

ARPA
Agenzia Regionale per la Prevenzione e l'Ambiente
dell'Emilia - Romagna

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Atti amministrativi

Deliberazione del Direttore Generale n. DEL-2014-2 del 27/01/2014

Oggetto Servizio Idro-Meteo-Clima. Approvazione del Progetto "Improving Environmental Monitoring and Disaster Prevention Capacity in Drina River Basin – Phase II" (Republic of Srpska and Montenegro) ref 1206.005-13.

Proposta n. PDEL-2014-5 del 23/01/2014

Struttura proponente Servizio Idro-Meteo-Clima

Dirigente proponente Cacciamani Carlo

Responsabile del procedimento Cacciamani Carlo

Questo giorno 27 (ventisette) gennaio 2014 (duemilaquattordici), presso la sede di Via Po n. 5, in Bologna, il Direttore Generale, Prof. Stefano Tibaldi, delibera quanto segue.

Oggetto: Servizio Idro-Meteo-Clima. Approvazione del Progetto *Improving Environmental Monitoring and Disaster Prevention Capacity in Drina River Basin – Phase II (Republic of Srpska and Montenegro) ref 1206.005-13.*

RICHIAMATA:

- la Legge Regionale 24 giugno 2002, n. 12 “Interventi regionali per la cooperazione con i Paesi in via di sviluppo e i Paesi in via di transizione, la solidarietà internazionale e la promozione di una cultura di pace” e successive modifiche;

PREMESSO:

- che l’Assemblea Legislativa della Regione Emilia-Romagna, con riferimento alla L.R. n. 12 del 24 giugno 2002, ha approvato, con deliberazione n. 84 del 25 Luglio 2012, il *Documento di Indirizzo Programmatico per il triennio 2012 – 2014 per la cooperazione con i Paesi in Via di Sviluppo ed in via di transizione, la solidarietà internazionale e la promozione di una cultura di pace*;
- che Arpa Emilia-Romagna è un Ente strumentale della Regione Emilia-Romagna istituito con la Legge Regionale n. 44 del 1995 e successive modifiche, preposto all’esercizio delle funzioni tecniche per la prevenzione collettiva e per i controlli ambientali, nonché all’erogazione di prestazioni analitiche di rilievo sia ambientale sia sanitario;
- che con D.D.G. n. 8 del 28 gennaio 2013 sono state approvate sia la sottoscrizione della lettera d’intenti per la collaborazione tecnico-scientifica in materia di protezione dell’ambiente con l’Agenzia per la Protezione dell’Ambiente della Repubblica Serba (SEPA) sia la partecipazione di Arpa Emilia-Romagna al progetto *Improving Environmental And Disaster Prevention Capacity in the Serbian Republic - Ref. n. 1206KEP.001-12* che aveva, come oggetto, il miglioramento del monitoraggio idrometeorologico nel bacino del fiume Drina nel territorio di competenza della Repubblica Serba;
- che con D.D.G. n. 70 del 25 luglio 2013 è stata approvata la sottoscrizione della lettera di intenti tra il Servizio Idrometeorologico della Repubblica di Srpska (RHMZRS), l’Istituto di Idrometeorologia e Sismologia del Montenegro (IHMSMNE) e Arpa Emilia-Romagna per la condivisione di know how e la cooperazione nei settori del cambiamento climatico, del monitoraggio ambientale, dell’allerta e della riduzione del rischio al fine di promuovere un processo di collaborazione nei campi di comune interesse per favorire un positivo scambio di conoscenze ed esperienze per lo sviluppo, in forma congiunta, di studi, programmi e progetti finalizzati a promuovere la sostenibilità ambientale ed accrescere la sicurezza delle popolazioni, in ambito locale, nazionale o europeo;

- che il Servizio Idrometeorologico della Repubblica di Srpska (RHMZRS) è un ente pubblico della Repubblica di Srpska, una delle due entità costitutive della Bosnia-Erzegovina, con competenze per l'analisi e la diffusione di dati idrometeorologici, lo studio della variabilità del clima e dei cambiamenti climatici, e la individuazione di indicatori di rischio e di vulnerabilità nel suo territorio;
- che l'Istituto di Idrometeorologia e Sismologia del Montenegro (IHMS MNE) è un organismo pubblico con compiti relativi a meteorologia, idrologia, climatologia, ecologia, idrografia e sismologia e, analogamente ad Arpa Emilia-Romagna, provvede alla gestione di numerose reti per il monitoraggio ambientale (rete meteorologica e idrologica, rete per il monitoraggio della qualità dell'acqua e rete per la qualità dell'aria);
- che, a livello nazionale, entrambi questi enti pubblici hanno importanti relazioni con istituzioni operative sia pubbliche che private, attive nei campi della conservazione delle risorse naturali, il monitoraggio ambientale, la prevenzione dalla contaminazione e la protezione dai disastri naturali;

CONSIDERATO:

- che, nell'ambito delle relazioni instaurate e finalizzate a consolidare la collaborazione tra Arpa Emilia-Romagna e le citate amministrazioni, visto il bando nell'ambito del programma Know-how Exchange (KEP) finanziato dalla Central Europe Initiative (CEI), ente che favorisce la collaborazione tra i paesi dell'Europa Centrale e Orientale sovvenzionando, in quota parte, progetti di collaborazione, ARPA ER, RHMZRS e IHMS MNE hanno presentato la proposta progettuale *Improving environmental monitoring and disaster prevention capacity in Drina river basin – phase II (Republic of Srpska and Montenegro)* finalizzata al miglioramento del monitoraggio ambientale sul fiume Drina, per ridurre i rischi da eventi naturali e migliorare la sicurezza della popolazione, tramite l'individuazione di azioni da intraprendere nel breve e medio termine (2 a 5 anni);
- che tale nuova proposta progettuale, allegata sub A) al presente atto quale parte integrante e sostanziale, è stata approvata dal Comitato dei coordinatori nazionali CEI e viene di seguito denominata, in via abbreviata, "progetto KEP CEI Balcani";
- che il progetto KEP CEI Balcani costituisce il completamento ideale del precedente progetto approvato con la citata deliberazione n. 8/2013, in quanto si pone come fine il miglioramento del monitoraggio idrometeorologico sempre nel bacino del fiume Drina, ma nei territori di competenza della Repubblica di Srpska e Montenegro;

DATO ATTO:

- che il progetto KEP CEI Balcani prevede la partecipazione di Arpa Emilia-Romagna in qualità di fornitore di competenze (main provider of know-how) mentre il Servizio Idrometeorologico della Repubblica di Srpska (RHMZRS) e l'Istituto di Idrometeorologia e Sismologia del Montenegro (IHMS MNE) partecipano quali istituzioni beneficiarie (Beneficiary institutions);
- che, a seguito dell'approvazione del progetto, l'Ufficio Finanziamenti CEI (CEI Fund at the EBRD) con sede a Trieste ha inviato ad Arpa Emilia-Romagna, con nota PGSIM/2013/1424 del 19 dicembre 2013 (agli atti) la convenzione di sovvenzione (Grant Agreement – GA) con il Segretariato Esecutivo CEI (CEI-ES) per la realizzazione del progetto *Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13* - tale convenzione è allegata sub B) al presente atto quale parte integrante e sostanziale;

RILEVATO:

- che, a fronte del costo complessivo del progetto, pari a euro 80.830,00, CEI-ES ha autorizzato un contributo pari a € 30.260,00, prevedendo il costo residuo di euro 50.570,00 a carico dei soggetti partecipanti, individuati in ARPA ER, RHMZRS e IHMS MNE, secondo il piano economico allegato 1) al presente atto;
- che l'utilizzo del contributo CEI da parte di Arpa deve essere in conformità con i termini e le condizioni contenute nella convenzione di sovvenzione tra il Segretariato Esecutivo CEI e l'Agenzia Regionale per la Protezione Ambientale della Regione Emilia-Romagna;

