation and operation of risk modelling tools. A 3.5 Conduct survey of available			
hazard databases in Europe and collaborate with European institutions that host such databases.			

Activities	Means	Costs	Assumptions
Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR WMO	Consultant + WMO staff: consultation with ALADIN, COSMO and other NWP groups on adaptation of high-resolution NWP to the needs of IPA beneficiaries;	EUR 300 000	
Activities: A 4.1. Enhancement of Numerical Weather Prediction (NWP) capabilities of IPA beneficiaries in support of Early Warning Systems.	Consultant + WMO staff: development of procedures for exchange of warnings; operational implementation of such exchange;		
A 4.2. Enhancement of the cross-border exchange of real-time data (weather radar, hydrological data, etc).	Consultants + WMO staff: training events on nowcasting, forecasting, warning services; background data collection and validation; digitized river networks and catchment		
A 4.3. Development of floods forecast guidance and integrated flood forecast capacity.	boundaries, DTMs, data on land use; Regional workshop on severe weather forecasting in collaboration with EUMETSAT, EUMETNET and ECMWF;		
A 4.4. Enhancement of qualification of forecasters required for 24/7 operations in support to Early Warning Systems, including training in severe-weather forecasting and warning.	1 – 3 month on-the-job training at leading European NMHSs for forecasters from IPA beneficiaries;		
A 4.5 Training of hydrology forecaster in the integration of NWP in hydrological forecasting models.	Regional workshop on QMS; Regional workshop on forecast verification; Partnership agreement with the Regional Instrument Centre (RIC)		
A 4.6. Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS)	Slovenia RIC missions to IPA beneficiaries to assist in calibration of instruments;		
training, resolving deficiencies related to quality of observational data (calibration and maintenance of instruments), improved forecast verification.	Procurement of mobile calibration equipment for use by IPA beneficiaries not having national calibration Labs.		

Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda "Will Activities" A 5.1. Enhancing capacity in drought risk management through strengthening the role and operation of the Drought Management Centre for South-East Europe (DMC/SEF), through secondment of staff from PA Beneficiaries to this Centre and provision of training on specialized drought-management tools. A 5.2. Organisation of regular sessions of temperature of training on specialized of climate explaining and risk management tools. A 5.2. Organisation of regular sessions of climate events from PA beneficiaries, collaborative production of regional climate change Senarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of respective sectors-specific Statements of Requirements. A 5.3. Training in the use and interpretation of Jong-range forecasts, and interpretation of Jong-range forecasts, and interpretation of planting and risk management including elaboration of regional climate change scenarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of regional climate change scenarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of regional climate change scenarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of regional climate change scenarios, and interpretation of Jong-range forecasts, and interpretation of Jong-range forecasts, and interpretation of regular scenarios in application to various user sectors, including through secondment of staff to DMC/SEE. EUR 150 DMC/SEE. Secondment of taff to DMC/SEE. Regional workshop on development of regional guidance in drought management with SEE/VCC On-the-job training of users with SEE/VCC. Sessions – consultants and resource products in sectoral plan	Activities	Means	Costs	Assumptions
LIASK AS MEMIONEG ADOVE	Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda - WMOActivities: A 5.1. Enhancing capacity in drought risk management through strengthening the role and operation of the Drought Management Centre for South-East Europe (DMC/SEE), through secondment of staff from IPA Beneficiaries to this Centre and provision of training on specialized drought-management tools. A 5.2. Organisation of regular sessions of the South-East Europe Climate Outlook Forum (SEECOF) at the South-East European Virtual Climate Change Center (SEEVCCC) comprising capacity-building of climate experts from IPA beneficiaries, collaborative production of regional climate outlooks and interpretation of regional climate change scenarios, and training of users in the use of these products in sectoral planning and risk management including elaboration of respective sector-specific Statements of Requirements. A 5.3. Training in the use and interpretation of long-range forecasts, climate watch related aspects, and climate scenarios in application to various user sectors, including through secondment of staff from IPA beneficiaries to SEEVCCC. A 5.4. Training on the role of NMHSs in support of activities in the field of	Partnership agreement with DMC/SEE; Secondment of staff to DMC/SEE; Regional workshop on development of regional guidance in drought management; Partnership agreement with SEEVCCC (Belgrade) on SEECOF; Secondment of staff to SEEVCCC; Training at SEEVCCC. On-the-job training (duration 1 - 3 months) of experts from SEE at leading NMHSs and/or regional entities; SEECOF Sessions — consultants and resource persons from the Global Producing Centres and Regional Climate Centres; SEECOF on-line forums; SEECOF web site; Regional workshop on LRF; Regional training — NMHS role for insurance sector; Climate data rescue — consultancy, software, on-site training; QMS — promotion of QMS approaches during any event carried out under this		Assumptions

