ANNEX I

Description of the Action

1. GENERAL INFORMATION

Name of the implementing organizations	The United Nations International Strategy for Disaster Reduction (lead partner) & World Meteorological Organization (partner)	
Title of the action	Building Resilience to Disasters in Western Balkans and Turkey	
Location of the action	Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo [*] and Turkey	
Total eligible cost of the action (A)	**Amount requested from Contracting Authority (B)**	**% of total eligible cost of action (B/Ax100)**
2,590,000	2,200,000 Euro	84,94%
Total duration of the action	24 months	

Contact details for the purpose of this action	
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[*] This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

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Contact person(s) for issues related to the Contribution Agreement and contractual issues:	**Any correspondence should be sent to** Ms Helena Molin-Valdes, Deputy Director, UNISDR **Email address:** molinvaldes@un.org, **Copy to** Ms. Vanessa Buchot, Donor Relations Officer (buchot@un.org)
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Acronyms and abbreviations used	
CDMS	Climate Data Management System
CRIF	Catastrophe Risk Insurance Facility
DMC	Drought Management Centre
DARE	Data Rescue (activities to digitize and archive historical meteorological and climatological data available on paper, which are crucial for climate studies)
DPPI	Disaster Preparedness and Prevention Initiative
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EC	European Commission
ECMWF	European Centre for Medium-range Weather Forecasts
EF DRR	European Forum for DRR
EMDAT	Emergency Events Database
ESSL	European Severe Storm Laboratory
EU	European Union
EUMETNET	EIG EUMETNET is a grouping of 29 European National Meteorological Services
EUMETSAT	European Organization for the Exploitation of Meteorological Satellites
EWS	Early Warning System(s)
FAR	False Alarm Ratio

HFA	Hyogo Framework for Action
IPA	Instrument for Pre-accession
KMS	Knowledge Management System
LGU	Local Governamental Unit
LRF	Long Range Forecasts
MHEWS	Multi-hazard Early Warning System
NMHS	National Meteorological and Hydrological Services
NWP	Numerical Weather Prediction
PCIT	Project Coordination and Implementation Team (joint UNISDR/WMO team)
POD	Probability of Detection
QMS	Quality Management System
RCC	Regional Cooperation Council
SEE	South-Eastern Europe
SEE CRIF	South-Eastern Europe and Caucasus Disaster Risk Insurance Facility
SEE COF	South-Eastern Europe Climate Outlook Forum
SEEDRMAP	South-Eastern Europe Disaster Risk Mitigation and Adaptation Programme
SEEVCCC	South-Eastern Europe Virtual Climate Change Centre
SME	Small and Middle Enterprise
UNDP	United Nations Development Programme
UNICEF	The United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
WMO	World Meteorological Organization

2. THE ACTION

2.1. TITLE

“Building Resilience to Disasters in Western Balkans and Turkey”

2.2. LOCATION

Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey

2.3. COST OF THE ACTION AND AMOUNT REQUESTED FROM THE CONTRACTING AUTHORITY AND OTHER EXPECTED SOURCES OF FUNDING

The total budget of the Action is 2,590,000, out of which the amount of 2,200,000.00 Euro is requested to the European Union (the Contracting Authority) and the amount of 364,486 Euro is secured by the implementing organizations.

Details can be found in the **Budget for Action (Annex III).**

2.4. SUMMARY

Title of the action:	Building Resilience to Disasters in Western Balkans and Turkey
Location(s) of the action	Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey
Total duration of the action (*months*):	24 months
Total budget for the action	2,590,000 Euro
Amount of requested EU contribution	2,200,000.00 Euro (84,94% of the total budget)
Objectives of the action	Overall objective*:* ▪ To reduce vulnerability of IPA beneficiary countries to disasters caused by the impact of natural hazards in line with the Hyogo Framework for Action (HFA) and increase their resilience to climate change. Project purpose: • To enhance the regional cooperation and capacity in addressing disaster risk reduction in the context of existing risks posed by typical natural hazards related to meteorological and hydrological hazards, as well as, new risks posed by a changing climate, 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 data/information in the area of disaster risk reduction.
Target group(s)[1]	Disaster Risk Reduction (DRR) authorities and National Meteorological and Hydrological Services (NMHS) of Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey
Final beneficiaries[2]	Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey
Tasks :	*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 workshops on DRR and climate change adaptation *2. Strengthened regional capacity and cooperation towards data and knowledge*

[1] "Target groups" are the groups/entities who will be directly positively affected by the action at the action purpose level.

[2] "Final beneficiaries" are those who will benefit from the action in the long term at the level of the society or sector at large.

	sharing on risks. 2.1. A DRR Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information. 2.2. Develop and disseminate guidelines on the use of the DRR KMS and capacity building of IPA Beneficiaries' officers on its use and functions. *3. Enhanced regional risk assessment capacities through improved capabilities of beneficiaries in hazard analysis and mapping.* 3.1. Beneficiaries enhance their capacity of creating high quality hazard databases through data rescue and improved data management of available climatological records per standards aligned with WMO and EU requirements 3.2. A number of relevant professionals from IPA Beneficiaries trained on data management including hazard analysis and mapping. 3.3. Hydro-meteorological hazard analysis and mapping tools available to and implemented by IPA Beneficiaries. 3.4. Establishment of links and collaboration with Sava River Commission for a collaborative pilot project aimed at enhancing capacities in flood hazard assessment in the Sava river transboundary basin. *4. Enhanced capacity of IPA Beneficiaries to prepare and deliver accurate and timely warnings for hazardous meteorological and hydrological phenomena.* 4.1. Harmonized forecasting capabilities in support of Early Warning Systems in IPA Beneficiaries (including capabilities related to utilization of numerical weather prediction (NWP) products, satellite and radar information). 4.2. Increased accuracy and timeliness (sufficient lead time to allow relevant action) of the warnings for hazardous weather. 4.3. Improved knowledge in integrated flood management and flood forecasting. 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 through specific training packages. 4.6. Issues related to quality of observations in some IPA beneficiaries addressed 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 *5. Improved capacity of the NMHSs of IPA beneficiaries in the provision of information to support climate change adaptation and climate risk management.* 5.1. Increased capacity of IPA Beneficiaries' to utilize drought management tools developed for the region. 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 NMHS's awareness of their role and new type of services to be provided in support of the activities in the field of insurance. 5.4. Ensured sustainability of the South-East Europe Climate Outlook Forum (SEECOF) as a regional cooperation mechanism for capacity-building in

[3] Services provided by Europa Reinsurance (Europa Re), a reinsurance company supported by the World Bank in collaboration with UNISDR, are promoted among the IPA beneficiaries which are current members or are in the process of applying for membership in Europa Re (Albania, Bosnia and Herzegovina – including the Republic of Srpska -, the former Yugoslav Republic of Macedonia, Montenegro and Serbia) and potential members among remaining IPA beneficiary countries in collaboration with the private sector, the World Bank and Europa Re.

	long-range forecasting and climate watch. 5.5. Enhanced dialogue with users and better understanding of sector-specific requirements related to LRF, Climate Change and Climate Watches in support of climate risk management. *6. A design for a seamless regional Multi-Hazard Early Warning System (MHEWS) developed 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 harmonized and inter-operable national Early Warning Systems. 6.2. Identifying existing gaps in the monitoring and forecasting capabilities (e.g., hydrological data, weather radar data, etc.) and proposing solutions which are cross-border optimized in order to reduce the cost of monitoring infrastructure and running costs. 6.3. Cost-benefit analysis for the realization of the designed regional MHEWS. 6.4. Addressing relevant institutional and procedural issues at national and regional level necessary to enable the implementation of effective and efficient MHEWS. 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. *7. Catastrophe and weather risk insurance products as well as insurance and reinsurance services*[3] 7.1. In collaboration with the World Bank and Europa Re, UNISDR will build the capacities of beneficiary countries to promote the penetration of insurance products for disaster risk transfer. 7.2. In collaboration with the World Bank and Europa Re, enhance public awareness on tools will be developed to mitigate the risk of disasters through insurance products available for homeowners and SMEs. 7.3. In collaboration with the World Bank and Europa Re a regional conference and a press conference will be organized to enhance visibility and awareness on disaster risk transfer options and the services available through Europa Re. *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 local governments' officials and local decision makers enhanced their knowledge on DRR through the development of specific knowledge products on DRR at community level in Western Balkans and Turkey.
Main activities	***Task 1:*** *Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change. (implemented by UNISDR)* o Organization of study tour for 2 participants for each IPA beneficiary with selected EU countries.

- Development of a final report of the DRR Exchange Programme.
- Organization of a session in an existing regional meeting (e.g. DPPI SEE Regional Meetings) to present the outcomes of the exchange programme and impact on countries' capacity

Task 2*: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. (implemented by UNISDR)*

- Development of a KMS consisting of a web-accessible database of national and regional information specific to DRR
- Consolidation of relevant information and publication and other content to be included in the KMS.
- Preparation of training guidelines on the use of the KMS

Task 3*: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping. (implemented by WMO)*

- Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS).
- Enhancing hydro-meteorological data quality, homogenization and standardization
- Drought Hazard analysis and mapping.
- Sava River pilot project on flood hazard.

Task 4: *Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR. (implemented by WMO)*

- Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of Early Warning Systems: advanced training for meteorological forecasters required for 24/7 operations.
- Advanced training for hydrological forecasters
- Enhancement of the cross-border exchange of data and information in support of EWS.
- Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS).
- Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments).

Task 5*: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda (implemented by WMO)*

- Enhancing capacity in drought risk Management
- Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services.
- Developing capacity in services for the insurance sector.

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

- Assessment and gap analysis of the existing national Early Warning Systems
- Preparation of a technical design document describing a seamless regional Multi-Hazard Early Warning System

Task 7: *Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) (implemented by UNISDR)*

	o Develop a training package (in local languages) for insurance agents that would promote Europa Re insurance products in IPA states participating in Europa Re program. o Up to 5 regional training sessions for insurers and insurance agents participating in Europa Re program; o Design and print out flyers, brochures and other hand-out materials (in local languages) on Europa Program and products. o Prepare a promotional video clip in local languages for Europa Re insurance o Organize the 2nd Regional Europa Re Insurance Conference dedicated to the launch of Europa Re's operations in IPA countries beneficiaries of the program and EU countries to enhance the visibility of this insurance initiative ***Task 8:*** *Increase public awareness in relation to disaster risk reduction. (implemented by UNISDR)* o Implementation of the World Disaster Reduction Campaign 2011-2012 "Making Cities Resilient: My City Is Getting Ready" in the Western Balkans and Turkey o Development of brochure, flyers and other communication/visibility material to be published on web social networks and PreventionWeb on the importance of DRR for IPA countries citizens o Support mayors and LGUs representatives to attend main event on reducing urban risks regionally and internationally o Organization of a press conference with high level representatives and community representatives on awareness of community based DRR interventions for Western Balkans and Turkey. o Development of a compendium of good practices in urban risk reduction o Translation of relevant DRR materials for communication into local languages (and web publishing).