CONSIDERATO:

- che all'art. 2. della Lettera di intenti approvata con deliberazione n.70/2013 è previsto che gli eventuali costi derivanti dallo sviluppo di attività concordate saranno coperti da RHMZRS, IHMS MNE e ARPA ER con propri fondi;
- che il progetto *Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13* risulta pienamente coerente con le politiche regionali individuate dal *Documento di Indirizzo Programmatico per il triennio 2012 – 2014 per la cooperazione con i Paesi in Via di Sviluppo ed in via di transizione, la solidarietà internazionale e la promozione di una cultura di pace* con il quale la Regione Emilia-Romagna pone, in particolare, l'attenzione sui Paesi balcanici (Albania, Serbia, Bosnia, Montenegro) e su quelli del Corno sud dell'America latina (Brasile e Argentina);
- che il Responsabile del Servizio Intese Istituzionali e programmi speciali d'Area della Regione Emilia-Romagna, con nota PGSIM/2013/74 del 24/01/2013, agli atti, ha valutato

favorevolmente la partecipazione di Arpa Emilia-Romagna al progetto *Improving Environmental And Disaster Prevention Capacity in the Serbian Republic* del quale il progetto KEP CEI Balcani costituisce la naturale continuazione;

- che il progetto *Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13* contribuirà ad aprire prospettive di interesse per Arpa in quanto dimostrazione concreta di una collaborazione in essere tra ARPA ER, RHMZRS e IHMS MNE, nata da esigenze comuni e consonanza di intenti;
- che detta collaborazione potrà rappresentare un elemento favorevole per la presentazione di proposte progettuali nel periodo 2014-2020 all'interno di bandi IPA e all'interno del nuovo Programma di Cooperazione Territoriale Transnazionale South East Gateway;
- che, per le considerazioni ora richiamate, in considerazione della valenza strategica di tale collaborazione tra ARPA ER, RHMZRS e IHMS MNE e dei futuri benefici scientifici, tecnici ed economici potenzialmente derivanti dalla comune partecipazione a progetti europei finanziati, si ritiene che il presente progetto rientri nella fattispecie indicata in allegato sub A) alla DDG 88/2013 (casi nei quali la rilevanza strategica della commessa nel medio lungo periodo giustificano la deroga al criterio di completa copertura dei costi esterni della commessa da parte del contributo);

RITENUTO:

- che la collaborazione con RHMZRS e IHMS MNE anche all'interno del progetto KEP CEI Balcani possa rappresentare per Arpa uno strumento strategicamente utile per la presentazione di future proposte progettuali nell'ambito dei Programmi per la cooperazione territoriale europea 2014-2020;
- di approvare, in deroga ai vincoli economici stabiliti dall'allegato sub A) *Linee guida per il budget esercizio 2014* della DDG 88/2013, la partecipazione di Arpa al progetto KEP CEI Balcani, approvando il piano economico allegato 1);
- di delegare al Direttore del Servizio Idro-Meteo-Clima la sottoscrizione della convenzione di sovvenzione e del successivo accordo finalizzato a disciplinare la collaborazione tra ARPA, RHMZRS e IHMS MNE, nonché l'adozione di ogni atto che si renda necessario per garantire lo svolgimento delle attività progettuali, nel rispetto del budget assegnato;
- di delegare al Dott. Carlo Cacciamani, Direttore del Servizio Idro-Meteo-Clima, la responsabilità del progetto *Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13*;

SU PROPOSTA:

- del Direttore del Servizio Idro-Meteo-Clima dott. Carlo Cacciamani, il quale ha espresso, ai sensi del Regolamento per il Decentramento amministrativo, approvato con D.D.G. n. 65 del 27/09/2010, il proprio parere favorevole in ordine alla regolarità amministrativa del presente provvedimento;

DATO ATTO:

- del parere di regolarità contabile espresso dal Responsabile dell'Area Bilancio e Controllo economico, Dott. Giuseppe Bacchi Reggiani, ai sensi del Regolamento per il Decentramento amministrativo approvato con D.D.G. n. 65 del 27/09/2010;
- del parere favorevole espresso dal Direttore Tecnico, Dott. Franco Zinoni, e dal Direttore Amministrativo, Dott.ssa Massimiliana Razzaboni, resi ai sensi dell'art. 9, comma 5, della L.R. n. 44/95;
- che il responsabile del procedimento è il Dott. Carlo Cacciamani, Direttore del Servizio Idro-Meteo-Clima;

DELIBERA

1. di prendere atto dell'approvazione, da parte del Comitato dei coordinatori nazionali CEI del progetto *Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13*(KEP CEI Balcani);
2. di approvare, in considerazione della valenza strategica del progetto e in deroga a quanto stabilito dall'allegato A) *Linee guida per il budget esercizio 2014* della D.D.G. n. 88/2013, la partecipazione di Arpa al progetto KEP CEI Balcani, nonché il relativo piano economico, allegato 1) al presente atto quale parte integrante e sostanziale;
3. di dare atto che Arpa Emilia-Romagna, nell'ambito del citato progetto riveste il ruolo di fornitore di competenze (main provider of know-how);
4. di dare atto che il Progetto KEP CEI Balcani avrà durata di mesi 9 a partire dal 10/03/2014 e pertanto si concluderà il 10/12/2014;
5. di dare atto che il contributo CEI-ES ad Arpa per le attività previste nel Progetto KEP è pari a 11.400,00 euro;
6. di dare atto che il costo complessivo stimato per la realizzazione delle attività previste nel Progetto KEP , pari a euro 80.830,00 risulta così suddiviso:
 - euro 58.330,00 a carico di Arpa;
 - euro 19.000,00 a carico di RHMZRS;

- euro 3.500,00 a carico di IHMS MNE;
- 7. di dare atto che, per Arpa Emilia-Romagna, il soggetto competente all'attuazione e alla gestione del Progetto KEP è il Servizio Idro-Meteo-Clima;
- 8. di delegare al Direttore del Servizio Idro-Meteo-Clima la sottoscrizione della convenzione di sovvenzione e del successivo accordo finalizzato a disciplinare la collaborazione tra ARPA, RHMZRS e IHMS MNE nonché l'adozione di ogni atto che si renda necessario per garantire lo svolgimento delle attività progettuali, nel rispetto del budget assegnato;
- 9. di delegare al Dott. Carlo Cacciamani, Direttore del Servizio Idro-Meteo-Clima, la responsabilità del Progetto *Improving Environmental and Disaster Prevention Capacity in the Serbian Republic* Ref. n. 1206KEP.001-12.

PARERE: FAVOREVOLE

IL DIRETTORE AMMINISTRATIVO

(F.to Dott.ssa Massimiliana Razzaboni)

IL DIRETTORE TECNICO

(F.to Dott. Franco Zinoni)

IL DIRETTORE GENERALE

(F.to Prof. Stefano Tibaldi)

PROGETTO: Improving environmental monitoring and disaster prevention capacity in drina river basin – phase II (Republic of Srpska and Montenegro) ref 1206.005-13(KEP CEI Balcani)

Piano finanziario, come da Grant Agreement approvato con nota PGSIM/2013/1424 del 19 dicembre 2013.