Activities	Means	Costs	Assumptions
5.5. Climate data rescue including assessment of existing national data archives and applying a common methodology for transferring data to digital media.			
5.6 Implementation of QMS features, such as user-friendly webpages for climate service access including user feedback functions, provision of contact information, provision of methodology information etc.			

Activities	Means	Costs	Assumptions
Task 6: Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework WMO Activities: A 6.1. Assessment of the existing nationa EWS, gap analysis with respect to the four components of effective early warning systems ³¹ and preparation of a concep document identifying the technological and institutional needs for building the business case for a regional MHEWS. A 6.2 Development of capacity of IPA beneficiaries in quality assurance of services as underpinning element of the EWSs. A 6.3. Preparation of a technical design document describing a seamless regional MHEWS, encompassing optimized monitoring networks, forecasting facilities, telecommunications, institutional and procedural aspects, human resources. Costbenefit analysis will accompany the preparation of this document, which should provide also the expected costs and possible sources of funding. • Regional meetings and workshops addressing the design of the four components of EWS and their interlinkages for development of a harmonized regional MHEWS.	 Team (DT) consisting of: two international consultants, national experts (1 or 2 from each IPA beneficiary), WMO experts from the required fields of expertise (observations, data processing and communications, forecasting, climate, DRR). professionals from Regional Centres and leading NMHSs in Europe. Three meetings of the Design Team. On-line forum. Regional forum for DRR stakeholders in IPA Beneficiaries. Meetings with potential financing institutions (EC, WB, national development funds). 	EUR 400 000	

³¹ The four components of effective early-warning systems are (i) detecting, monitoring and forecasting hazards;

Activities	Means	Costs	Assumptions
A 6.4. Organization of a regional forum to present the design document and promote it for adoption at national and regional level.			
6.5. Presentation of the design to potential donors and financing institutions with the view to get support for implementation.			

⁽ii) analysing risks and utilizing this information in the emergency preparedness and planning as well as thewarning messages; (iii) disseminating timely warnings, which should carry the authority of government; (iv) activating emergency plans to prepare and respond

Activities	Means	Costs	Assumptions
Task 7: Insurance and reinsurance products for disaster risk transferred are promoted among the beneficiaries countries in collaboration with the private sector, the World Bank and the Catastrophe Risk Insurance Facility (CRIF) Enhanced regional networking and technical cooperation in the area of seismic risk reduction. (UNISDR) **Activities:* A 7.1 In collaboration with the World Bank recruitment of an highly –reputed consulting firm to develop the training package needed to promote the use of insurance and reinsurance products in Western Balkans and Turkey and build the beneficiary countries capacities for joining the SEE CRIF.	the insurance training package and provide support to the training sessions Support to the IPA beneficiaries to attend the capacity building activities Local consultants for the translation of the documents in IPA beneficiary local languages (total 8 man/months – also contributing to tasks 1-2 and 8) Lay out consultant (1 month) to develop the task 7 related publications	EUR 300 000	
A 7.2 In collaboration with the World Bank and other ISDR partners, organization of five regional sessions of training for delivery the package on insurance and reinsurance developed through the activity 7.1 to create a standardized approach to settling insurance claims, public information campaigns on the benefits of catastrophe insurance and how to join the existing SEEC Catastrophe Risk Insurance Facility.			