2.5. RELEVANCE OF THE ACTION

Countries of Western Balkans and Turkey are exposed to a range of disasters caused by 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 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 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

[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.

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 Review[5] undertaken in the context of the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP)[6] 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 organized in a usable format 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 organization such as DPPI SEE[7] having capacity and resources should coordinate efforts on DRR…. The coordinating organization 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 2007-2009[8] *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".

Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of South Eastern Europe: a Study of Risk Financing Options(2008) undertaken in the context of the SEEDRMAP finds that "Despite considerable risk exposure to disasters cause by the impact natural hazards, the existing risk financing mechanisms, at both the regional and SEE countries level, do not have the capacity to address the consequences of large disaster events, therefore, reducing the adverse financial impact of disasters on governments, businesses and household in SEE must be regarded as an important economic and social priority at the national."

The Structure, Role and Mandate of Civil Protection in DRR for SEE[9]*2009study in 2009,* 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 SEE[10], held in Sofia, Bulgaria, 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

[5] SEEDRMAP is a joint initiative of UNISDR and the World Bank in collaboration with regional and international partners aiming to reduce the vulnerabilities of SEE countries to disasters. http://www.unisdr.org/europe/publications/v.php?id=7650

[6] The full document can be accessed at http://www.preventionweb.net/files/2214_DRmitigationadaptation.pdf

[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

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

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

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, Turkey, 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 from 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 Multi-beneficiary 2011 will build on the results of the *Regional Programme on Disaster Risk Reduction in South-East Europe*[12]*, 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 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 development.

The project was prepared and will be implemented by two specialized organizations, UNISDR and WMO, in consultation with IPA beneficiaries[13]' HFA focal points and the NMHSs.

In implementing this action, UNISDR and WMO will pay special attention to the recommendations and lessons learned from the IPA MB 2008 *Regional Programme "Disaster Risk Reduction in South-East Europe"*, which are provided in the Final Report of the Activiy 2 "Regional Cooperation in South East Europe for meteorological, hydrological and climate data management and exchange to support disaster risk reduction" implemented by WMO under this programme, as well as in related publications available on the respective project website: http://www.wmo.int/pages/prog/dra/eur/DRR_SEEProject.php.

2.6. TARGET GROUPS AND FINAL BENEFICIARIES

The project will directly benefit the national authorities in charge for Disaster Risk Reduction (DRR) and Disaster Risk Management (DRM) and the National Meteorological and Hydrological Services (NMHS) of Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo and Turkey. Other primary beneficiaries will be the national officers in charge with regulations of the insurance and reinsurance industry as well as the actors involved in the

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

[12] See section 3.6 "Link activities" for details

[13] Due to its special status, Kosovo (under UNSCR 1244/99) was not directly involved in the consultation process; however, the
communication with Kosovo (under UNSCR 1244/99) took place through UNMIK

chain of public-private partnerships which promotes disaster risk transfer tools such as insurance to the general public and Small-Medium Businesses. Moreover, direct beneficiaries will be also local authorities – in particular city mayors – and community based organizations which are involved in community-based DRR interventions.

The target groups are both senior level and medium level national/local officers which will benefit from increased capacities in managing risks posed by natural hazards while overall their institutions will be better equipped and prepare to prevent and reduce the risks of disasters.

At the regional level, the project will contribute to strengthen the capacities of regional owned initiatives for DRR such as DPPI SEE and complement with the initiatives and projects described in the previous section.

The awareness and advocacy activities on DRR and climate adaptation measures will benefit the general public and in particular those who are involved in public institutions such as schools (children and teachers) and hospitals.

Details on the countries participation to the project activities can be found in Table 1.

Table 1: Participation of IPA beneficiaries in the project activities

	Albania	Bosnia and Herzegovina	Croatia	FYR of Macedonia	Montenegro	Serbia	Kosovo (under UNSCR 1244/99)	Turkey
Task 1: Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change. – UNISDR								
Developed the exchange DRR Programme with EU selected countries in the context of the European Forum for DRR (EFDRR).	X	X	X	X	X	X	X	X
Improved institutional DRR capacity and coordination at regional level, as result of participation of IPA beneficiaries in regional workshops on DRR and climate change adaptation	X	X	X	X	X	X	X	X
Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. - UNISDR	X	X	X	X	X	X	X	X
A DRR Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information.	X	X	X	X	X	X	X	X
Published guidelines on the use of the DRR KMS and capacity building of IPA Beneficiaries' officers on its use and functions	X	X	X	X	X	X	X	X
Task 3: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping. – WMO								
Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS).	X	X	1)	X	X	1)	X	1)
Enhancing hydrometeorological data quality, homogenization and standardization.	X	X	X	X	X	X	X	X
Drought Hazard analysis and mapping.	X	X	X	X	X	X	X	X
Sava River pilot project on flood hazard.	X	X	X	X	X	X	X	X
Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR. – WMO								
Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of Early Warning Systems	X	X	X	X	X	X	X	X
Advanced training for hydrological forecasters.	X	X	X	X	X	X	X	X

Enhancement of the cross-border exchange of data and information in support of EWS.	X	X	X	X	X	X	X	X
Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS).	X	X	X	X	X	X	X	X
Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments).	X	X	2)	X	X	2)	X	2)
Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda - WMO								
Enhancing capacity in drought risk management.	X	3)	3)	X	X	X	3)	3)
Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services.	X	X	X	X	X	X	X	X
Developing capacity in services for the insurance sector.	X	X	X	X	X	X	X	X
Task 6: Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework. - WMO								
Assessment and gap analysis of the existing national Early Warning Systems	X	X	X	X	X	X	X	X
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.	X	X	X	X	X	X	X	X
Task 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) - UNISDR								
In collaboration with the World Bank and Europa Re, build the capacities of beneficiary countries to promote the penetration of insurance products for disaster risk transfer.	X	X	X	X	X	X	X	X
In collaboration with the World Bank and Europa Re, enhance public awareness on tools available to mitigate the risk of disasters through insurance products available for homeowners and SMEs.	X	X	X	X	X	X	X	X
In collaboration with the World Bank and Europa Re organize a regional conference and a press conference to enhance visibility and awareness on disaster risk transfer options and the services available through Europa Re	X	X	X	X	X	X	X	X

Task 8: Increase public awareness in relation to disaster risk reduction - UNISDR								
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.	X	X	X	X	X	X	X	X
Western Balkans countries and Turkey enhanced their knowledge on communication and DRR through capacity building activities involving governments, media and other relevant stakeholders	X	X	X	X	X	X	X	X
Task 9: Joint UNISDR – WMO Management								
Inception Workshop (&1st SC meeting)	X	X	X	X	X	X	X	X
MTR Workshop (&2ndt SC meeting)	X	X	X	X	X	X	X	X
Wrap up workshop (&3rd SC meeting)	X	X	X	X	X	X	X	X
Evaluation	X	X	X	X	X	X	X	X

Notes:

1) DARE and CDMS activities are not envisaged for Croatia, Serbia and Turkey since they have well developed systems.

2) Activities related to data quality, maintenance and calibration are not envisaged to Croatia, Serbia and Turkey since they have well developed systems.

3) Secondments to Drought Management Centre (DMC) are not envisaged for BiH and Turkey (secondments done during the IPA 2008); Croatia and Serbia.

2.7. OBJECTIVES OF THE ACTION

Overall Objective:

To reduce vulnerability of IPA beneficiary countries to disasters caused by the impact of natural hazards in line with the Hyogo Framework for Action (HFA) and increase their resilience to climate change.

Project purpose:

To enhance the regional cooperation and capacity in addressing *disaster risk reduction* in the context of existing risks posed by typical natural hazards related to meteorological and hydrological hazards, as well as, new risks posed by a changing climate, 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 data/information in the area of disaster risk reduction.*

2.8. TASKS AND ENVISAGED RESULTS:

2.8.1 Results and measurable indicators in relation with Task 1: Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change (implemented by UNISDR)

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 workshops on DRR and climate change adaptation

Indicators:

- At least 70% of the IPA beneficiary countries take part in the EU-SEE DRR Exchange Programme for experts.
- At least 70% of the participants at the DRR Exchange Programme assessed it as satisfactory.

The report with the results and lessons learnt from the Exchange Programme is released by the end of the intervention and shared among the IPA beneficiaries.

2.8.2 Results and measurable indicators in relation with Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks (implemented by UNISDR).

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

2.1. A DRR Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information.

2.2. Develop and disseminate guidelines on the use of the DRR KMS and capacity building of IPA Beneficiaries' officers on its use and functions.

Indicators

- By the end of the intervention the DRR KMS is functional and used by IPA beneficiaries.
- By the end of the intervention DRR KMS guidelines are developed and shared with the IPA beneficiaries' officers and relevant national and regional stakeholders as necessary.

2.8.3 Results and measurable indicators in relation to Task 3: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping (implemented by WMO).

Result 3: Enhanced regional risk assessment capacities through improved capabilities of beneficiaries in hazard analysis and mapping.

3.1. Beneficiaries enhance their capacity of creating high quality hazard databases through data rescue and improved data management of available climatological records per standards aligned with WMO and EU requirements

3.2. A number of relevant professionals from IPA Beneficiaries trained on data management including hazard analysis and mapping.

3.3. Hydro-meteorological hazard analysis and mapping tools available to and implemented by IPA Beneficiaries.

3.4 Establishment of links and collaboration with Sava River Commission for a collaborative pilot project aimed at enhancing capacities in flood hazard assessment in the Sava river transboundary basin.

Indicators

- Amount of national data on paper rescued, digitized and included in climate data management database.
- Number of beneficiaries with climatological databases created and utilized.
- Conformity of the climatological databases created with the WMO and EU requirements.
- Completeness of the database (percentage of the country surface covered, number of hazards for which data are available).