Istituzione	Costi stimati in euro	
ARPA Emilia-Romagna	58.330,00	di questo importo euro 11.400,00 saranno coperti dal contributo CEI-ES, euro 17.080,00 saranno sostenuti da ARPA come contributo in kind - costi di personale interno - mentre la parte residua, euro 29.850,00, dovrà essere sostenuta con risorse proprie come stabilito dalla vigente normativa CEI
Servizio Idrometeorologico della Repubblica di Srpska (RHMZRS)	19.000,00	di questo importo euro 17.180,00 saranno coperti dal contributo CEI-ES, euro 1.700,00 saranno sostenuti da RHMZRS come contributo in kind - costi di personale interno - mentre la parte residua, euro 120,00, dovrà essere sostenuta con risorse proprie come stabilito dalla vigente normativa CEI
Istituto di Idrometeorologia e Sismologia del Montenegro IHMS MNE	3.500,00	di questo importo euro 1.680,00 saranno coperti dal contributo CEI-ES, euro 1.700,00 saranno sostenuti da IHMS MNE come contributo in kind - costi di personale interno - mentre la parte residua, euro 120,00, dovrà essere sostenuta con risorse proprie come stabilito dalla vigente normativa CEI
	80.830,00	

TO BE COMPLETED BY THE
OFFICE FOR THE CEI FUND
AT THE EBRD

Reference Number:

Application received on:



CEI Know-how Exchange Programme (KEP)

PROJECT APPLICATION FORM CALL FOR PROPOSALS 2013

IMPORTANT

The application, other submitted documents, and information therein provided, may be made publicly available on the CEI website and to CEI bodies and partner organisations.

Last update: March 2013

1. PROJECT SUMMARY

1.1 Project title

IMPROVING ENVIRONMENTAL MONITORING AND DISASTER PREVENTION CAPACITY IN DRINA RIVER BASIN – PHASE II (Republic of Srpska and Montenegro).

Consistently with the project results so far achieved within the KEP 1206KEP.001-12 “Improving environmental and disaster prevention capacity in the Republic of Serbia”, the present proposal aims at constituting the ideal completion of the previous project, being the Drina river trans-boundary among Serbia, Republic of Srpska (BiH) and Montenegro. Scope of the initiative is to improve environmental monitoring on the Drina river and to reduce risks from natural events and improve safety of population.

Starting of a permanent data exchange program, focused to the implementation of trans-boundary projects of common interest.

1.2 Project applicant (main provider of know-how)

Name and surname of project manager: Dr. Carlo Cacciamani
 Official position: Director of Hydro-Meteo-Climate Service of ARPA - ER
 Organisation name: Regional Environmental Protection Agency of Emilia Romagna – ARPA ER
 Postal Address: Viale Silvani, 6 - 40122 Bologna, ITALY
 Tel.: +39 051 649 7510
 Mobile: +39 3357712865
 Fax: +39 051 64 97 501
 E-mail: cacciamani@arpa.emr.it
 Website: www.arpa.emr.it

1.3 Other know-how provider(s) (if applicable)

(please provide here the names and the countries, only; list their detailed contact information in Annex #1)

1.4 Know-how beneficiary institution(s)

(please provide the names and the countries, only; list their detailed contact information in Annex #2)

RHMZRS - Republican Hydro-meteorological Service, Republic of Srpska (Bosnia and Herzegovina)
 HMZCG – Hydro-meteorological and seismological Service of the Republic Montenegro

1.5 Estimated start date
(day/month/year)

10 March 2014

1.6 Estimated end date
(day/month/year)

10 December 2014

1.7 Expected project duration
(months)

9 months

1.8 Total project cost in Euro

80.830

1.9 Requested CEI grant in Euro

39.860

1.10 Summary project description

The present Project intends to complete the set of studies presently under execution in the Serbian portion of the Drina River Basin within the KEP project 1206KEP.001-12 “Improving environmental and disaster prevention capacity in the Republic of Serbia”.



The Drina river, with its 346 Km of length, spreads over the borders between Republic of Srpska (BiH), Serbia and Montenegro, with a minor part in Albania. It is the longest tributary of the Sava River and the longest Karst river in the Dinaric Alps, belonging to the Danube river watershed. The total surface of the Basin is around 19, 570 km². Recurrent floods due to heavy rains (very dramatic were those of December 2010 – see picture on left) hit the area during autumn and winter time, often causing casualties and substantial damages to local economies. Lack of data exchange between BiH, Montenegro and Serbia makes almost impossible to foresee the arrival of disruptive

events, thus adopting appropriate measures to contain damages and disruption.

In 2012, the Environmental Protection Agency of the Region of Emilia Romagna, Italy (ARPA ER - Applicant), joint with the Environmental Protection Agency of Serbia (SEPA - Beneficiary), promoted the implementation of the a project aimed at reducing environmental risks and increase safety of population in the Serbian portion of the Drina River Basin, by improving hydro-meteorological monitoring, forecasting capacity and integrated water management. This project was selected by the Office for the CEI Fund to benefit from a KEP contribution, and it is currently in its implementing phase (1206KEP.001-12). During the first phases of the project, the Republican Hydro-Meteorological Services of the Republic of Srpska (Bosnia and Herzegovina) and of Montenegro joined with its own resources some project activities, expressing their will to extend the project activities to the left side of the Drina river (see right).



Extending the project scope to Rep. Srpska and Montenegro is considered essential, considering that all kind of environmental risks potentially affecting the population along the Drina river are “trans-boundary”. Only commonly shared water management strategies and consequent actions may in facts lead to rational and effective exploitation of extremely high potential connected to Drina River and tributaries. Special importance is given to energy supply, with a total of 97 small and large hydro-electric plants, including 6 plants under construction. The present project, as a “Phase II” of the 1206KEP.001-12, will be compliant with the activities conducted by the Serbian Government and by the Drina River Commission (DRC), and with the guidelines of Climate Change Framework Action Plan for Adaptation for South East Europe (CCFAP), giving new impulse to the process of permanent exchange of data and know-how among the Drina RB sharing Countries. Sectors to be investigated under the present project include: water resource management, hydro-meteorological monitoring and forecast, risk reduction from natural events, air and water quality, energy and overall social and economic development.

2. PROJECT RATIONALE

2.1 Background

1. A Letter of Intent (LOI) will be signed in the month of July 2013 among the Applicant (ARPA-SIMC) and Beneficiaries Institutions (RHMZRS and HMZCG), to launch a comprehensive Know-How Exchange Platform, where to insert the present KEP, if successful (see [Annex A](#)).
2. Additional to the above, the following previous or on-going studies are considered as basic background for the present Project:
 - 1206KEP.001-12 “Improving environmental and disaster prevention capacity in the Republic of Serbia”, implemented in 2013 by ARPA ER (IT) as Applicant and SEPA (SRB) as Beneficiary, over the Serbian portion of the Drina River Basin, focused to the reduction of environmental risks, safety of population and improved environmental monitoring techniques;
 - World Bank Project “Support to Water Resources Management in the Drina River Basin”. The Technical Assistance Project is under implementation and will support the water management authorities in Bosnia-

Herzegovina, Montenegro and Serbia in preparation of the Drina River Basin Management Plan (RBMP) and the Investment Prioritization Framework.

As legislative and institutional aspects are concerned, KEP shall respect EU directives and local legislation on environment. Namely:

- Water Framework Directive (2000/60 /EC) as amended by Decision 2455/2001/EC
- Directives given by the Ministry of Agriculture, Forestry and Water Management (MoAFWM) in the Rep. Srpska for the implementation of the EU WFD and the management of River Basin Districts;
- Environmental Law of Montenegro (rev.2006 - Art 3, 5, 6 and 7);

Law on integrated Pollution Prevention of Montenegro (2005) and subsequent regulations for enforcement.

2.2 Perceived needs

Perceived needs are evident while considering that the Rep. Srpska disposes of no automatic functioning hydrological station on the Drina river, while Montenegro disposes of relatively good forecasting capacities. Summary description of current situation and perceived needs in Partner Countries are given below.

Republic of Srpska:

There is no flood forecasting system on Drina river basin in Republic of Srpska, also there is no automatic hydrological station with real time data transfer. There is 8 automatic hydrological stations in Drina river which are property of Water agency “Vode Srpske” In situations with high water level on Drina river RHMZRS has several problems with real time data because we don’t have hourly data from these stations. Also there is a lot of problems with maintenance for these stations. They don’t work properly and continuously.