Activities	Means	Costs	Assumptions
A 7.3. Organization of a high level event		1	
and press conference with IPA countries and EU countries media to enhance the		'	
visibility of the insurance component and –		'	
overall – the project intervention for			
sensitization of the public opinion and		'	
policy makers on issues related to DRR.	'	1	
A 7.4 Flyers, brochures and other material			
is develop to enhance the awareness on the		'	
importance of insurance against disasters		'	
and enhance the visibility of the		'	
intervention among the general public in	'	'	
beneficiary countries.		'	

Activities	Means	Costs	Assumptions
Task 8: Increase public awareness in relation to disaster risk reduction UNISDR Activities:	Support to beneficiary to attend the events related to tasks 8. Consultant (2 months) to develop the compendium of good practices	EUR 200 000	
A 8.1 Implementation of the World Disaster Reduction Campaign 2011-2012 "Making Cities Resilient: My City Is Getting Ready" in the Western Balkans and Turkey through specific launching events in collaboration with the mayors an local authorities.	Consultant (2 months) to develop the lay out of the publications related to task 8 Int. staff and experts travel in the region to provide technical support and		
A 8. 2 Development of brochure, flyers and other communication/visibility material such as videos to be published on web social networks and PreventionWeb on the importance of DRR for IPA countries citizens.			
A 8.3 Organization of a regional workshop in collaboration with EUR-OPA and DPPI SEE on Urban Risks and lessons learnt from the implementation in the Western Balkans and Turkey of the World Disaster Reduction Campaign.			

Activities	Means	Costs	Assumptions
A 8.4 Development of a compendium of good practices in urban risk reduction collected from the experiences of the Western Balkans and Turkish cities which participated in the World Disaster Reduction campaign			
A 8.5 Development of common/regional communication and media strategies standard for disaster risk reduction through the translation of relevant DRR materials for communication into local languages (and web publishing).			
8.6 Organization of a regional event on communication and DRR The event targets the main national media (TV, Radio & Newspapers) and relevant governmental officers such as the IPA HFA Focal Points.			

Pre-conditions:

The project builds on the results of IPA MB 2008 DRR Programme and therefore prior achievement of the IPA MB 2008 deliverables which serve as grounds for its implementation represents a pre-requisite.

ANNEX II: Amounts (in EUR) contracted and disbursed per quarter over the full duration of the project

			,			- p - q				92 9229 P2	9,000
Contracted	2011, Q4	2012, Q1	2012, Q2	2012, Q3	2012, Q4	2013, Q1	2013, Q2	2013, Q3	2013, Q4	2014, Q1	2014, Q2
Contract 1	2 200 000										
Cumulated	2 200 000										
Disbursed	2011, Q4	2012, Q1	2012, Q2	2012, Q3	2012, Q4	2013, Q1	2013, Q2	2013, Q3	2013, Q4	2014, Q1	2014, Q2
Contract 1	1 050 000					950 000					200 000
Cumulated	1 050 000					2 000 000					2 200 000

ANNEX III: Description of Institutional Framework

Albania

The Government is officially recognised as the first actor in civil emergencies. Its stated duties are to prevent, mitigate and restore any damage suffered by the population, animals, properties, cultural heritage and environment. The Department for Civil Emergencies, Planning and Response of the Ministry of Interior is responsible for disaster management. It is comprised of permanent and provisional structures on a central, regional and local level.

Improving response capacities at local levels; and strengthening planning, monitoring and operational structures at all levels; and building and enhancing institutional capacity at all levels remain the key challenges to developing an integrated, responsive and effectively-coordinated disaster management system in Albania.

However, plans were under way for the renamed Department of Civil Emergency to be based on a more functional and versatile scheme that should simplify the cumbersome command and control chain of the previous, rigid and centralised, system. An integrated system of communication and early-warning for civil emergencies is planned to be introduced as a unified 112 operational centre. Moreover, the new civil protection structure is to adopt a multi-level system, emphasizing the role of local levels whose competencies and responsibilities will be enhanced and enlarged to include preventative activities and planning, under the responsibility of prefects.

A network of five or six regional headquarters, each having authority over a set of three or four counties, is to be established to create a system of reliable, capable and autonomous bodies able to manage and coordinate operations during 'ordinary' emergencies.