- Acquired knowledge and skills of participants in the hazard analysis and mapping workshop with focus on drought.

- Participation in the collaborative project with the Sava River Commission; quality and usefulness of the results of the pilot project on Sava River Basin.

2.8.4 Results and measurable indicators in relation to Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR (implemented by WMO).

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

4.1. Harmonized forecasting capabilities in support of Early Warning Systems in IPA Beneficiaries (including capabilities related to utilization of numerical weather prediction (NWP) products, satellite and radar information).

4.2. Increased accuracy and timeliness (sufficient lead time to allow relevant action) of the warnings for hazardous weather.

4.3. Improved knowledge in integrated flood management and flood forecasting.

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 through specific training packages.

4.6. Issues related to quality of observations in some IPA beneficiaries addressed 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.

Indicators

- Number of IPA beneficiaries capable of using “state-of-the-art” Numerical Weather Prediction products in predicting hazardous weather and issuance of warnings.

- Number of IPA beneficiaries with improved flood forecast capabilities.

- Ratio current to previous real-time data cross-border exchanges.

- Number of meteorological and hydrological forecasters trained.

- Number of IPA beneficiaries compliant with the WMO requirements for calibration and maintenance of observing equipment.

- Increased compliance with the quality assurance standards/guidelines developed by WMO and relevant international standards and best practices.

2.8.5 Results and measurable indicators in relation to Task 5: Develop capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda (implemented by WMO)

Result 5: Improved capacity of the NMHSs of IPA beneficiaries in the provision of information to support climate change adaptation and climate risk management.

5.1. Increased capacity of IPA Beneficiaries' to utilize drought management tools developed for the region.

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 NMHS's awareness of their role and new type of services to be provided in support of the activities in the field of insurance.

5.4. Ensured 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. Enhanced dialogue with users and better understanding of sector-specific requirements related to LRF, Climate Change and Climate Watches in support of climate risk management.

Indicators:

- Number of staff from IPA Beneficiaries trained in the use and interpretation of long-range forecasts, climate change scenarios, and climate watches.
- Utility/Effectiveness of the developed tools specific to drought management and number of staff from IPA Beneficiaries trained in the use of drought management tools.
- 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 and number of climate experts from IPA beneficiaries participating;
- 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 seasonal outlooks in decision-making process.

2.8.6 Results and measurable indicators in relation with Task 6: Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework (implemented by WMO).

Result 6: A design for a seamless regional Multi-Hazard Early Warning System (MHEWS) developed 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 harmonized and inter-operable national Early Warning Systems.

6.2. Identifying existing gaps in the monitoring and forecasting capabilities (e.g., hydrological data, weather radar data, etc.) and proposing solutions which are cross-border optimized in order to reduce the cost of monitoring infrastructure and running costs;

6.3. Cost-benefit analysis for the realization of the designed regional MHEWS;

6.4. Addressing relevant institutional and procedural issues at national and regional level necessary to enable the implementation of effective and efficient MHEWS;

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.

Indicators

- Number of experts designated by IPA beneficiaries participating in the regional design effort;
- Quality and usefulness of the gap analysis related to monitoring and forecasting capabilities;
- Realism and comprehensiveness of the design document prepared;
- Realism and utility of the cost-benefit analysis accompanying the preparation of the design document;
- Promotion and adoption of the regional MHEWS design at the level of IPA beneficiaries' governments and commitment to support its realization.

2.8.7 Results and measurable indicators in relation with Task 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) (implemented by UNISDR)

Result 7: Catastrophe and weather risk insurance products as well as insurance and reinsurance services provided by Europa Reinsurance (Europa Re)[14], a reinsurance company supported by the World Bank in collaboration with UNISDR, are promoted among the IPA

[14] Europa Reinsurance Program, also known as Southeast Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) has been developed through the direct support and technical assistance from the World Bank and UNISDR.

beneficiaries which are current members or are in the process of applying for membership in Europa Re (Albania, Bosnia and Herzegovina – including the Republic of Srpska -, the former Yugoslav Republic of Macedonia, Montenegro and Serbia) and potential members among remaining IPA beneficiary countries in collaboration with the private sector, the World Bank and Europa Re.

7.1 In collaboration with the World Bank and Europa Re, UNISDR will build the capacities of beneficiary countries to promote the penetration of insurance products for disaster risk transfer.

7.2 In collaboration with the World Bank and Europa Re, enhance public awareness on tools will be developed to mitigate the risk of disasters through insurance products available for homeowners and SMEs.

7.3 In collaboration with the World Bank and Europa Re a regional conference and a press conference will be organized to enhance visibility and awareness on disaster risk transfer options and the services available through Europa Re.

Indicators

- Training package on insurance and reinsurance is fully developed
- At least three training sessions delivered by the end of the intervention
- By the end of the intervention a regional conference on SEEC CRIF in IPA beneficiaries countries has been organized and attended at least by 70% of the IPA representatives.
- Visibility material for the awareness of insurance to mitigate the effect of disasters has been developed by the end of the intervention.

2.8.8 Results and measurable indicators in relation with Task 8 Increase public awareness in relation to disaster risk reduction (implemented by UNISDR).

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 local governments' officials and local decision makers enhanced their knowledge on DRR through the development of specific knowledge products on DRR at community level in Western Balkans and Turkey.

Indicators

- 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.

2.9. MAIN ACTIVITIES

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

Background

Each IPA beneficiary countries shall have two governmental officers who will take part to the programme in one of the selected EU countries. The exchange will imply a field visit in the host institution and a detailed learning work programme that will be set up with the hosting institutions working on DRR and climate change adaptation.

Activities:

1.1.1 Organization of study tour for 2 participants for each IPA beneficiary with selected EU countries. The Programme will involve IPA beneficiary's expert/governmental representatives (including National Platforms coordinators, HFA Focal Points) and will address DRR and 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.

a) In the context of the EFDRR plan the exchange programmes and its logistic based on the support provided by UNISDR Europe RO and facilitation with EU HFA Focal Points in the EU countries whose DRM/DRR practices and systems better suit the needs of the IPA beneficiary countries.

b) Development of a study guide for the beneficiary participants in which, besides the description of the activities and programme implementation, the programme learning elements have to be clearly formulated for evaluation of its impact once the IPA governmental officers will return back to their ministries and organizations.

c) Implementation of the programme facilitating the missions and exchanges of the IPA beneficiary countries with the EU countries documenting the progress of the exchange programme and collecting the participants' feedback through structured evaluation forms.

Method: A capacity building expert with experience in DRR training material will develop the plan of the study tour in consultation with the beneficiaries and the EU countries which gave availability as hosts. The expert will develop the study material and in collaboration with UNISDR Programme Officers it will facilitate the travel and collect the participants' feedback for an assessment of the results achieved through this activities.

1.1.2 Development of a final report of the DRR Exchange Programme

A detailed report of the exchange programme will be presented in which the activities, learning elements and participants' feedback of the programme are reported. The report shall highlight which are the skills acquired by the participants and how / how much these skills are envisaged to be applied by the IPA beneficiaries once they return to their work and which are the benefits for the IPA countries. The reports shall also present recommendations on future actions in terms of DRM/DRR/CRM capacity building interventions based on the lesson learnt from the implementation of the programme.

Method: the capacity building expert and UNISDR Programme Officers – based on the material developed and the evaluation of the study tour - will develop the final report and elaborate recommendations from the lessons learnt from the exchange programme. The report will be shared for information not only with the project stakeholders but also with European partners such as ECHO which are involved in DRR capacity building in Western Balkans and Turkey.

1.2.1 Organization of a session in an existing regional meeting (e.g. DPPI SEE Regional Meetings) to present the outcomes of the exchange programme and impact on countries' capacity.

Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. (implemented by UNISDR)

Background

The DRR KMS will function as a hub of information on risks in IPA countries and a database of publications on DRR and climate change adaptation 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.

The KMS will be developed by an IT and Management Information Expert with experience in database development and webhosting.

The system will be based either on a temporary based within UNISDR (using the capabilities of its Information Management Unit) or directly in a regionally owned organizations such as DPPI SEE if the specialist and the project Steering Committee will assess that there are enough capabilities to provide a long term sustainability of the system.

The KMS will bring to the IPA beneficiaries countries the following advantages:

A dynamic database will be developed in multiple local languages, which can host documents, contacts and virtual working space for the Western Balkans DRR and Climate Change Adaptation community practitioners.

The IPA beneficiaries' countries will be trained on the use of the KMS through the development of training material in multiple languages and online tutorials.

The system will also be open to further possibility of expansions to serve as regional hub for the collection and retrieving of data on disaster losses as a dynamic database which can produce online reports on disaster data in Western Balkans and Turkey.

The DRR KMS will support and integrate the results achieved through Task 3.

Activities

2.1.1 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.

Method: An Expert in Information Management will design and develop the web-based KMS, based on the needs of the beneficiaries and in consultation with UNISDR Programme Officers and UNISDR Information Management Unit.

2.1.2 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.

Method: a local consultant familiar with DRR in the region and IPA countries' national languages will build the archive of the KMS. The consultant will be populating the web-site content with resources provided by the beneficiaries, UNISDR, DPPI SEE and other relevant regional partners.

2.2.1 Preparation of training guidelines on the use of the KMS to be shared with IPA beneficiaries countries

Method: the Information Management Expert, in partnership with UNISDR Programe Officers and in consultation with DPPI SEE and the beneficiaries will develop (in English) visual guidelines for building the capacities of the beneficiary countries' officers in the use of the KMS. The guidelines will be translated in national languages and shared among all stakeholders who will have access to the KMS content management system.

Task 3: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping. (implemented by WMO)

Background:

Floods, droughts, forest fires are among highest priority hazards in the region, with severe impacts on safety of lives and economic losses across the whole region. As risk assessment at regional, national and local levels is the foundation for the development and implementation of any DRR strategy, it was identified in IPA 2008 project that methodologies and tools for production of risk assessment and mapping at the national/regional level should be developed and harmonized in the region for the priority hazards, based on common standards. This would be particularly crucial for cross-border hazards, such as flood and drought.

Under this task, a major effort will be undertaken in improving the historic meteorological and hydrological databases, including the rescue of available paper archives of relevant meteorological variables, data digitalization, homogenization and quality control, in accordance with the established international standards.

The task includes capacity building in the development and utilization of hydrometeorological databases through training, as well as, procurement of new and/or upgrade of existing climate data management systems (such as CLIDATA) recommended by WMO.