Every 3 hour in case of high water levels RHMZRS sends Hydrological report on water levels to the Civil protection service of Republic of Srpska and to the 112 operational centre

Montenegro:

Montenegro declared itself an Ecological Country in its constitution of 1992. After this, the Country experienced robust economic growth since 2002 with a 4 to 5 per cent GDP increase yearly, and is striving to harmonize its rules with those of the European Union (EU) in view of a possible accession. Sophisticated laws were passed in 2005 on integrated pollution prevention and control (IPPC), strategic environmental assessment (SEA) and environmental impact assessment (EIA), noise, solid and liquid wastes, water quality and air protection and so forth. In spite of this, enforcement of environmental legislation is however still low, and the Country suffers from a deficit in environmental monitoring and reporting, the absence of a polluter register, a fragmented system of permitting, scattered inspection responsibilities and so forth.

The Institute of Hydro-meteorology and Seismology of Montenegro is well organized and disposes of a quite diffused network of automatic hydrological and meteorological stations. In 2009, the Institute entered into a comprehensive Master plan for the upgrading of hydrological monitoring network (in cooperation with Norwegian Directorate for Water and Energy/NVE) , envisaging the placement of new equipment on 51 locations (31 in Black Sea basin and 20 in Adriatic sea basin). The plan was largely implemented, but poor attention was given to Drina river basin, also due to difficulties connected with cross-boundary cooperation (difficulties expected to be overcome with the present KEP). In general, both Countries coincide in asserting that several endangering activities are still present in the Rep. Srpska and Montenegrin portions of Drina RB. As an example, the thermal power plant, coal mine and zinc mine in Pljevlja, the communal waste disposal sites in Kolasin and Mojkovac, and for Rep.Srpska: the coalmine in Ugljevik, the bauxite mine in Zvornik and the lead and zinc mine in Srebrenica (see for ref. the Report on Pollution in the Drina River basin, issued by REC in 2011).

2.3 Project objectives

According to CEI Plan of Action 2010-2012, the Project is aimed to establish a sustainable policy and action plan in key issues, such as: Climate Change (trends, consequences and adaptation), conservation of environment and sustainable use of natural resources; reduction of risks from extreme natural events; modernization and improvement of monitoring systems and so forth. All activities carried on and recommended post-project investments, shall be in accordance with conclusion of the Serbian KEP implemented during 2013, representing an integration of it at the level or the entire Drina River Basin.

The following specific objectives shall be pursued:

- Improving Beneficiaries’ capabilities of assessment of environmental issues, focusing on typical trans-boundary problems (e.g. water contamination, weather and water monitoring, natural disasters and so forth);
- Improving hydro-meteorological monitoring and forecast capacity, on account to climate change

(monitoring and preparedness), early warning, disaster prevention and protection of environment, also with appropriate technology to be purchased within the project scopes;

- Improving forecasting capacity and modelling (hydrological, hydraulic);
- Propose measures to increase safety of populations against extreme natural events, such as heavy storms, floods and landslides, reducing costs for mitigation (consequence of improved monitoring and forecast capacity);
- Improving technologies and capacities for sustainable water management on account to more balanced water use, protection of water sources, satisfaction of priority needs (potable, energy, agriculture, industry);
- Improving water quality monitoring along Drina river and tributaries, including most important natural lakes and artificial reservoirs. Focus will be on water quality recovering in most critical / contaminated areas.
- Improving air quality monitoring in most densely populated / industrial areas;
- Promote the formation of an inter-government trans-boundary working group, to assure technical cooperation and permanent exchange of data among Drina River Basin sharing Countries (Republic of Serbia, Republic of Srpska, Montenegro and Albania);

As part of the above, promote the signature of a Memorandum of Understanding (MOU) between Applicant and Beneficiaries, in order to continue the cooperation after the present Project. Republic of Serbia will also be included, extending MOU actually in force between SEPA and ARPA ER to beneficiary Institutions of the present KEP.

2.4 Justification

The Project is justified by:

- The importance of extending to the entire Drina River Basin the studies carried out in 2013 under the 1206KEP.001-12 over the Serbian portion of the same basin. In absence of this extension, no trans-boundary environmental protection measures or interventions may reasonably be planned or implemented;
- The outstanding economic potential and social importance of the Rep.Srpska and Montenegrin portions of Drina river basin, strongly influencing the trends of Regional development, as well as the national economies of Serbia (studied under the previous KEP), Rep.Srpska and Montenegro.
- The great interest shown by the international community for the problems related to environmental protection, disaster prevention and integrated water management in the Drina river basin. The comprehensive studies undertaken by the Regional Environmental Centre – REC – on pollution sources and studies undertaken as part of the Regional Programme on Disaster Risk Reduction in South East Europe (in particular: activity 2, on Meteorological, Hydrological and Climate Data Management and Risks prevention), are outstanding examples to be taken as essential references for the present KEP (other than the previous partial 2013 KEP).
- The need of integrating the results of the above studies (mostly informative) into a sustainable medium-long term “Action Plan” aimed to:
 - i. Improve knowledge on climate change effects over the Region, giving clear indications about most effective adaptation and mitigation measure;
 - ii. Increase general and specific environmental monitoring capacity, in terms of automatic stations, real time transmission of data, modelling, forecasting and so forth;
 - iii. increase capacity for environmental disaster management (mainly floods and landslides), drastically reducing costs for post-disaster interventions;
 - iv. reducing air and water pollution, through a more accurate monitoring of pollution sources, implementation of new technologies to reduce emissions, activating decontamination processes in most affected areas;
 - v. improve rational use of water (energy, agriculture, human consumption, industrial); and so forth;

The need of the EU community to have a clear view of capacity and “level of commitments” put in action by the different Countries sharing the Drina River Basin, in terms of interstate cooperation, coordination with EU and enforcement of EU regulations on environment, capacity of establishing sustainable and mutually consistent investment programs and so forth.

2.5 Have there been any previous efforts to tackle the perceived needs?

Do the project objectives relate to any specific previous projects that have taken place in the country/region of operations, undertaken by international organisations or other parties?

A number of studies and Projects were carried out over the Drina River Basin by the different “partner” Countries. The majority of them, were oriented to energy production, in consideration of the very high potential of the river and its tributaries, such as Moraca river (overall potential is estimated to range 10,000 GW). As mentioned in section 2.1 of this application, the WB recently launched an integrated study on resources policy and administrative management on the Drina River Basin, mostly oriented towards integrated water management, but substantially excluding problems related to climate change, environmental monitoring, risk reduction and disaster management, that form the core of this KEP.

A Drina River Committee was created in 2006, to Support to Cross-Border Cooperation in the Basin, at the same time supporting actions carried out by Sava River Commission and local Authorities, mainly in the areas of water management and energy. The DRC is currently inactive, and there is an attempt by REC (see below) to revamp the Initiative.

The Regional Environmental Centre – REC, carried out between 2009 and 2011 a number of activities to reinforce cross-border cooperation in the Drina River Basin. Presently, lack of funds and difficulties for the enforcement of an effective trans-boundary cooperation of specific issues, are compromising again the Committee’s activities.

The International Committee for the Protection of Danube River promoted data exchange on water level monitoring of the Drina River between Serbia and Rep.Srpska. The lack of data to be exchanged makes impossible to implement this agreement.

Several EU government are active. Particularly, the Norwegian Government is very active in the area since 2003, implementing projects aimed to “enhance cross-border cooperation in the Drina River basin... through a framework for sustainable pollution prevention and environmental protection”.