The following institutions and structures are involved in disaster management in Albania: line ministries, quarks, municipalities and communities; the Albanian Red Cross and other national NGOs; the Academy of Science and scientific research institutes; citizens and communities; United Nations agencies, the North-Atlantic Treaty Organization/Civil-Emergency Planning/Euro-Atlantic Disaster Response Coordination Centre (NATO/CEP/EADRCC) and other international organizations; and regional and European initiatives such as Civil Military Emergency Planning, the Disaster Preparedness and Prevention Initiative (DPPI), the Black Sea Agreement, and the EUR-OPA Hazard Agreement.

The main operational forces deployed to cope with major emergencies are the armed forces, coordinated by the Ministry of Defence; state and other police; the fire-fighting and rescue service; the ambulance service; the Albanian Red Cross and other national NGOs; public service enterprises and private companies contracted at local or central level; and specialized international teams.

Other significant pieces of policy and legislation in the realm of disaster risk reduction include the Law on Civil Emergency Services, and the Policy on Civil Emergency Planning and Response.

Bosnia and Herzegovina

Bosnia and Herzegovina consists of two Entities - the Republic of Srpska and the Federation of Bosnia and Herzegovina, and Brcko District as a third administrative unit.

The country as a whole has 14 governance units, 5 levels of administration and more than 150 ministries and governmental agencies. In terms of civil protection structures, the entities are both financially and jurisdictionally autonomous from the State. Each level has its own specific mandate, with the State focusing on civil protection strategy while the entities focus on operational matters.

At State level, the Protection and Rescue Sector of the Ministry of Security is the central body with competences in, and responsibility for, international cooperation, internal coordination, strategic planning of protection and rescue measure, establishment of disaster management and response structure and training programmes. Three departments have been established within the Sector: the Department for Strategic Planning of Protection and Rescue Measures; the Department for Structures and Training; and the Department of International Cooperation and Operational – Communicational Center of BH 112 in charge of monitoring hazards of disasters in Bosnia and Herzegovina (particularly of transboundary effects) and communications among relevant authorities in and out of Bosnia and Herzegovina (NATO, UN, EU MIC etc.) . Each level has its own specific mandate with the State focusing on civil protection strategies while the entities focus on operational The Ministry of Security coordinates and manages planning and exchange of data and information, and reports on the risk reduction activities of entities and Brčko District.

The entities and Brčko District, within the framework of their competences in the area of protection and rescue, define, plan, train, organise, finance and execute protection and rescue with the aim of reducing risks and removing or mitigating the harmful consequences of disasters caused by natural or other hazards.

Croatia

With the establishment of the Croatian Platform for Disaster Risk Reduction on 9 November 2009, the country took a significant step in making disaster risk reduction both a national and local priority with a strong institutional basis for application. The Platform, which is a permanent forum in the form of an annual conference, was set up at the proposal of the country's HFA Focal Point, the National Protection and Rescue Directorate.

The aim is to reduce disaster risks already existing or those likely to emerge in the future. It includes the development of the early-warning system by raising public awareness of disaster risks, especially through the education system. The establishment of the Platform is recognition that a multi-sector approach to disaster risk reduction would enable the maximum use of domestic knowledge and capacities, primarily the most competent scientific and educational institutions in Croatia.

The Protection and Rescue Act³² established the National Protection and Rescue Directorate, which is an independent, professional and administrative organization that prepares, plans and manages operational forces and coordinates the operation of all participants in the protection and rescue system.

The Directorate started functioning on 1 January 2005 and is the central-level body with primary responsibility for the coordination of forces. Its basic tasks are as follows: risk assessment and drafting of protection and rescue plans for local and regional self-government; preparation of mandatory guidelines for risk management; monitoring and analyzing the protection and rescue situation and recommending to the Government improvement measures; collecting, analyzing and distributing risk and consequence information through a single communication system; conducting activities related to the 112 system; organizing, training and equipping operational forces; drafting and conducting training programmes; and international cooperation.

Under the present system, the Directorate includes regional offices located in each of the 20 counties and the city district of Zagreb, along with its central body. However, once the decentralization process is complete the regional offices will be assigned to regional administrations. The organisation is divided into the following five sectors: the Sector for the 112 System; the Civil Protection Sector; the Fire-fighting Protection and Rescue School; and the Personnel, Legal and Finance Sector.