The assessment of the extent of flooding, flood losses and resultant needs of the affected communities is essential for flood relief coordination and often has to be carried out during the event itself under extraordinary circumstances, involving varying degrees of chaotic conditions, contingencies and time pressure. These preliminary flood loss assessments, established in expeditious manner, would later provide the basis for reconstruction planning and for decisions on flood management policy reform. Certain basic principles should be observed to avoid too unrealistic estimates and resulting repercussions in future policies.

WMO, within the framework of the Associated Programme on Flood Management has developed a tool on "Conducting Flood Loss Assessments" providing methodologies for undertaking assessment both during or in the immediate aftermath of an event, and, not in emergency period, as an instrument for planning and development policies.

In view of the above a new task has been included to test and promote the methodology for flood losses assessment, as well as, hydrometeorological data exchange. The Sava River basin has been selected as a test-bed for testing before further implementation of such methodology in all IPA beneficiaries. In close coordination with the International Sava River Commission (ISRC) and its Member Countries, a pilot project will focus on enhancing capacities in flood risk assessment in the Sava river transboundary basin. It will focus on (i) hydrological data management and exchange at the basin level, to provide the foundation of flood analysis and (ii) on flood losses assessment.

Activities:

3.1. *Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS).*

3.1.1 Assessment of beneficiaries' needs for DARE and CDMS. Based on the outcomes of IPA 2008 project, and further technical discussions with the beneficiaries, a detailed technical plan for DARE and CDMS will be developed.

Method: Survey and visits to targetted countries by WMO expert.

3.1.2 Assist NMHSs in digitizing meteorological variables available on paper and archiving on electronic media per standards aligned with WMO and EU requirements. CLIDATA system will be upgraded in three beneficiaries (Bosnia and Herzegovina, the FYR of Macedonia, and Montenegro). Assessment of the needs of Albania and Kosovo (under UNSCR1244/99) will be carried out in order to configure a suitable system for historic meteorological and climate data management.

Method: Procurement of updated versions and/or new system from CLIDATA manufacturer. On-site training by CLIDATA expert.

Note: In accordance with a WMO regional survey, Albania, Bosnia and Herzegovina, Montenegro and FYR of Macedonia are the IPA beneficiaries that need capacity building in data rescue and climate data management. That includes provision of upgraded or new CDMS. Therefore, these four IPA beneficiaries are included in 3.1.2; the needs of Kosovo will also be assessed and suitable CDMS solution proposed.

3.2 *Enhancing hydro-meteorological data quality, homogenization and standardization.*

3.2.1 A Regional workshop on historic hydro-meteorological data management will be organised with specific modules on hydro-meteorological data quality assurance, homogenization and standardization. With 2 participating experts (1 from hydrology and 1 from meteorology), the beneficiaries will provide specific information on the current status of their hydro-meteorological data management system, and a plan for harmonization of hydro-meteorological data management system will be developed.

Method: Regional workshop with all IPA beneficiaries (16 participants expected; resource persons from WMO and RA VI experts in data homogenization).

3.3 *Drought hazard analysis and mapping.*

3.3.1 Training on Drought Hazard Analysis and Mapping. A hands-on training on Drought Hazard Analysis and Mapping will be organised at a WMO Training Center in the region. National experts will be trained on the development of drought indices (e.g. SPI) and mapping of these indices. Participants will come with their national meteorological and climate data and will learn to develop drought hazard maps for their country. This climate data aspect will be linked to the data rescue and climate data management training of the project (task 3.2.1).

Method: Regional workshop with all IPA beneficiaries (8 participants expected; resource persons from WMO and RA VI experts in drought).

3.4 Sava River pilot project on flood hazard.

3.4.1 Enhancing hydrological data management and exchange procedures. A pilot project team will be formed with hydrology experts from the IPA beneficiary countries and representative of the International Sava River Commission (ISRC) to review existing practices and develop improved procedures for data management and exchange at the basin level, with the support of one consultant. A regional meeting is envisaged to review various products (bulletins, warning, etc) currently issued by the NMHSs in relation to flood forecasting, assess the need for their exchange with riparian countries and their interoperability with other warning systems. Proposals for standardization of products, exchange mechanisms and services will be developed with indication of those that can be implemented immediately and those for which supplementary external funding would be required.

Method: Consultancy (1 expert in hydrology and data exchange); regional meeting (8 participants expected; resource persons from WMO, ISRC and consultant)

3.4.2 Flood losses assessment tool. Based on the methodology of the "Associated Programme on Flood Management" (APFM), participants will be trained on flood losses assessment. This activity will be conducted through an initial training as well as field activities during the flood season in selected pilot sites where participants will collect data and apply the APFM methodology. A final wrap up meeting will aim to review the results and finalise the methodology and tools for flood losses assessment in cross-border river basins, such as the Sava River Basin.

Method: Training event (8 participants expected; resource persons from WMO, ISRC) followed by field activities (selected national experts to travel to the test sites during flood event); wrap-up meeting.

Note: The activity 3.4 represents further development of the initial ideas included in the Project Fiche but with much more practical focus and tailored better to the region. It involves cooperation with an existing transboundary organization, the ISRC, and would provide beneficiaries with enhanced knowledge and hands-on experience with a methodology already developed and ready to implement, thus, ensuring immediate positive impact on the decision-making and planning related to flood protection.

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

Background:

One of the major contribution of NMHSs to the disaster risk management comes through 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. This task targets the enhancement of the capacity of the NMHSs in providing better specialized products and services to the DRR stakeholders through extensive training of meteorological and hydrological forecasters in collaboration with training capacity of leading centres in Europe, thus ensuring transfer of knowledge, know-how and best practices. Specific aims of the tasks are:

- increasing availability and use of state-of-the-art forecasting methods and techniques;
- special emphasis on flood forecasting;
- introduction of quality management principles and culture, including further improvement of data quality;
- better cross-border collaboration in the forecasting and warning processes and dissemination of information.

Activities:

4.1. *Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of Early Warning Systems: advanced training for meteorological forecasters required for 24/7 operations.*

4.1.1 On-the-job training at suitable operational centre (e.g., Romania) for forecasters from IPA beneficiaries.

Method: Agreement with the NMHS of the recipient country (agreement received from Romania) for development of a training package on severe weather forecasting and warnings with the use of state-of-

the-art technology (NWP, weather radar, satellite data, etc.). The training will include one meteorolofgical forecaster per beneficiary, duration 3-4 weeks.

4.1.2 Participation of experts from IPA beneficiaries in the European severe weather forecasting test-bed in collaboration with the European Severe Storm Laboratory (ESSL)

Method: 1 expert (meteorological forecaster) from each IPA beneficiary to participate in the field test-bed excersize for the period of 1 week.

4.1.3 Upgrade of the EUMETCast stations at ALB, BIH, MKD, MNE and Kosovo (that have been installed during IPA 2008 Action (the so called DAWBEE stations) and training of NMHSs staff in using the advanced tools for severe weather forecasting.

Method: The upgrade of the stations will be done by EUMETSAT; the training will be covered by the project budget.

4.2 Advanced training for hydrological forecasters.

4.2.1 Regional training workshop on integrated flood management and flood forecasting. Integrated flood management (IFM) calls for a paradigm shift from the traditional, fragmented and localized approach, and encourages the use of the resources of a river basin as a whole, employing strategies to maintain or augment the productivity of floodplains, while at the same time providing protective measures against losses due to flooding. The training on IFM and flood forecasting will help the IPA beneficiaries to align their planning and procedures with the best practices.

Method: Training workshop (16 participants expected; resource persons from WMO.

4.3 *Enhancement of the cross-border exchange of data and information in support of EWS.*

4.3.1 Continuation of integration of IPA countries to Meteoalarm.

Note: During IPA 2008 Project, Bosnia and Herzegovina succesfully implemented Meteoralarm on national basis, however, the integration to the European Meteoalarm could not be completed due to administrative reasons. It is envisaged here to provide to BiH the necessary budget (10,000 Euros) required for joining the European Meteoralarm.

4.4. *Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS).*

4.4.1 Regional training in Quality Management Systems (QMS) and their application in activities related to DRR. Quality Management becomes a crucial element in a sustem that provides data and products to other stakeholders who make decisions for saving life and peroperty. WMO will use its experience in assisting Members countries to implement QMS for their aviation services; the training will build upon the genenric QMS principles with added specific items related to the Disaster Risk Manmagement.

Method: Training workshop (16 participants expected; resource persons from WMO).

4.5 *Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments).*

4.5.1 Improving hydro-meteorological data quality – assistance to countries not having adequate resources for calibration and maintenance of hydro-meteorological instruments (in cooperation with the WMO Regional Instrument Centre (RIC) in Slovenia).

Method: Building upon the capacity building activities conducted during IPA 2008 DRR project, this sub-task includes procurement of equipment (travel calibration kit) which will be used by the experts of WMO Regional Instrument Centre in Slovenia to conduct calibrationm and maintenance visits to those countries lacking national calibration capabilities (visits to Albania, BiH, Montenegro, FYR of Macedonia are envisaged).

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

Background:

Climate change and climate variations are affecting significantly the regime of the hydro-meteorological hazards. The available climate projections for the South-East Europe indicate that the region would be affected by more frequent and severe disasters related to weather, water and climate, including floods and droughts. The mitigation of the related risks requires new capabilities for monitoring, assessing and predicting of hazardous conditions with longer lead time. Thus, the NMHSs of the IPA beneficiaries need to develop their capacity in the following areas:

- Drought monitoring and drought management;
- Long-range forecasting with focus on seasonal forecasts;
- Development and provision of specialized services and products in the field of insurance;
- Development and provision of climate services for different economic sectors.

Activities:

5.1. *Enhancing capacity in drought risk management.*

5.1.1 Strengthening the role and operation of the Drought Management Centre for South-East Europe (DMC/SEE Ljubljana, Slovenia), through secondment of staff from IPA Beneficiaries to this Centre and provision of on-the-job training on specialized drought-management tools.

Method: 1 drought expert from four beneficiary countries to be seconded to the DMC/SEE for the period of 4 weeks.

Note: This is a continuation of an activity initiated during IPA 2008 project when 2 experts (one from BiH and one from Turkey) were seconded to DMC/SEE for three months.