2.6 Applicant and other know-how provider(s)

(Please describe all organisations providing know-how; list their detailed contact information in Annex #1)

ARPA ER is a Public Agency established under the Regional Law nr. 44 of April 19th, 1995 and subsequent amendments, with purpose of providing technical support to regional, district and local Authorities on environmental policies and monitoring.

ARPA ER mission is to protect health, ecosystems and territorial safety and to promote the use of resources within a framework of sustainable development. Functions, activities and tasks are defined as follows:

- a) monitoring and modelling of the various environmental components;
- b) Monitoring and modelling of regional hydro-meteorological parameters (through its internal Service of ARPA-SIMC), furnishing data to the Regional and National Civil Protection Department;
- c) Management and surveillance of the environmental and territorial impacts of human activities;
- d) Performing activities relevant to environmental impact assessment of plans and projects;
- e) Creation and management of the Regional Environmental Information System
- f) Drafting of soil, water and air quality improvement plans;
- g) Research relevant to the development of environmental protection.

At national level, ARPA ER maintains, among others, strict cooperation with the Regional and National Departments of Civil Protection, the Institute for Environmental Protection and Research, ISPRA, the Ministry of Environment and all other Regional Agencies for the Environmental Protections.

2.7 Know-how beneficiary(s)

(Please describe all organisations receiving know-how; list their detailed contact information in Annex #2)

A) Republic Hydro-meteorological Service of Republic of Srpska (RHMZRS)

The Republic Hydro-Meteorological service of Republic of Srpska has competence in meteorological, hydrological, ecological and seismological data collecting and analysis, climate variability and change, indicators of risk and vulnerability in the whole territory of the Rep. Srpska (BiH).

RHMZRS service and its experts participated in the First, and now working on the Second National Report on Climate Change, and also Risk Assessment of Rep. Srpska; Risk Assessment of Bosnia and Herzegovina from Natural Disasters, through the sectors of meteorology, hydrology and seismology.

B) Hydro-meteorological and Seismological Service of Montenegro (HMZCG)

The Service is responsible for Meteorology, Hydrology, Ecology, Hydrography and Seismology. Main task is measuring and observation and data transfer and processing. For meteorology, observations are performed at 8 main stations, 20 climatological stations and more than 50 precipitation stations, in accordance with the criteria

set by the World Meteorological Organization (WMO). Hydrological network disposes of 51 stations, for permanent monitoring of water level and, in some cases, water T°C. The Institute also implements the monitoring of water quality of all surface waters in Montenegro, following the Water Law of Montenegro (Off.gazz.of RMNE, No.27/07), and dispose with accredited laboratory (ISO 17 025). Data from automatic stations are directly transmitted to Podgorica on daily or even hourly basis. Some of them are transferred for international exchange, while most of them are further controlled and processed within the Institute. Following the advancements of technology, and conscious of the importance of hydro-meteorological data and information, the Service has continued the modernization of equipment and measurements, with particular reference to the basins of: i) Moraca, Cehotina and Ibar rivers (8 new automatic hydrological stations - UNDP funding); ii) Bojana river basin, where an SLD-Side Looking Doppler radar was placed, as part of the ADRICOSM STAR project, and iii) Moraca river, where multi parametric probes for water quality measurement (9 parameters) were installed in 2012. Drina river basin is unfortunately still lacking of interventions, expected to be planned under the present KEP.

2.8 Give details of the applicant and other know-how providers' previous experience with the beneficiary(s), or in the country(s) and region of the project.

The Region of Emilia Romagna and MOE have a longstanding tradition of technical and scientific cooperation. In the field of meteorology, hydrology, climate and environment monitoring, the following is mentioned: Operational observation systems and scientific-technical programmes, in the frame of a convention between the Serbian Hydro-meteorological Service and WMO; ECE/UN Cooperation programme for monitoring and assessment of Trans-boundary long-range air transport of pollutants; Program of meteorological safety of international air traffic within the Convention on International Civil Aviation Organization (ICAO); Research programme of antropogenic influences on global climate and potential influences of climate changes on human health, ecosystems, water resources, soil and various industrial branches, conducted within the World Climate Programme of WMO/UNEP and Intergovernmental Panel for Climate Changes Presently, ARPA EMR is conducting, joint with the Serbian Environmental Authority SEPA and the Serbian Hydro-meteorological Service RHMS, a KEP study including the same components envisaged for the present KEP, but limited to the Serbian portion of Drina River Basin. This study, to be concluded by the end of 2013, will represent an invaluable experience for the conduction of this new KEP.

2.9 Key risks to the project's objectives, and proposed mitigating solutions

The Project does not involve any major risks because of its objectives or implementation. No particular mitigation measures are therefore envisaged.

3. PROJECT ACTIVITIES

3.1 Description of project activities

(Please list for each activity the project objective it aims to achieve; all objectives listed in 2.3 should be explained here)

The following description takes into account the experience acquired by the Applicant during the implementation of the 1206KEP.001-12 over the Serbian portion of the same Drina River Basin, working together with the Serbian Environmental Protection Agency, other Serbian Institutions and with the attentive support of the potential Beneficiaries of this Program.

1.Launching the Program and 1st opening Conference (3 days). This activity shall be held in Podgorica (Montenegro) or Banja Luka (R. Srpska). Objectives are: a) review activities and results obtained during the 1206KEP.001-12, over the Serbian part of Drina River Basin; b) getting acquainted about integrated water/environmental management in the Drina RB portion of R. Srpska and Montenegro, also in relation to Climate Change (recorded and forecast); c) review activities to be done for the execution of the present KEP, including possible interactions with Serbian parts; d) prepare a detailed work plan, assigning tasks to all Partners (Applicant and Beneficiaries) and fixing a schedule for executions;
Main responsibility: Applicant

2.Acquisition of field data concerning the interested portion of Drina RB (environment, hydro-meteorology; water and air quality; assessment of potentially risk areas and so on). This will include the critical analysis of previous interventions and studies carried out in the fields of interest, giving special emphasis to Climate Change and risk prevention. Main responsibility: Beneficiaries

3.Assessment of present status of responsibilities at national level in both the beneficiary Countries, concerning

hydro-meteorological monitoring, integrated water / environmental management and risk prevention (thus interactions with National Civil Protection Agencies). This assessment will include: analysis of existing facilities, data measured, recorded, transmitted and processed, forecasting and modelling capacity and so forth. It will lead to the identifications of excellences and/or gaps to be filled, starting the Know-How Exchange Program between experts of the Applicant and Beneficiaries on procedures, methods and results; Main responsibility: Applicant

4. Comparison between techniques and methodologies employed by Applicant and Beneficiary Countries in the fields of action of the present KEP. Special evidence shall be given to climate change, recurrence of extreme natural events and produced damages, effects on economy (e.g.: agriculture), monitoring activities and risk prevention. Main responsibility: Applicant. Active participation of beneficiaries is expected

5. Specific analysis of actual performance of hydro-electric plants: efficiency of operation and improvements potentially obtainable with more sustainable management of water resources; Main responsibility: Beneficiaries

6. Preparation of 1st Progress Report (PR), resuming all the above issues. Main responsibility: Applicant + Beneficiaries

7. 2nd Conference, to be held in Bologna, Italy, with objective of discussing the content of 2nd Report and prepare future activities. Also Serbian representatives (1206KEP.001-12) will be invited to the Conference. Main responsibility: Applicant

8. Identification and description of specific interventions within the Drina River basin (Montenegro and R. Sprska), in order to improve:

- a. Knowledge of Climate Change: historical patterns, expected evolution and consequences over the territory of River Basin;
- b. Hydro-meteorological monitoring, alert and early warning system, capacity of risk reduction (to be linked with national and trans-boundary monitoring networks);
- c. Water quality monitoring along the Drina river and in major artificial water reservoirs: the use of automatic technologies and real-time transmission of data may be considered as a viable medium-term option;
- d. Air quality monitoring in most densely populated / industrial areas;