The Directorate's regional offices, namely the County Protection and Rescue Offices, each includes a county 112 centre and a Prevention, Planning and Supervision Department linked to the Civil Protection Sector and the Fire-fighting Sector at local level.

The Sector for the 112 System is responsible for the information flow to all the actors involved in protection and rescue regarding all possible threats and their consequences. The service, which also benefits from the information of Government institutions addressing issues linked to natural and technological hazards, such as that provided by the Meteorological and Hydrological Institute of Croatia, keeps logs on the unfolding emergency events. Warnings are communicated to the public by means of sirens.

The former Yugoslav Republic of Macedonia

Although the concept of disaster management in FYR of Macedonia has been largely interpreted in terms of protection and rescue, the Government gave political impetus to the development of a multi-stakeholder approach to disaster risk reduction and disaster management when it declared an official National Platform on 21 April 2009.

The principal goal of the National Platform is emergency management through the effective and efficient use of available resources and capacities; as an instrument for the reduction of risk factors; identifying, assessing and monitoring risks; building a culture of safety; and strengthening disaster preparedness at all levels.

³²Other pieces of legislation which established the National Protection and Rescue Directorate are the Law on Organization and Jurisdiction of the Government Administration, and the Decree on the Internal Organization of the National Protection and Rescue Directorate.

The aim is to ensure an integrated, efficient and effective approach to disaster risk reduction through prevention, early warning and management and mitigation of disaster threats and post-disaster consequences.

The Crisis Management Center (CMC) holds the strategic position within the crisis management system and provides the National Platform for stakeholders' coordination, and technical and administrative support. It is the governmental agency in charge of coordination of emergency management activities. This includes interdepartmental and international cooperation and consultations for the purpose of crisis management. Furthermore, the Centre is in charge of preparing and updating a unified assessment of the risks and threats to the security of Macedonia, and proposing measures and activities to resolve them.

The CMC has established 35 regional crisis management centres in order to monitor situations, exchange information and data, make and prepare assessments, and inform and broadcast alerts to the population. The Centre also has responsibility for issuing timely information and early warning.

The National Platform is developed through 21 specialized platforms covering specific risks and threats, ranging from wildfires and epidemics, through droughts and floods, to earthquakes and CBRN contamination. The particular platforms will enable institutional synergy and integration of available resources, knowledge and know-how of national and local authorities, the NGO sector, the business and academic community, and civil society.

The following stakeholders are part of the National Platform: ministries and independent governmental agencies and bodies; inspectorates within state institutions; independent regulatory bodies; municipalities; academic community; national laboratory network; education and training sector; research sector (including expertise); business community; and religious communities.

Various ministries and governmental agencies are engaged on a national and local level. These include the Ministries of Agriculture, Forestry and Water Management; Environment and Physical Planning; Health; Transport and Communications; Economy; IT Society; Culture; Education and Science; Labour and Social Policy; Justice. The National Platform also includes the following independent governmental agencies: Radiation Security Directorate and the National Cadastre Agency.

The CMC and the National Platform in general provide full coverage of disaster risk reduction activities at the local level. In this respect, a municipal network has been started aimed at developing and strengthening cooperation at local level towards effective prevention, early warning, crisis management, protection and rescue of people and goods, and mitigation. For this purpose, cooperation agreements with all 84 municipalities and the capital city of Skopje have been signed.

At central level, the Directorate establishes the main headquarters to manage national protection and rescue activities; the Directorate director is commander of these headquarters. Rapid response teams, established within the Directorate, are a mainstay of the protection and rescue forces and specialize in various fields.

Key activities are focused on implementing the Macedonian legal framework as it is harmonized with EU legislation; the ongoing process of destroying unexploded ordnance and other deadly devices; implementation of protection measures against floods; and intensifying and promoting international cooperation.

The different actors involved in the crisis management system include the State administrative bodies and authorities (the Assembly, President and Government), the armed forces, the protection and rescue forces, and bodies of municipalities and the city of Skopje.

In a crisis situation, a Steering Committee, Assessment Group and Crisis Management Center are established at national level. The Steering Committee is composed of the Ministers for Interior, Health, Transport and Communications, Defence, Foreign Affairs, and the Head of the Assessment Group. If necessary, depending on the crisis situation, other heads of relevant State administrative bodies can also be included in the work of the Steering Committee.