5.2. *Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services.*

5.2.1 Organisation of regular sessions of the South-East Europe Climate Outlook Forum (SEECOF). Two SEECOF sessions will be conducted within the two-year period of implementation in cooperation with the SEEVCCC, Belgrade, Serbia. The session will comprise a capacity-building module for the climate experts from IPA beneficiaries, followed by a collaborative production of regional climate outlooks and interpretation of regional climate change scenarios. Training of users in the use of these products in sectorial planning and risk management including elaboration of respective sector-specific statements of requirements is also envisaged.

Method: As a continuation of the activity started during IPA 2008 Project, two SEECOF sessions are planned (one in 2012 and one in 2013) with participation of climate experts from all IPA beneficiaries, along with representatives of user sectors. Resource persons will be provided by WMO and leading climate centres (UK, France, Russian Federation).

5.2.2 Regional training workshop in the use and interpretation of long-range forecasts, climate watch related aspects, and climate scenarios in application to various user sectors.

Method: Training workshop, 1 climate expert per IPA beneficiary; trainers from WMO and resource countries.

5.2.3 Development of platform for provision of climate services in collaboration with the SEEVCCC, including: implementation of user-friendly webpages for climate service access including user feedback functions, provision of contact information, provision of methodology information, etc.

Method: The task will be implemented through short-term secondments to SEEVCCC (2 experts from IPA beneficiaries (to be selected) for a period of 4 weeks).

5.3 *Developing capacity in services for the insurance sector.*

5.3.1 Regional training on the role of NMHSs in support of activities in the field of insurance.

Method: Training workshop, 2 experts per IPA beneficiary; trainers from WMO and resource countries.

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

Background:

In each country, the NMHS plays a key role in the establishment of an effective early warning system. Such systems should, with a multi-hazard approach, deliver accurate reliable and understandable warnings, in a timely fashion to authorities, emergency operations and the population at risk to enable preventative actions to reduce the impacts of potential disasters. In the specific scenario of the Western Balkans, the SEEDRMAP study conducted in 2007[15] , strongly recommended a regional approach in building adequate monitoring network to support the EWSs in the countries, as well as, enhanced cross-border exchange of hazards-related information. This is justified by the relatively small size of the countries with regard to the typical size of the disaster-affected areas, the cross-border nature of hazards, such as, floods, droughts, forest fires, etc., and the similar climatological regime of the hazardous conditions. The cost-benefit analysis shown in the study indicated that huge savings could be achieved through a regional design of the MHEWS, resulting in up to 30% in comparison with the case of each country developing its own system. This approach could be successfully implemented in collaboration with the other IPA beneficiary, Turkey, which has similar scope, climatology and EWS needs as the IPA beneficiaries in the Western Balkans.

In addition, the IPA 2008 Project, also strongly recommended the regional approach to building effective and efficient MHEWS through harmonized national Early Warning Systems within a regional cooperation framework. This would ensure seamless monitoring, forecasting and warning services

[15] See Strengthening the Hydrometeorological Services in South Eastern Europe, published by the World Bank, UN ISDR, WMO and Finnish Meteorological Institute, 2007

across the national borders to support multinational response adequate to the typical hazards in the region.

A Design Team will be established including one consultant, one expert from each beneficiary and relevant WMO experts. It will meet regularly through thematic regional meetings, workshops and visits 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. The team will focus on the priority hazards affecting the region, including forest fires, heat waves, severe storms, floods and droughts. The design of the MHEWS will also be based on good practices that have been documented in detail by WMO[16].

The main deliverable will be a design document which will be submitted to endorsement by relevant national and regional bodies, followed by presentation to potential donor organizations.

Activities:

6.1 *Assessment and gap analysis of the existing national Early Warning Systems*

6.1.1 Gap analysis with respect to the four components of effective early warning systems[17] 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. A consultant will be hired to develop this analysis based on the outcomes of Phase I project and with further cooperation with the beneficiaries as necessary.

Method: Consultancy; visits to all IPA beneficiaries to analyse the current warning systems of the NMHSs together with local experts; a report will be produced providing gap analysis and proposlas for system integration.

6.2 *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.*

6.2.1 Establishment of Design Team – consultant, designated experts from meteorological and hydrological services. The Design Team will conduct several meetings to develop a regional plan for the development of interlinked hydrometeorological monitoring and observation networks, forecasting capacities and open exchange of data and products. This plan will also build on the strengthening of the forecasting capacities of the countries undertaken in Task 4, and ensure appropriate linkages between the observation systems proposed and forecasting systems in place. Cost-benefit analysis will accompany the preparation of this document, which should provide also the expected costs and possible sources of funding. The task will be carried out in cooperation with regional stakeholders like EUMETNET and EUMETSAT.

Method: All IPA beneficiaries will designate one expert as a member of the Design Team. Three meetings of the design team; preparation of a final design document.

6.2.2 Regional meeting on institutional collaboration in MHEWS. Building on the principles of Quality Management Systems, a multi-stakeholder meeting will be organized with experts from Disaster Risk Management agencies and other stakeholders to review the current EWS-related planning and legislation in the countries, roles and responsibilities of the MHEWS stakeholders with

[16] Institutional partnership in Multi-Hazard Early Warning Systems – A compilation of Seven National Good practices and Guiding Principles – WMO - 2011

[17] 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

focus on the development of harmonized standard operating procedures for exchange and dissemination of information (including forecasts and warnings) between NMHSs and other MHEWS stakeholders.

Method: Regional Meeting with DRR stakeholders (back-to-back with the third meeting of the Design Team).

6.2.3 Regional forum to present the design document and promote it for adoption at national and regional level. Presentation of the design to potential donors and financing institutions with the view to get support for implementation (to be organized in connection with the final project meeting of the Steering Committee).

Method: Regional meeting (forum) with broad participation of DRR stakeholders and representatives of investors and donors. Planned to be back-to-back with the third meeting of the Steering Committee.

6.2.4 Assistance to the Informal Conference of South-east European Directors (ICSEED) of NMHSs. This is a traditional meeting of all Directors of NMHSs in SE Europe hold once a year. ICSEED is the body that first raised the need for cooperation at sub-regional level to enhance the hydrometeorolofgical service to DRR and improve early warning systems. It provides an excellent forum for presenting progress reports on project activities and coordinate with non-IPA countries in order to ensure that the actions undertaken in IPA area are coherent and the seamlessness of the systems is guaranteed. Two ICSEED meetings are planned during the implementation period and the project will assit four NMHS Directors from IPA beneficiaries to participate.

Task 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) (implemented by UNISDR)

Background:

The first result will actively promote public-private partnerships. It will be achieved through the development of a training package. The training will include a comprehensive review of Europa Re participation requirements for insurance companies and agents, products to be offered through Europa Re web-based underwriting platform, underwriting and pricing systems to be used by insurance agents, claims settlement procedures and risk management protocols for insurance companies enrolled in Europa Re.

The second and the third results will enhance the project visibility and the awareness of the importance of investing in insurance for disasters among homeowners and Small-Medium Enterprises. Achieving these results will also imply enhancing the political commitment towards establishing private-public partnerships for mitigating the risk posed by disasters.

Activities:

7.1.1. Develop a training package (in local languages) for insurance agents that would promote Europa Re insurance products in IPA states participating in Europa Re program.

Method: A senior Expert in Insurance and Re-insurance products for disasters will develop in partnership with the World Bank and UNISDR Programe Officers the training material for the use of existing financial products (such as Europe Re) that beneficiary countries, homeowners and Small-medium Enterprises can adopt to transfer their disaster risks.

7.1.2. Based on the training materials prepared under 7.1.1. organize up to 5 regional training sessions for insurers and insurance agents participating in Europa Re program;

Method: UNISDR Programme Officers in collaboration with the World Bank and the assistance of the Insurance Expert and the IPA participating countries in Europa Re will organize nationally-based trainings using the material developed in 7.1.1

7.2.1. Design and print out flyers, brochures and other hand-out materials (in local languages) on Europa Re Program and products. This awareness material shall be distributed by insurance agents to their clients (including homeowners, farmers, businesses and SMEs) and be available for main conferences, meetings and events that in the region deal with DRR and climate change adaptation;

Method: An Expert in Public Relations and Communication will develop the visibility material in coordination with UNISDR Programme Officers and the World Bank. UNISDR will vehicle the distribution of the visibility material through the HFA Focal Points and UNCTs in each country participating to the Europa Re and the other beneficiary countries so that they can increase their knowledge about insurance products for disaster risk transfer.

7.2.2. Prepare a promotional video clip in local languages for Europa Re insurance products that can be shown on media and internet and during main events and conferences which promote DRR and Climate Change Adaptation in the Western Balkans and Turkey;

Method: The Expert in Public Relations and Communication in partnership with UNISDR Programme Officers and the World Bank will develop a video to promote the project and the insurance for disasters among the general public and insurance stakeholders. UNISDR will vehicle its distribution through PreventionWeb and its national and regional network of contacts the distribution of the video and will assure that is featured in the main upcoming event concerning DRR at international level.

7.3.1. Organize the 2nd Regional Europa Re Insurance Conference dedicated to the launch of Europa Re's operations in IPA countries beneficiaries of the program and EU countries to enhance the visibility of this insurance initiative

Method: The World Bank and UNISDR Programme Officers, in partnership with the hosting countries and in collaboration with IPA beneficiary countries will organize a regional conference to share information about the outcomes of the training and increase the awareness among the general public of the importance of insurance for reducing disaster risks and increase the visibility of the project.

Task 8: Increase public awareness in relation to disaster risk reduction. (implemented by UNISDR)

Background:

These activities will build on the existing opportunities offered by the global UNISDR campaign on Making Cities Resilient. Over 40 municipalities from IPA beneficiary countries already joined the campaign and set an important basis for the project.

UNISDR Europe will facilitate the implementation of these activities through exchanges and support to the local governmental units and mayors.

The flyers and media material will be designed by a specialized expert and distribute in local languages for awareness rising in schools, hospitals and other public locations.

The press conference will be couple to a main international event such as the Global Platform for DRR 2013 or the 2013 European Forum for DRR.

The project will also provide the support for mayors or representatives of local governmental unit to attend events related to urban planning for risk reduction and main regional and international events which promote the UNISDR campaign and urban safety.

Activities:

8.1.1 Implementation of the World Disaster Reduction Campaign 2011-2012 "Making Cities Resilient: My City Is Getting Ready" in the Western Balkans and Turkey[18] 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. The project envisages a local event for each beneficiary country in partnership with the local governments.