Main responsibility: Applicant

9. Preparation, supply and installation of equipment and goods requested under the present KEP. This will concern one automatic hydro-meteorological station with real time transmission of data, to be installed in a selected location along the Drina river, jointly selected by Beneficiaries. The purchase will be tendered according to the applicable national procurement rules, and its supply shall include transmission devices (mobile telephone or other) and necessary SW packages. Main responsibility: Beneficiaries, for procurement, selection of installation site; Applicant: for technical requirements, and assistance for procurement procedure

10. Preparation of 2nd PR, presenting identified interventions with relevant justifications and preliminary considerations on technical / economic / environmental / institutional feasibility. Main responsibility: Applicant + Beneficiaries

11. 3rd Conference, to be held in Banja Luka (R. Sprska), or in Podgorica (Montenegro), to discuss the contents of 2nd PR and prepare future activities. Main responsibility: Beneficiaries

12. Drafting of an overall medium – long term (5 to 10 years) comprehensive investment Plan in the above sectors and sub-sectors, to comply with KEP targets and EU requirements. The Plan shall include the preliminary analysis of funding sources, also in contact with potential Donors, giving indications on actions to be undertaken, possible “stake-holders” (or executing Agencies) for the single Projects, and so forth. The Plan will take into considerations or – as much as possible - integrate the results obtained by the ARPA – Serbian 2012 KEP, the results of which are expected to be made available before the starting of the present KEP. Main responsibility: Applicant

13. Launching a permanent know-how exchange platform (Follow Up), between the Applicant (as leading Service of ARPA Emilia Romagna) and Beneficiaries, to sustain actions identified and described under commas. Special training sessions shall be prepared. Scientific conferences and public debates will be executed as part of the training sessions, to disseminate the results of the Project and obtain inputs or recommendations from other national (Italy, Montenegro or R. Sprska) and international institutions (mainly EU), available and interested to attend the sessions. Testing and assistance to operation for the new monitoring station will be part of this Platform. Main responsibility: Applicant for the testing of monitoring station; shared for remaining activities

14. Preparation of 3rd Final Report- Draft - (DFR), to describe identified priority interventions, actual or potential funding sources and envisaged action plan. Responsibility: Applicant

15. Circulation of DFR and reception of comments – Preparation of final edition (FR)

16.4th Conference, to present and discuss the FR and plan future actions for the implementation of priority interventions. This Conference should possibly be held in one the leading Municipalities of Drina River Basin (such as Foca – Buk Bjela in R. Srsпка, where an important hydro-power plant is existing (Srbinje dam), or Buk Bijela in Montenegro, where the construction of a new huge power plant of 450 MW is planned.

3.2 Work plan, participation, and schedule

Project activity	Days (*)	M1	M2	M3	M4	M5	M6	M7	M8	M9
1. Launching the Program and its Conference	3	◇								
2. Acquisition of field data	30		▬							
3. Institutional assessment and def. of responsibilities in study area	15		▬							
4. Comparison of technologies and methodologies between Beneficiaries and Applicant	30		▬							
5. Specific analysis of hydro-electric Plants	7		▬							
6. Preparation of 1 st Progress Report	40		▬							
7. 2 nd Conference	4				◇					
8. Identification and description of priority interventions	50				▬					
9. Site inspections, tender preparation, supply and installation of equipment (hydrological station)	90				▬					
10. Preparation of 2 nd PR	40					▬				
11. 3 rd Conference	5						◇			
12. Preparation of preliminary Investment Plan	45							▬		
13. Launching a permanent Know-How exchange Platform	Not defined							▬		
14. Preparation of Draft Final Report (DFR) – Include result of testing for new equipment	40							▬		
15. Circulation of DFR and preparation of Final Report	30								▬	
16. 4 th Conference: conclusions and closure of activities	5									◇

NOTES

- (*) Number of calendar days for the execution if the specific activity – Not full time experts' assignment
- Work Plan is indicative and shall be revised during its implementation, according to problems encountered, results achieved and so forth.
- Main responsibilities for each activity have been indicated in paragraph 3.1. The Applicant will however maintain the full coordination and control of the entire project, in term or respect of the objectives, consistency of results achieved by each and all performed activities, preparation of interim and final reports and presentation of KEP results.

Acquisition of equipment and goods to be supplied as part of the KEP executed by the Applicant, according to Regional regulations and internal rules;

3.3 Beneficiary(s) ownership of the project activities

(Please attach any supporting official strategies, development plans, or other strategic documents of each and all beneficiaries)

KEP Beneficiaries are the two hydro-meteorological services of the R. Srpska and Montenegro, both of them in charge for the monitoring of climatic conditions (including climate change), forecasting and prevention of natural disasters, in the respective portions of Drina River Basin.

All benefits generated by KEP – in terms of knowledge, improved methodologies, equipment acquired and so forth, will be owned by the Beneficiaries and remain the patrimony of the respective Countries.

As for the hydrological station, ownership will be given to the Country in which territory the station will be installed, but with the commitment that data generated shall be made and will remain available to both Beneficiaries and, in perspective, to all Drina River Basin managing institutions, in a form to be decided during the execution of KEP.

As “intellectual property” is concerned, the acquisition process and subsequent ownership shall be accomplished in full respect of the official mandate of the single Beneficiary Institution, in consistency with national guidelines and strategies established at central (Government) level in the respective Countries, as well as the guidelines fixed by trans-national Institutions, such as Drina River Commission and Sava River Commission, as well as with EU guidelines for environmental strategy. The following key reference are mentioned:

- a. Montenegro Law on Environment (2006 – under revision).
- b. Montenegro: answers to EU questionnaire on Environment – 2009.
- c. Law on Environment Protection Fund of the Republic of Srpska (2002 and subsequent amendments);
- d. Priorities established by the Sava River Commission and the International Commission for the Protection of Danube River, especially for the enhancement of the hydro-meteorological and WQ monitoring.
- e. Priorities set by the South East Europe (SEE) Transnational Cooperation Program for the “Protection and Improvement of the Environment” including “integrated water management”, “flood risk prevention” and “improved prevention of environmental risks” (Axis 2);
- f. Priorities and guidelines fixed by the European Environmental Agency (EEA), the European Environment Information and Observation Network (EIONET) and others International Agencies, in the field of environmental monitoring, exchange of data and related activities

3.4 Evaluation activities and/or follow-up indicators

Evaluation of activities and consistence with Project’s objectives: will be executed step-by-step during the Project development, according to schedule of activities (reports and conferences). A Steering Committee (SC) will also be formed, with responsible persons from the Applicant and Beneficiaries.

Relevance: Applicant and Beneficiaries are corresponding institutions, with similar objectives, experience and working methodologies. The proposed KEP is therefore totally consistent with the institutional objectives, priorities and policies of the target Beneficiaries, as well as fully suited to the know-how and experience of the Applicant.

Effectiveness: the final target of the Project will be to design the new automatic environmental monitoring and risk reduction system in the Drina River Basin, in consistency with the results of previous A1206KEP.001-12. The supply and installation of a new automatic hydro-meteorological monitoring stations in a selected location of the Drina RB, will represent a tangible element to demonstrate the effectiveness of measures and interventions recommended under the KEP. Further than this, the effectiveness of the Project will be measured by the acceptance of the given recommendation from the local authorities (beneficiaries and central Government) and the EU revisers, as well as by the results obtained through the Know-How exchange and training programme (activity 13 of work-plan in 3.2), to practically tested operating the new installed station.

Efficiency: is expected to be the highest, as the best balance between objectives to be achieved resources employed. This efficiency is guaranteed by the technical and managerial experience of the and the very “reactive” environment to which this experience will be transferred and/or exchanged, also in accordance with the already implemented know-how exchange agreement and the correspondent LOI.