The Assessment Group is a governmental body that performs constant assessment of the risks and dangers to national security and proposes measures and activities for their prevention, early warning and management. The Group delivers its analyses, recommendations and conclusions to the Steering Committee.

Montenegro

Montenegro has developed a broad framework under the Ministry of Interior and Public Administration for handling emergency situations and civil security through the establishment of the Sector for Emergency Situations and Civil Security. The Sector was established as a unique body to implement mechanisms for civil protection in Montenegro under the terms of regulations introduced by the Government in December 2004 which made the Ministry of Interior and Public Administration responsible for risk management, preparedness and search and rescue in cases of earthquakes, fires and other natural or technological incidents.

The plan was a move to institutionalize disaster management and consisted of three components: an assessment of basic risks, which resulted in the National Strategy for Emergency Situations; the establishment of a service capable of responding to disasters, but focused on prevention; and the development and adoption of the Law on Protection and Rescue, with an aim to regulate the legal framework.

The Sector for Emergency Situations and Civil Security consists of the following departments and units: the Department for Civil Protection, which identifies and evaluates risks at national and local level; the Department for Risk Assessment, which is responsible for the management of the national database of risksas reported by the National Strategy for Emergency Situations; the Department for Prevention and Inspection, which has jurisdiction over the activities defined by the Law on Protection and Rescue and other regulations related to this area; the Department for Operational Affairs, which is in chargeof the coordination of all organisations, companies, and State or local authority institutions in emergencies; the Department for Strategic Policies and Legal Affairs, which defines the guidelines for strategies and programmes, and proposes draft laws relevant to the organisationand the functioning of civil protection and monitors their realization; the 112 Centre, which uses the

European emergency number 112 and is a hub for all types of emergency; and the Helicopter Unit, which is responsible for search and rescue operations in the whole of Montenegro.

Serbia

Serbia has built a constructive framework towards disaster risk management. Key to the process was the reorganisation of the Protection and Rescue Sector of the Ministry of Interior, which now deals with disaster and emergency management³³ according to the Law on Emergency Situation.

As part of the ongoing reforms and in accordance with the Government Decision of 5 March 2009, the Protection and Rescue Sector is being reorganised into the Sector for Emergency Management, the aim being to establish an integrated emergency management system. The Sector will be tasked with coordinating the activities of all state institutions involved in disaster management.

Two new departments, the Department for Risk Management and the Department for Civil Protection, will be established within the Sector for Emergency Management, besides two existing ones (the Department for Prevention and Department for Fire and Rescue Units).

Furthermore, there is an ongoing project for implementation of a single European emergency call number 112.

Turkey

In order to achieve sufficient, effective and integrative institutional, administrative and legal structure in disaster management in Turkey, the main actors responsible for disaster management (Prime Ministry General Directorate of Emergency Management, Ministry of Interior General Directorate of Civil Defense and Ministry of Public Works and Settlement General Directorate of Disaster Affairs) were joined under Prime Ministry "Disaster and Emergency Management Presidency" (AFAD) with the Law 5902. Within this new Organization three boards and committees were established namely;

- Disaster and Emergency Management High Board, 0
- Disaster and Emergency Management Co-ordination Board, 0
- Earthquake Advisory Board.

The members of those boards mainly consist of members of governmental organizations, universities, private sector and non-governmental organizations. After the establishment of AFAD, studies in order to establish a national platform for disaster risk reduction was initiated. AFAD plans to conclude those efforts by the end of this year.

³³Much of the information in this section comes from Serbia: National progress report on the implementation of the Hyogo Framework for Action, June http://www.preventionweb.net/english/countries/europe/mne/

ANNEX IV: Reference to laws, regulations and strategic documents

- COM(2009) 84: Communication from the Commission to the Council and the European Parliament - EU strategy for supporting disaster risk reduction in developing countries.
- COM(2009) 82: European Commission communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A community approach on the prevention of natural and man-made disasters.
- European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI)).
- Hyogo Framework for Action.
- Global Platform for Disaster Risk Reduction.