Method: UNISDR Programme Officers in collaboration with the UNISDR Campaign Team (Geneva) will promote the "Making Cities Resilient" with selected cities in IPA Beneficiaries which already joined the Campaign or intend to join it. Through city-based visibility events, citizen will be informed on what their local governments are doing to prevent disaster risks and will get knowledge on their role in protecting their lives and assets in case of disasters

8.1.2 Development of brochure, flyers and other communication/visibility material to be published on web social networks and PreventionWeb on the importance of DRR for IPA countries citizens. The flyers will be distributed on major events in the region and through the contribution of the local governments in schools, hospitals and other centres of community aggregation to enhance awareness on DRR.

Method: UNISDR Programme Officers in collaboration with a graphic designer will develop information material and in partnership with the Making Cities Resilient network of mayors and local governments will assure that the visibility and awareness material is distributed in public offices (schools and hospitals) of IPA beneficiary countries and through social media (in electronic version).

8.1.3 Support mayors and LGUs representatives to attend main event on reducing urban risks regionally and internationally.

8.1.4 Organization of a press conference with high level representatives and community representatives on awareness of community based DRR interventions for Western Balkans and Turkey.

Method: UNISDR will support mayors or their representatives (of IPA beneficiary countries) to join main international events such as the Global Platform for DRR. In occasion of their participation in a main international event and under the umbrella of the Making Resilient Campaign, a press conference will be organized by UNISDR inviting mayors and European journalists to promote the work done by cities in Western Balkans and Turkey in DRR at community level.

8.2.1 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

Method: a Consultant expert in community-based DRR will collect the experiences of cities in IPA beneficiaries' countries which have invested in disaster prevention and risk reduction and featured DRR has a priority of their local development strategies.

8.2.2 Translation of relevant DRR materials for communication into local languages (and web publishing).

[18] 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

Method: This activity will contribute to the KMS described under Task 2 and will be performed by local translators. The material translated will be shared by UNISDR through PreventionWeb and its network of national HFA Focal Points in IPA beneficiary countries.

2.10 DURATION AND INDICATIVE ACTION PLAN FOR IMPLEMENTING THE ACTION

The duration of the action is 24 months. The indicative action plan is presented in the Table 2.

Table 2: Project implementation plan

Tasks	Year 1												Year 2											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Task 1: Enhance the regional institutional capacity and coordination with respect to disaster risk reduction (DRR) and adaptation to climate change. – UNISDR																								
Developed the exchange DRR Programme with EU selected countries in the context of the European Forum for DRR (EFDRR).			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Improved institutional DRR capacity and coordination at regional level, as result of participation of IPA beneficiaries in regional workshops on DRR and climate change adaptation																				x	x	x	x	
Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. - UNISDR																								
A DRR Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information.				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Published guidelines on the use of the DRR KMS and capacity building of IPA Beneficiaries' officers on its use and functions																		x	x	x				
Task 3: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping. – WMO																								
Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS).			x	x	x	x	x	x	x	x	x	x	x	x	x									
Enhancing hydro-meteorological data quality, homogenization and standardization.					x	x	x	x																
Drought Hazard analysis and mapping.													x	x	x	x	x	x						
Sava River pilot project on flood hazard.				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR. – WMO																								
Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of Early Warning Systems					x	x	x	x								x	x	x	x					

Tasks	Year 1												Year 2											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Advanced training for hydrological forecasters.							x	x	x	x	x	x												
Enhancement of the cross-border exchange of data and information in support of EWS.															x	x	x	x	x	x	x	x		
Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS).			x														x	x						
Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments).					x	x	x	x	x	x	x	x	x	x	x	x	x							
Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda - WMO																								
Enhancing capacity in drought risk management.									x	x	x										x	x	x	
Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services.							x	x	x	x	x	x	x					x	x	x	x	x	x	
Developing capacity in services for the insurance sector.															x	x	x							
Task 6: Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework. - WMO																								
Assessment and gap analysis of the existing national Early Warning Systems					x	x	x	x	x															
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.					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Task 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) - UNISDR																								

Tasks	Year 1												Year 2											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
In collaboration with the World Bank and Europa Re, build the capacities of beneficiary countries to promote the penetration of insurance products for disaster risk transfer.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
In collaboration with the World Bank and Europa Re, enhance public awareness on tools available to mitigate the risk of disasters through insurance products available for homeowners and SMEs.					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					
In collaboration with the World Bank and Europa Re organize a regional conference and a press conference to enhance visibility and awareness on disaster risk transfer options and the services available through Europa Re																					x	x	x	
Task 8: Increase public awareness in relation to disaster risk reduction. - UNISDR																								
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.				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Western Balkans countries and Turkey enhanced their knowledge on communication and DRR through capacity building activities involving governments, media and other relevant stakeholders			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Joint UNISDR – WMO Management																								
Inception Workshop (& 1st SC meeting)	x	x																						
MTR Workshop (& 2nd[t] SC meeting)												x	x											
Wrap up workshop (& 3rd SC meeting)																							x	x
Evaluation											x	x											x	x

3. SUSTAINABILITY OF THE ACTION

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.

- 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.

- 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 SEEC 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 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.

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.

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 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 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.

4. PROJECT MANAGEMENT

4.1. IMPLEMENTATION ARRANGEMENTS

The Action will be implemented in joint management with two international organizations, namely the United Nations International Strategy for Disaster Reduction (UNISDR) which will lead the Action, and World Meteorological Organization (WMO). Each of the two organizations will be in charge with implementation of certain tasks, namely: Tasks 1, 2, 7 and 8 are under responsibility of UNISDR, while Tasks 3, 4, 5, 6 are under the responsibility of WMO.

Responsibility sharing among UNISDR and WMO with regards to implementation, reporting, auditing and evaluation of this project was agreed upon and formalized by the two organization under a Memorandum of Understanding signed in February 2012.

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 supporting 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 to play in climate change adaptation and DRR at all levels. UNISDR coordinates efforts in DRR and guide, monitor as well as report regularly on the progress of the implementation of the HFA. UNISDR campaigns to create global awareness of DRR benefits and empower people to reduce their vulnerability to hazards; advocates for greater investments in DRR actions to protect people's lives an assets including promoting climate change adaptation. UNISDR informs and connect people by providing practical services and tools such as the keeping of Prevention Web the global hub of knowledge on DRR on the web, publications and good practices, country profiles and the Global Assessment Report (GAR) on DRR providing analysis of global risks and trends.

UNISDR operates globally through the presence of 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 behavior 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;

- 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;

- 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 Hyogo Framework for Action and their DRR national strategies (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 report[19]). The project actions have been identified in coordination with IPA beneficiaries and are based on the recognized needs for addressing DRR in the region. The project aims at achieving further enhancements of beneficiary countries national meteorological and hydrological systems, products and services through regional cooperation and collaboration, being therefore complementary to and consistent with the national development efforts. Participation of the WMO's Permanent Representatives in the Western Balkans and Turkey (the Directors of the NMHSs) will also have a role in ensuring full compatibility of the project with the national programmes and initiatives.

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.

[19] See Annex VI for details.

4.2. MANAGEMENT AND METHODOLOGY OF THE INTERVENTION

The overall management envisages a strong participatory approach with the beneficiaries' countries. This aims at increasing the effectiveness and the efficiency of the actions as well as enhancing the ownership of the service delivered and consequently the long term sustainability of the project outcomes.

Project key stakeholders are the NMHSs representatives, HFA Focal Points and the National Platforms coordinators, who will be involved in the decision making process to assure that the implementation is demand driven by the beneficiaries.

4.3. PROJECT MANAGEMENT STRUCTURE

Steering Committee

The Project will be guided by a Steering Committee formed by beneficiary countries' representatives (HFA Focal Points and Directors of the NHMS), WMO, UNISDR and the European Commission.

The Steering Committee will oversee the implementation of the project against the work plan, evaluate progress and performance of the intervention and decide on corrective measures as needed. The Steering Committee will review the planed deliverables and evaluate their relevance and quality.

The Steering Committee will conduct meetings as described in section 4.8 below.

Advisory Group

The Advisory Group is composed of representatives from relevant organizations which are not directly involved in the operational implementation of the project, but will have advisory functions to ensure consistency and complementarity with similar activities in the region. The Advisory Group will support the work of the Steering Committee providing timely information on relevant climate adaptation and DRR initiatives in IPA beneficiary countries and will give the opportunity t the project to build on complementarities and establish synergies with other interventions if necessary. The Advisory Group, being formed by experts from several international organizations can also provide technical support on specific issues addressed by the project.

UN partners such as the World Bank, UNDP, CADRI; regional organizations such as DPPI, RCC, Sava River Commission; and representatives of European Meteorological infrastructures (ECMWF, EUMETNET, EUMETSAT); Relevant EC bodies: EC DG ECHO, JRC, DG DEVCO, DG CLIMA – will be invited to participate to the Advisory Group.

Advisory Group will be consulted through electronic means and will be invited to participate in the inception and final meetings of the Steering Committee.

4.4. NATIONAL COORDINATORS

The overall coordination of the project implementation with beneficiaries will be done through national project coordinators (HFA Focal Points and Directors of NMHSs).

4.5. PROJECT COORDINATION AND IMPLEMENTATION TEAM (PCIT)

The operational management of the project will be responsibility of a joint UNISDR – WMO Project Coordination and Implementation Team (PCIT) which will be composed by:

a. Senior Officers who in UNISDR and WMO have supervisory responsibility on the implementation on DRR and regional activities in Western Balkans and Turkey.

UNISDR Head of Europe Officer will be the senior officer in charge of the overall supervision of the action and specifically the activities related to UNISDR. The Senior Officer will assure the overall coordination and that project resources are efficiently used within the deliveries timeline.

On WMO side, the senior officers in charge will be the Chief of the Regional Office for Europe (C/ROE) and the Chief of the DRR Programme (C/DRR).

b. Programme officers responsible for UNISDR and WMO components of the project. The programme officers will closely coordinate to ensure harmonized implementation of the actions required to achieve the project objectives.

The PCIT will consult with relevant experts from WMO and UNISDR who will advise on the implementation of specific tasks.

4.6 INTERNAL PROJECT IMPLEMENTATION ARRANGEMENTS BY UNISDR AND WMO

UNSIDR will have a devoted Programme Officer (P3) which will act as manager of the project, assuring that daily management of the activities is carried out as per deadlines agreed with the donor and beneficiaries. The Officer will have responsibility for the monitoring and reporting of the UNISDR related activities and will be the first focal point for the project stakeholders.