Impact: positive impacts / changes and outcomes are expected in the following: a) improved institutional setting in the field of environmental monitoring, hydro-meteorology, early warning and risk reduction; b) introduction of technological advancements in the same fields; c) potential benefits to population living in the area where the

Project shall be eventually implemented. No negative impacts of any kind are expected.

Sustainability: shall be ensured by:

- a. the continuous collaboration between the Applicant and the Beneficiaries, with permanent exchange of know-how and information beyond the temporary limits of this Project. To this extent, once the KEP activities will be concluded, a permanent and open mechanism of cooperation involving all Institutions operating within the Drina River Basin will be established, in accordance with contents of existing cooperation agreements among the Applicant and Beneficiaries, including the Serbian part;
- b. the concept that all policies, plans and projects studied and recommended under the present KEP, will be acceptable (and thus likely to be implemented) only if “sustainable” over the long term, effectively contributing to the growth of local economies, conservation of the environment and safety of populations, only if a responsible management is assured;
- c. the possibility of replicating / expanding Project methodology and effects beyond the Country’s limits, reaching the objective of an integrated “*Southern European Early Warning System*”, with a permanent data sharing, common forecasting methodologies.

4. PROJECT RESULTS

4.1 Expected project results

Immediate (or short term) results of Project were already listed in Section 3. Long term results (i.e. after the implementation of actions studied and recommended under the present KEP) are expected in:

- a) Increased capacity of evaluation of environmental issues;
- b) more continued and accurate monitoring of environmental parameters, with the active involvement of local institutions and authorities;
- c) increased safety of population and reduced damages against extreme weather events;
- d) increased safety of infrastructures and transportation;
- e) increased consciousness of population in terms of environmental conservation, reduction / control of pollution sources, environmental recovery;
- f) increased disaster preparedness at level of local institutions and populations;
- g) availability of new technologies for the real-time environmental monitoring and updated regulations at Country level;
- h) increased diffusion of information and dissemination of data to population and economic operators, in vital sectors such as agriculture, energy, water supply and tourism.

4.2 Expected project impact

1. Tangible changes produced by the Project in the short term (i.e. as an immediate consequence of performed activities) will concern institutional / managerial aspects within the internal structure of the Beneficiaries themselves, and its relations with other concerned National Authorities, either at central or local level .
2. On the long-term, would the new environmental monitoring system(s) be installed and correctly operated, the Project will produce impacts on several economic and social sectors, among which:
 - a) natural disasters management (improved);
 - b) integrated water management (improved), and as part of this,
 - c) hydroelectric energy production (more rational),
 - d) cost and number of injuries and fatalities related to natural disasters (reduced);
 - e) expenditure on disaster prevention and mitigation (reduced);
 - f) human settlements vulnerable to natural disasters (reduced);
 - g) agricultural practices and yields (improved);
 - h) use of alternative energy sources, such as sun and wind (more rational);

and so forth.

4.3 Expected sustainability of project impact and potential replicability

- a) Sustainability and “replicability” of the Project itself were already discussed in Section 3.4.6.
- b) The same concepts can be applied to Project’s impacts (positive), as described in Section 4.2. In facts, the Project is expected to become self-sustainable, as soon as its benefits (availability of a Master Plan and guidelines for environmental improvement and safety of population, institutional strengthening, realization of priority interventions) will start to produce “visible” and “tangible” effects for the civil society and the economy (local and national), the “demand” for sustainability (meaning enforcement of

established rules, maintenance of installed equipment, proper and advanced use of data and so forth) will spontaneously come out from the general population, joint with local administrations. Such effects shall not come to an end because of the completion of the present KEP, but they will start with it, representing a first (and highly replicable) case of “extended cooperation” for a better environment, and a permanent contribution to the overall Country development , in the terms reported in section 4.2.2 above.

- c) The Project is a cross-border and will be carried out on behalf of Beneficiaries belonging to separate Countries, under the guidance of the Applicant and for the benefit of a common and high valuable environment (Drina River Basin). This cooperation, forcibly oriented towards the implementation of common “actions” more than a mere exchange of “courtesy visits”, will represent the best possible impulse for the future Project sustainability, and replicability in other commonly shared water basins (Sava RB as an outstanding example). Furthermore, the Republic of Serbia (actually implementing a similar project in the same river basin, but limited to the national portion), is joining the team, bringing an extremely valuable “added value”, for the present and future Project stages.
- d) One of the objectives of the present Project is to sing a Letter of Intent (or Memorandum of Understanding) between the Applicant and the Beneficiaries, in order to continue the cooperation in the next future. All concerned institutions (including Serbia, as mentioned in item k) above) are committed to find additional financial resources (internal, EU or others) to sustain the cooperation.

5. VISIBILITY

5.1 Project publicity and dissemination of information

The Project will receive publicity through:

- a) the web sites of Applicant (ARPA Emilia Romagna) and Beneficiaries (Hydro-met Services of Rep. Srsпка and Montenegro);
- b) dedicated conferences and / or seminars to be held in the cities of Podgorica (Montenegro), Banja Luka (Rep. Srsпка) and Bologna (headquarter of the Applicant). Information about such events shall be given to all concerned institutions in the Country of the Applicant and in the Countries of the Beneficiaries, including research institutions, Universities, NGOs or private companies operating in the sectors of environmental monitoring, hydrometeorology and related activities (e.g. modelling and forecasting);
- c) direct diffusion of Progress Reports and Final Report. Reports shall be made available through the web-sites, diffusing communications to potentially interested public and private institutions;
- d) direct e-mail information transmitted to scientists and professionals, directly or indirectly involved in the different issues to be afforded during the execution of the Project;
- e) other means that may be recommended by the Beneficiaries or the respective National Authorities any moment.

5.2 Use of CEI logo and references

CEI logo will be reported in header of all documents (interim reports, final report and official correspondence) published under the present KEP. Moreover, a dedicated introduction will be also added to every document, reporting the general objectives and leading concepts for CEI grant / KEP activities at EBRD and expectations. This will be highlighted with specifically studied graphic effects, to enhance its visibility and separate from the general context of the document.

5.3 How did you learn about the KEP?

Previous experience (1206KEP.001-12 between ARPA ER – Italy - and SEPA – Rep. of Serbia).

6. BUDGET

6.1 Person responsible for expenditure

Name and surname: Barbara Ramponi
 Official position: Administration manager ARPA SIMC
 Postal address: Viale Silvani, 6 - 40122 Bologna
 Tel.: +39-051-6497504
 Mobile: +39-335.7712819
 Fax: +39-051-6497501
 E-mail: bramponi@arpa.emr.it

6.2 Total cost and CEI contribution

Total eligible cost of project	in euro	80830 €
Amount requested from the CEI	in euro	39860 €
	% of total cost of project	49 %

6.3 Breakdown of estimated costs

See Excel file

6.4 Remarks

7. FINANCIAL RESOURCES

7.1 Project financing

See Excel file

7.2 Remarks

8. SIGNATURES

For the beneficiaries:

1. RHMZRS – Republic of Srpska (Bosnia and Herzegovina)

I confirm that I am duly authorised by the RHMZRS - Republican Hydro-meteorological Service, Republic of Srpska (Bosnia and Herzegovina) to sign this application and that information provided in the application is correct and accurate. I confirm that the RHMS - Republican Hydro-meteorological Service, Republic of Srpska (Bosnia and Herzegovina) by me represented is fully committed to the implementation of the project.

Date: 15.07.2013.

Position: Director of RHMZRS

Name: Zoran Božović

Signature and stamp:




2. HMZCG – Republic of Montenegro

I confirm that I am duly authorised by the HMZCG – Hydro-meteorological and seismological Service of the Republic Montenegro to sign this application and that information provided in the application is correct and accurate. I confirm that the HMZCG – Hydro-meteorological and seismological Service of the Republic Montenegro by me represented is fully committed to the implementation of the project.