Albania

The legislation covering disaster management in Albania reflects the processes which are transforming the centralized structures of the sector into an essentially decentralized scheme based on a network of local decision centres. The current efforts are focused on the inclusion of

Albanian civil protection structures within a European perspective and represent a road map for achieving this.

The first move towards the establishment of a more modern civil protection system came with Law 8756, in March 2001. The law encompasses the planning, prevention and preparedness system and defines first coordination among the different actors in civil emergency response operations.

In December 2004 the Albanian Council of Ministers adopted the National Civil Emergency Plan. The plan defines the roles and duties of all relevant governmental institutions and civil organisations involved in civil protection for all phases of emergency management. Albania's cooperation with other countries has a special emphasis.

Bosnia and Herzegovina

Legislation relating to civil protection is currently undergoing major transition to a new framework of laws prepared with the support of UNDP and NATO. Of particular note is the Law on Protection and Rescue, which details the responsibilities and authorities of the Protection and Rescue Sector, including with regard to disaster management and disaster risk reduction. It covers people and assets in cases of disasters caused by natural hazards, and was passed in May 2008.

Among other things, the law defines protection and rescue of people and material goods in cases of disasters caused by natural or other hazards in Bosnia and Herzegovina; the execution of international obligations and cooperation in the area of protection and rescue; and the channels of authority and coordination of activities of

Bosnia and Herzegovina institutions and bodies, entity administrations involved in civil protection and the authorized civil protection body in Brcko District. The law prescribes the founding of the State Operational and Communication Centre of Bosnia and Herzegovina - 112.

Other relevant laws include the Law on Transport of Dangerous Substances in Bosnia and Herzegovina; the Law on Defence of Bosnia and Herzegovina; the Law on Mine Clearance in Bosnia and Herzegovina; and the Law on the Red Cross Association of Bosnia and Herzegovina. There are several other laws promulgated by the Bosnia and Herzegovina State Parliament with potential bearing during emergencies.

The current legislation is based on a set of laws defining the roles and competences of all the administrative levels involved in civil protection.

Croatia

Legislation covering disaster management is largely covered by the Protection and Rescue Act, which came into force in 2005. The act largely superseded a number of separate laws and regulations that established the basic goals and operational objectives for organizing civil protection, including the areas of intervention, and the methodology and content of plans relating to protection and rescue.

The law regulates the system of protection and rescue of citizens, goods and property in disasters and major accidents; the management and coordination of protection and rescue activities; and the rights, obligations, specific training and general education of participants in protection and rescue activities. It also regulates the tasks and the structure of protection and rescue authorities; how to alert and warn; and how to organise mobilisation for the purposes of protection and rescue.

The former Yugoslav Republic of Macedonia

In terms of protection and rescue, the Law on Protection and Rescue indicates how responsibilities are divided between the participants in activities, including the State, local authorities, private companies, and public enterprises, facilities and services. The law regulates the division of responsibilities in accord with the provisions in the Local Self-Government Law which devolve obligations of protection and rescue to municipalities.

The law also determines the responsibilities of the Protection and Rescue Directorate, as an independent State authority, in the conduct of protection and rescue activities. The Directorate, which was established in May 2005, has the task of coordinating the civil protection sectors.

The second piece of legislation covering the civil emergency management function is the Law on Crisis Management, which governs the response to emergencies in terms of organisation and functioning; decision-making and resource use; communication, coordination and cooperation; planning and financing; and an assessment of the security risks to the country.

Montenegro

The National Strategy for Emergency Situations can be considered as a foundation document for thestructure of civil protection in Montenegro. It analyses all the risks affecting the territory of Montenegro and provides a survey on the capacity of the Montenegrin structures to cope withthem. The survey highlights the operational capabilities of Montenegro with reference to the major risks on its territory, emphasizing the importance of constant monitoring of the hazards and the need for an integrated approach to disaster risk reduction.

Serbia

The Protection and Rescue Sector prepared the Law on Emergency Situations, which the Serbian Parliament passed in December 2009. The act, which was drawn up in accordance with new European legislation, provides the legal framework for establishment of an integrated emergency management system. It is intended that this law will be a platform for strengthening and binding all the institutions involved in disaster management. It will also define modalities and mechanisms in planning, preparedness, coordination, response and recovery at national and sub-national level.