In addition UNISDR will support the activities related to advocacy and awareness with an Associate Programme Officer (P2) specialist in Communication and Advocacy and the activities related to insurance and re-insurance products through a Programme Officer (P3) with specific subject matter expertise. To assure that project administration is duly kept and financial reporting match the EC standards, UNISDR will assure that an Administrative Assistant (G5) is supporting the action, as well, given the amount of logistic to organize the project activities and travel, a Team Assistant (SSA) will be recruited.

WMO will hire a Project Manager who will carry out the operational project management of the tasks implemented by WMO and will be part of the PCIT. WMO experts in relevant fields will be involved in the implementation of specific tasks and sub-tasks (this includes experts in the field of: observations, forecasting and warnings, climate, hydrology, agrometeorology, QMS, DRR, capacity development). An internal project implementation team will be formed to ensure close coordination and information sharing. The technical and administrative arrangements for the project events – meetings, workshops and seminars will be carried by the secretaries and technical assistants of the Departments involved and the WMO Travel Unit. Financial arrangements and reporting will be facilitated by the WMO budget and financial divisions. All internal arrangements for the implementation of the project will be established for the whole duration of the project through a Service Note issued by the WMO Secretary-General.

4.7 PROJECT COMMUNICATION

The PCIT will assure that any relevant information is timely shared with the Project Steering Committee members through regular email updates and the organization of the Steering Committee (see 4.6) meetings and teleconferences.

The Advisory Group will support the PCIT transferring the information shared by the project with other relevant partners involved in the region in areas relevant to DRR and climate adaptation.

Communication of the project activities and envisaged results to the general public and wider range of DRR actors and stakeholders operating in IPA countries will be achieved through visibility material,

UNISDR and WMO websites and the use of PreventionWeb, the world major hub of information on DRR and climate change (www.preventionweb.net) whose content is managed by UNISDR Information Management Unit.

4.8. MEETINGS

1. Project kick-off meeting

The kick-off meeting will be organized with participation of the project Steering Committee comprising representatives from the eight IPA beneficiaries, the international and regional organizations part of the project Advisory Group and representatives from the European Commission. The meeting objective is to adopt the project implementation plan with respective timeline. The membership, role, responsiblities and working methods of the Steering Committee and Advisory Group will also be discussed and agred upon during this meeting. This event will be used for raising awareness and visibility of the intervention through a press event and adequate level of attendance.

2. Mid-term Implementation Review Meeting.

The Steering Committee shall meet and review the progress of the implementation against the work plan and formulate advice on adjustment and recommendations for the second year of project implementation. The meeting will decide on appropriate publications to enhance the visibility of the project's achievements.

3. Wrap-up Meeting.

The meeting will comprise the Steering Committee and other high level representatives of the national DRM stakeholders, international partners including relevant NGOs. The results and achievements of the project will be presented and regional approach to DRR will be promoted.

Besides the three above mentioned meetings, the Steering Committee will meet on a regular basis (every 6 months) or in person or through Videoconference/Teleconference organized by UNISDR and WMO through their facilities.

5. PROJECT MONITORING AND EVALUATION

The Steering Committee will be responsible for monitoring the implementation of the project tasks and activities, reviewing the reports developed by the WMO and UNISDR as well as the final evaluation of the project.

On-going evaluation of performance against the expected results will be done by the Steering Committee and jointly with PCIT will decide on corrective measures as needed.

A consultant (independent evaluation specialist) will be hired to conduct the mid-term and final evaluation of the project and to submit evaluation reports proposing corrective actions and recommendations to ensure the long term sustainability of the outcomes and results achieved.

The project activities will be regularly monitored by the UNISDR and WMO staff devoted to the project (see section 4 for more details). At the beginning of the intervention the identified indicators will be featured in a project monitoring matrix and at the project inception benchmarks (where possible) for the indicators will be measured so that results can be related to the targets envisaged for each activities and results by the end of the intervention.

6. REPORTING

UNISDR will report to the Contracting Authority in line with the Contribution Agreement. The reports will be submitted to the Contracting Authority by the UNISDR, in its capacity as lead partner, in line with the provisions of the Contribution Agreement. WMO will provide inputs for progress reports and final report, as required and in accordance with the Memorandum of Understanding signed in February 2012.

7. VISIBILITY AND OUTREACH

UNISDR and WMO will set up special webpage for the project where information on the implementation and results will be posted regularly.

UNISDR and WMO will use opportunities for promoting the cooperation with the European Commission by issuing appropriate press releases, flyers, banners and other media products which will be developed and disseminated in the beneficiary countries and among relevant regional and international partners to enhance the visibility and awareness of the project actions among the general public and national institutions.

In all publications, presentations and other deliverables produced by the Project, the visibility requirements of the European Commission as specified in the Contractual Agreement will be duly observed. The same will be valid for any equipment purchased through the Project.

ANNEX: Logical Framework Matrix

Programme name: Building Resilience to Disasters in Western Balkans and Turkey			
		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.	(Percentage of increased) level of accomplishments within the identified HFA indicators. Reduction in loss of life, property and economic productivity caused by natural disasters.	HFA reports of IPA Beneficiaries. HFA reports for SEE region. Statistical reports from IPA Beneficiaries' national statistical offices. International sources of information, such as the Emergency Events Database-	

[20] n.a. EMDAT is the international database on disasters

		"EMDAT"[20].	
To enhance the capacity of IPA Beneficiaries to address disaster risk reduction in both today's and the future predicted climate.	Increased availability of hazard risk data and maps of IPA beneficiaries. 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 through collaboration and optimizing the implementation costs. Increase in availability of products and services at national and regional level to support decision-making in climate change adaptation.	HFA reports of IPA Beneficiaries. 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. Database utilization reports[21].	Sustained political commitment from IPA beneficiaries. Effective interest and commitment of the key national stakeholders (i.e. the National Platforms coordinators, Hyogo Framework for Action (HFA) focal points, representatives of the National Meteorological and Hydrological Services, etc), during the project implementation, as well as after its end. Effective commitment from 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.

[21] 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. Significant increase in the qualification and competence of meteorological and hydrological forecasters and experts from IPA beneficiaries, resulting in higher quality products and services in support DRR. Large volumes of climate and hazard data rescued through transfer to digital media. Number of visits of the web-accessible database created under Task 2. Developments at regional and national level that the project contributed to. Number of countries joining the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility Number of countries developing their own National DRR strategies and programmes.	Reports of HFA focal points and NMHS to UNISDR, respectively to WMO[22]. 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.	Stable socio-political conditions in the region are maintained. 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 be identified by the end of the project implementation

[22] 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.

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
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 workshops on DRR and climate change adaptation.	At least 70% of the IPA beneficiaries' participants at the DRR Exchange Programme achieve a score assessed as satisfactory. 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 released by the end of the intervention and shared among the IPA beneficiaries. .	Program/action evaluation sheets[23] 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[24].	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[25]. 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[26] on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

[23] 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 the program.

[24] i.e. Results Oriented Monitoring (ROM) reports.

[25] 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.

[26] See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 2: Strengthened regional capacity and cooperation towards data and knowledge sharing on risks. 2.1. A DRR Knowledge Management System (KMS) consisting of a web-accessible database of national and regional information. 2.2. Develop and disseminate guidelines on the use of the DRR KMS and capacity building of IPA Beneficiaries' officers on its use and functions..	By the end of the intervention the DRR KMS is functional and used by IPA beneficiaries. By the end of the intervention DRR KMS guidelines are published and shared with the IPA beneficiaries' officers and relevant national and regional stakeholders as necessary.	Agreement document between implementing organization(s) and DPPI with regard to future maintenance and functionality of the Knowledge Management System created. Project reports DRR KMS guidelines produced Project evaluations	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. Sufficient relevant information regarding DRR (i.e. regional expertise, contacts, resource material) available and timely accessible to the project team. IPA MB 2008-DRR Programme[27] on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

[27] See details at "Linked projects" section

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 3: Enhanced regional risk assessment capacities through improved capacity of beneficiaries in hazard analysis and mapping (WMO). 3.1. Beneficiaries enhance their capacity of creating high quality hazard databases through data rescue and improved data management of available climatological records per standards aligned with WMO and EU requirements 3.2. A number of relevant professionals from IPA Beneficiaries trained on data management including hazard analysis and mapping. 3.3. Hydrometeorological hazard analysis and mapping tools available to and implemented by IPA Beneficiaries. 3.4 Establishment of links and collaboration with Sava River Commission for a collaborative pilot project aimed at enhancing capacities in flood hazard assessment in the Sava river transboundary basin.	Amount of national data on paper rescued, digitized and included in climate data management database. Number of beneficiaries with climatological databases created and utilized. Conformity of the climatological databases created with the WMO and EU requirements. Completeness of the database (percentage of the country surface covered, number of hazards for which data are available). Acquired knowledge and skills of participants in the hazard analysis and mapping workshop with focus on drought. Participation in the collaborative project with the Sava River Commission; quality and usefulness of the results of the pilot project on Sava River Basin.	Up-to-date climate data bases and management systems available at the end of project implementation. Hazard assessment documentation available at the end of implementation period. Feed-back from IPA beneficiaries. 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[28] on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

[28] 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 forecasting capabilities in support of Early Warning Systems in IPA Beneficiaries (including capabilities related to utilization of numerical weather prediction (NWP) products, satellite and radar information). 4.2. Increased accuracy and timeliness (sufficient lead time to allow relevant action) of the warnings for hazardous weather. 4.3. Improved knowledge in integrated flood management and flood forecasting. 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 through specific training packages. 4.6. Issues related to quality of observations in some IPA beneficiaries addressed through assistance in calibration and maintenance. 4.7. Increased capacity in introduction of quality assurance standards/guidelines in support of DRR, including improved orecast verification techniques.	Number of IPA beneficiaries capable of using "state-of-the-art" Numerical Weather Prediction products in predicting hazardous weather and issuance of warnings. Number of IPA beneficiaries with improved flood forecast capabilities. Ratio current to previous real-time data cross-border exchanges. Number of meteorological and hydrological forecasters trained. Number of IPA beneficiaries compliant with the WMO requirements for calibration and maintenance of observing equipment. Increased compliance with the quality assurance standards/guidelines developed by WMO and relevant international standards and best practices.	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. Establishment of good working relations with the training institutions involved. IPA MB 2008-DRR Programme on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 5: Improved capacity of the NMHSs of IPA beneficiaries in the provision of information to support climate change adaptation and climate risk management. 5.1. Increased capacity of IPA Beneficiaries to utilize drought management tools developed for the region. 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 NMHS's awareness of their role and new type of services to be provided in support of the activities in the field of insurance. 5.4. Ensured 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. Enhanced dialogue with users and better understanding of sector-specific requirements related to LRF, Climate Change and Climate Watches in support of climate risk management	Number of staff from IPA Beneficiaries trained in the use and interpretation of long-range forecasts, climate change scenarios, and climate watches. Utility/Effectiveness of the developed tools specific to drought management and number of staff from IPA Beneficiaries trained in the use of drought management tools. 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 and number of climate experts from IPA beneficiaries participating; 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 seasonal outlooks in decision-making process.	Satisfaction surveys on training events. Reports. Climate Outlooks verification statistics. Documented user's requirements for climate services.	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. Commitment of leading centres in LRF to support the regional events through recourse persons. Improved communication with users and broader participation of users in SEECOF sessions.