In the field of prevention, the law will define the methodology to be adopted for the prediction of possible risks of and the protocols to use when an emergency situation occurs.

Other legislation in the realm of disaster risk reduction includes the Law on Meteorological and Hydrological Activities, the Law on Water the Law on Protection Against Ion Radiation, the Decision on Setting the Coordination Team for Major Chemical Accidents, and the Law on Protection at Work.

Turkey

Existing legislation relevant to disaster risk reduction includes the Law on Protection against Flash Floods; the Law on Civil Defense; and the Law on Measures and Assistance to be put into Effect Regarding Natural Disasters Affecting the Life of the General Public.

ANNEX V: Details per EU funded contract

The Action will be implemented in joint management with two specialized international organizations, namely the United Nations International Strategy for Disaster Reduction (UNISDR) and World Meteorological Organization (WMO), partners in this project. A Contribution Agreement will be concluded in this regard between the European Commission and the lead partner, in line with the relevant Regulations and legislation in force and based on a formal agreement between the two partner organizations with regards to this specific Action.

ANNEX VI: Details on beneficiaries

VI.1. Local counterparts of WMO

IPA Beneficiary		Contact address/telephone/fax/e-mail		
	NMHS	Reporting to:	Director (National Coordinator)	
Albania	Institute of Energy, Water and Environment (IEWE)	Polytechnic University of Tirana; Ministry of Education and Science	Mr Bashkim Mal LUSHAJ	Street of "Duress" P.O. Box No.: 219 Tirana Phone: +355 4 225 9360 Fax No: +355 4 222 3518 E-mail:bmlushaj@hotmail.com or bmlushaj@tropoja.eu
Bosnia and Herzegovina	Federal Hydrometeorological Institute of Bosnia and Herzegovina ³⁴	Federation of Bosnia and Herzegovina	Mr Enes SARAC	Bardakcije, 12, 71000 SARAJEVO Phone: +387 033 276 709 Fax: +387 033 276 701 E-mail: meteobih@bih.net.ba
Croatia	Meteorological and Hydrological Service	Ministry of Science, Education and Sport	Mr Ivan ČAČIĊ	Grič 3, 10000 ZAGREB Phone: +385 1 4565 693 Fax: +385 1 4851 901 E-mail: cacic@cirus.dhz.hr

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³⁴ The Republic Hydro-Meteorological Institute Banja Luka will also be involved in the project activities.

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Serbia	Republic Hydrometeorological Service of Serbia	Special governmental organization reporting to the Government	Mr Milan DACIC	Kneza Viseslava, 66 11030 BELGRADE Tel: +381 11 3050 923 Fax: +381 11 3050 847 E-mail: office@hidmet.gov.rs
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VI.2. Local counterparts of UNISDR

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ANNEX VII: List of acronyms/abbreviations

CRIF	Catastrophe Risk Insurance Facility	
DMC	Drought Management Centre	
DPPI	Disaster Preparedness and Prevention Initiative	
DRM	Disaster Risk Management	
DRR	Disaster Risk Reduction	
EF DRR	European Forum for DRR	
EMDAT	Emergency Events Database	
EU	European Union	
EWS	Early Warning System(s)	
FAR	False Alarm Ration	
HFA	Hyogo Framework for Action	
IPA	Instrument for Pre-accession	
KMS	Knowledge Management System	
LRF	Long Range Forecasts	
MHEWS	Multi-hazard Early Warning System	
NMHS	National Meteorological and Hydrological Services	
NWP	Numerical Weather Prediction	
POD	Probability of Detection	
QMS	Quality Management System	
RCC	Regional Cooperation Council	
SEE	South-Eastern Europe	
SEE COF	South-East Europe Climate Outlook Forum	
SEEDRMAP	South-Eastern Europe Disaster Risk Mitigation and Adaptation	
	Programme	
SEEVCCC	South-East European Virtual Climate Change Center	
SME	Small and Middle Enterprise	
UNDP	United Nations Development Programme	
UNICEF	The United Nations Children's Fund	
UNISDR	United Nations Strategy for Disaster Reduction	
WMO	World Meteorological Organization	