Results	Objectively verifiable indicators	Sources of Verification	Assumptions

Result 6: A design for a seamless regional Multi-Hazard Early Warning System (MHEWS) developed 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 harmonized and inter-operable national Early Warning Systems. 6.2. Identifying existing gaps in the monitoring and forecasting capabilities (e.g., hydrological data, weather radar data, etc.) and proposing solutions which are cross-border optimized in order to reduce the cost of monitoring infrastructure and running costs; 6.3. Cost-benefit analysis for the realization of the designed regional MHEWS; 6.4. Addressing relevant institutional and procedural issues at national and regional level necessary to enable the implementation of effective and efficient MHEWS;	Number of experts designated by IPA beneficiaries participating in the regional design effort; Quality and usefulness of the gap analysis related to monitoring and forecasting capabilities; Realism and comprehensiveness of the design document prepared; Realism and utility of the cost-benefit analysis accompanying the preparation of the design document; Promotion and adoption of the regional MHEWS design at the level of IPA beneficiaries' governments and commitment to support its realization.	Satisfaction surveys on meetings and workshops. Reports. Concept and Design documents. Feed-back from IPA beneficiaries. Feed-back from financial institutions.	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 the realization of the regional MHEWS. Proposed design fits to requirements for financing by international financing institutions. IPA MB 2008-DRR Programme[29] on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

[29] See details at "Linked projects" section

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.			

Result 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) 7.1 In collaboration with the World Bank and Europa Re, UNISDR will build the capacities of beneficiary countries to promote the penetration of insurance products for disaster risk transfer.7.2 In collaboration with the World Bank and Europa Re, enhance public awareness on tools available to mitigate the risk of disasters through insurance products available for homeowners and SMEs. 7.3 In collaboration with the World Bank and Europa Re organize a regional conference and a press conference to enhance visibility and awareness on disaster risk transfer options and the services available through Europa Re.	Training package on insurance and reinsurance is fully developed At least five training sessions delivered by the end of the intervention By the end of the intervention a regional conference on SEEC CRIF in IPA beneficiaries' countries has been organized and attended at least by 70% of the IPA representatives. Visibility material for the awareness of insurance to mitigate the effect of disasters has been developed by the end of the intervention.		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. The World Bank and Europa Re provide expertise as required in the partnership with UNISDR to implement the activities related to insurance and re-insurance.

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
Result 8: Increased public awareness on disaster risk reduction. 8.1. Western Balkans countries and Turkey local governments' officials and local decision makers enhanced their knowledge on DRR through the development of specific knowledge products on DRR at community level in Western Balkans and Turkey. 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.		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[30] on whose outcomes the project builds successfully finalized and its outputs made available to the project team.

[30] See details at "Linked projects" section

Activities	Means	Estimated Costs (=Total Eligible 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:* 1.1.1 Organization of study tour for 2 participants for each IPA beneficiary with selected EU countries. 1.1.2 Development of a final report of the DRR Exchange Programme 1.2.1 Organization of a session in an existing regional meeting (e.g. DPPI SEE Regional Meetings) to present the outcomes of the exchange programme and impact on countries' capacity.	• Support to IPA beneficiary countries for the Exchange Programme and the workshops • Consultant to develop and support the Exchange Programme.	Euro 298,106	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.

Task 2: Strengthen the regional capacity and cooperation towards data and knowledge sharing on risks. – UNISDR *Activities:* 2.1.1 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. 2.1.2 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. 2.2.1 Preparation of training guidelines on the use of the KMS to be shared with IPA beneficiaries countries	• Consultant Expert in KMS / MIS to develop the system • Web graphic designer • Local consultant which can support the content development of the DRR KMS		DPPI SEE is available and able to host the system and promote it with its member countries.

Task 3: Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping. – WMO *Activities:* A 3.1. Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS). A 3.2. Enhancing hydro-meteorological data quality, homogenization and standardization. A 3.3. Drought Hazard analysis and mapping A 3.4. Sava River pilot project on flood hazard.	• Consultancy • Assistance by WMO staff • Upgrade of existing and procurement of new CDMS systems • Training workshops • Collaboration between experts from Sava River basin countries and Sava River Commission • Use of flood losses assessment tool		Meteorological and hydrological variables/data needed available on paper and timely put at the project team's disposal. Local IT support for the new CDMS systems available. Highly motivated participation in the planned training events Establishment of good working arrangements with the Sava River Commission

Task 4: Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR. - WMO *Activities:* A 4.1. Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of Early Warning Systems: advanced training for meteorological forecasters required for 24/7 operations. A 4.2. Advanced training for hydrological forecasters. A 4.3. Enhancement of the cross-border exchange of data and information in support of EWS. A 4.4. Building capacity for quality assurance of products and services provided in support of DRR, including quality management system (QMS). A 4.5 Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments).	• Workshops and trainings in collaboration with leading centres (Romanian Meteorological Administration and European Severe Storm Laboratory); • Upgrade of satellite systems and training in collaboration with EUMETSAT; • Training workshops on flood management; • Web development for collaborative work in support of EWS (consultancy); • QMS training for NMHSs managers; • Equipment and expert assistance for maintenance and calibration of instruments used monitoring of weather conditions (in cooperation with the Regional Instrument Centre (RIC) Slovenia).		Highly motivated participation in the planned training events. Establishment of good working arrangements with the Romanian Meteorological Administration and ESSL. NMHSs in need for calibration and maintenance assistance establish national plans for regular checks and calibration in accordance with WMO requirements. The need for implementation of QMS for services in support to DRR well recognized by NMHSs management.

Task 5: Develop the capacity needed to support climate risk management and climate change adaptation into national and regional DRR agenda - WMO *Activities:* A 5.1. Enhancing capacity in drought risk management. A 5.2. Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services. A 5.3. Developing capacity in services for the insurance sector.	• Secondment of drought experts from IPA beneficiaries to DMC/SEE; • Two SEECOF Sessions supported by resource persons from the Global Producing Centres and Regional Climate Centres; • Secondment of climate experts from IPA beneficiaries to the SEEVCCC, Belgrade. • Regional workshop on Long-Range Forecasting; • Regional workshop on the NMHS role for insurance sector.		Highly motivated participation in the planned training events and secondments. Good organization of the SEECOF sessions including broader participation of user's representatives.

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 and gap analysis of the existing national Early Warning Systems A 6.2 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.	• Consultancy for assessment and gap analysis; • Establishment of a Design Team composed of experts from all IPA beneficiaries supported by consultant and WMO experts; • Review of existing monitoring networks and designing an optimized network; • Cost-benefit analysis; • Meetings of the Design Team to coordinate and prepare the final deliverable – MHEWS Design Proposal; • Regional forum for DRR stakeholders in IPA Beneficiaries. • Meetings with potential financing institutions (EC, WB, national development funds).		Commitment by all IPA beneficiaries to a regional approach towards harmonization of all elements of the efficient EWS. Designation of best available experts to the regional Design Team. Selection of appropriate consultant with knowledge of the technical, organizational and financial aspects of EWS. Good interaction with main DRR stakeholders. Effective promotion campaign with the potential donors.

Task 7: Insurance and reinsurance products for disaster risk transfer are promoted among the IPA beneficiaries in collaboration with the private sector, the World Bank, Europa Re and the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF) - UNISDR *Activities:* 7.1.1. Develop a training package (in local languages) for insurance agents that would promote Europa Re insurance products in IPA states participating in Europa Re program. 7.1.2. Based on the training materials prepared under 7.1.1 organize up to 5 regional training sessions for insurers and insurance agents participating in Europa Re program.; 7.2.1. Design and print out flyers, brochures and other hand-out materials (in local languages) on Europa Re Program and products. 7.2.2 Prepare a promotional video clip in local languages for Europa Re insurance products; 7.3.1 Organize the 2nd Regional Europa Re Insurance Conference dedicated to the launch of Europa Re's operations –in IPA countries	• Consultant to develop the insurance training package and provide support to the training sessions • Support to the IPA beneficiaries to attend the capacity building activities • Consultant to develop the visibility material and PR Consultant graphic designer • Consultant to support the organization of the regional conference		Government officials (regulators from Ministries of Finances) and private sector operators continue the collaboration established by UNISDR and the WB to promote the SEEC CRIF in Western Balkans. The WB and Europa Re continue the effective collaboration with UNISDR on promoting insurance and reinsurance in the SEE region.

Task 8: Increase public awareness in relation to disaster risk reduction. - UNISDR *Activities:* 8.1.1 Implementation of the World Disaster Reduction Campaign 2011-2012 "Making Cities Resilient: My City Is Getting Ready" in the Western Balkans and Turkey[31] through specific launching events in collaboration with the mayors and local authorities. 8.1.2 Development of brochure, flyers and other communication/visibility material to be published on web social networks and PreventionWeb on the importance of DRR for IPA countries citizens. 8.1.3 Support mayors and LGUs representatives to attend main event on reducing urban risks regionally and internationally. 8.1.4 Organization of a press conference with high level representatives and community representatives on awareness of community based DRR interventions for Western Balkans and Turkey.	• Support to beneficiary to attend the events related to tasks 8. • Consultant to develop the compendium of good practices		Local municipalities and local governmental units collaborate to support the awareness and advocacy activities at local level

[31] 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

8.2.1 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 8.2.2 Translation of relevant DRR materials for communication into local languages (and web publishing).			