Date: 16. July 2013.

Position: Deputy Director

Name: Radomir Kandić

Signature and stamp:

For the Applicant - ARPA ER:

I confirm that I am duly authorised by the Regional Environmental Protection Agency of Emilia Romagna – ARPA ER to sign this application and that information provided in the application is correct and accurate. I confirm that ARPA ER by me represented is fully committed to the implementation and managing of the project.

Date: 11 July 2013

Position: Director General of ARPA - ER

Name: Stefano Tibaldi

Signature and stamp:

ANNEX 1

Please provide detailed contact information for all providers of know-how and of financing, other than the applicant

Name and surname of contact person:

Official position:

Organisation name:

Postal address:

Tel.:

Mobile:

Fax:

E-mail:

Website:

ANNEX 2

Please provide detailed contact information for all beneficiaries

Name and surname of contact person: Zoran Božović

Official position: Director

Organisation name: RHMZRS - Republican Hydro-meteorological Service, Republic of Srpska (Bosnia and Herzegovina)

Postal address: Put Banjalučkog odreda 66

78000 Banja Luka

Republic of Srpska

Bosnia and Herzegovina

PO BOX: 147

Tel.: +387 51/ 433-521; +387 51/ 433-522

Fax: 051 307-943

E-mail: rhmz@teol.net

Website: <http://www.rhmzrs.com>

Name and surname of contact person: Ivana Pavičević

Official position: Head of International Projects Department

Organisation name: HMZCG – Hydro-meteorological and seismological Service of the Republic Montenegro

Postal address: IV Proleterske 19

81000 Podgorica

Tel: +382 20 655 183

Fax: +382 20 655 197

E-mail: ivana.pavicevic@meteo.co.me

Website: <http://www.meteo.co.me>

GRANT AGREEMENT

between

THE CENTRAL EUROPEAN INITIATIVE EXECUTIVE SECRETARIAT

and

**REGIONAL ENVIRONMENTAL PROTECTION AGENCY OF EMILIA ROMAGNA
(ARPA ER)**

RELATING TO THE IMPLEMENTATION OF THE PROJECT TITLED

**IMPROVING ENVIRONMENTAL MONITORING AND DISASTER PREVENTION
CAPACITY IN DRINA RIVER BASIN – PHASE II
(REF. NO. 1206.005-13)**

**TO BE CO-FINANCED UNDER THE KNOW-HOW EXCHANGE PROGRAMME OF THE
CENTRAL EUROPEAN INITIATIVE**

The Central European Initiative Executive Secretariat (CEI-ES), hereinafter called the GRANTOR with its main office located in Via Genova 9, 34121, Trieste, Italy, on behalf of the Office for the CEI Fund at the EBRD, located at the same address as the CEI-ES – who assumes all the responsibilities of the GRANTOR throughout the implementation of the project entitled 'Improving Environmental Monitoring and Disaster Prevention Capacity in Drina river basin – Phase II' Ref. No. 1206.005-13.

on one side,

and

the Regional Environmental Protection Agency of Emilia Romagna – ARPA ER (called Applicant in the Project Application Form and hereinafter called the GRANTEE) with its main office located in Viale Silvani, 6 - 40122 Bologna, Italy.

on the other side,

have agreed as follows:

1. GENERAL PROVISIONS

1.1 The GRANTEE commits itself to undertake all the activities specified in the attached Application Form for the Know-how Exchange Programme (KEP), dated 17 July 2013, duly signed by the GRANTEE and by Republican Hydro-meteorological Service, Republic Srpska, Bosnia and Herzegovina with its main office located in Put Banjalučkog odreda 66, 78000 Banja Luka, Republic of Srpska, Bosnia and Herzegovina; and signed by Hydro-meteorological and seismological Service of Montenegro with its main office located in IV Proleterske 19, 81000 Podgorica, Montenegro (hereinafter called the KNOW-HOW BENEFICIARIES). The GRANTOR agrees to co-finance the activities of the project with a grant contribution amounting to a maximum of €30,260.00 (thirty thousand two hundred sixty Euro), which constitutes the 37,44% of the total project cost amounting to €80,830.00 (eighty thousand eight hundred and thirty Euros). The portion to be co-financed by the GRANTEE from its own and/or external resources will be of at least 46,930.00 (forty-six thousand



nine hundred thirty euro) which constitutes the 58,06% of the total budget cost. Each beneficiary institution will contribute with at least €1,820 (one thousand eight hundred twenty euro), totally amounting to €3,640.00 (three thousand six hundred and forty Euro) which constitutes the 4,50% of the total budget cost, as detailed in paragraph 7.1 of the Application Form.

1.2 By signing this Grant Agreement, the GRANTEE acknowledges its sole responsibility for the implementation and financial management of the project in accordance with the project Application Form and KEP Rules and Procedures, which are both attached to this Grant Agreement. In case the GRANTEE delegates part of the implementation and/or the financial management of the project to a qualified partner, such delegation cannot and must not restrict or remove the legal responsibility of the GRANTEE for the implementation of the project and the sound management of the CEI grant.

2. IMPLEMENTATION, MODIFICATION AND TERMINATION OF THE PROJECT

2.1 THE GRANTEE commits itself to fully implement the project and to conclude all related operations at the latest by 10 December 2014, as detailed in paragraph 1.6 of the Application Form.

2.2 THE GRANTEE undertakes to satisfy additional requirements put forward by the GRANTOR during the grant approval process, namely:

- The CEI grant contribution shall be used to co-finance the items of the budget break down as follows:

Budget items	Approved CEI contribution (€)
1b Senior experts - Applicant (external).	5,000.00
2a Bologna-Podgorica/BanjaLuka- Bologna	2,400.00
3a Per diem in Bologna	1,000.00
4a Conferences and seminars in POD/BL	2,400.00
4b Conferences and seminars in Project area.	960.00
4c Conferences and seminars in Bologna.	1,000.00
5a Aut. Hydrological Station in Drina river (installed).	13,500.00
5b Data transmission / reception devices and SWs.	2,000.00
6a Advertisement in Web sites (Applicant + Beneficiaries).	5,00.00
6b Project leaflets	5,00.00
8a External auditing (Italy - including expenses).	1,000.00
Total	30,260.00

2.3 If after the approval of the CEI contribution any changes occur with regard to the dates, venue, title, scope of activities, participation, budget, personnel involved in the project, or any other project aspects described in the Application Form, the GRANTEE will promptly inform the GRANTOR and obtain its written approval before implementing any such modifications. The implementation of activities or payment of expenses in a form not authorised by the GRANTOR may result in the reduction or cancellation of the grant. If such a situation arises, the GRANTEE will return the amounts received within fourteen (14) days upon receiving a written request from the GRANTOR.

2.4 In case the implementation of the project has to be stopped for Force Majeure, as defined below, and the GRANTEE submits relevant explanatory documentation, and none of the situations described in article 3.4 of the present Agreement occurred, the GRANTOR will disburse the amount of the grant proportional to the completed project activities. The disbursement of the grant will take place upon submission by the GRANTEE of satisfactory final implementation documentation as



described in articles 4.2 and 4.3 of the present Agreement. For the purpose of the present Agreement, "Force Majeure" means an event which is beyond the reasonable control of the GRANTEE, is not foreseeable, is unavoidable, and which makes the GRANTEE's performance of its duties hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances. Force Majeure may include, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial actions. Force Majeure shall not include any event which is caused by the negligence or intentional action of the GRANTEE, nor any event which a diligent GRANTEE could have been expected to take into account at the time of the signing of the present Agreement.

3. PAYMENTS TO THE GRANTEE

3.1 The GRANTOR's contribution to the implementation of the project will be paid as follows:

- a) Advance Payment. The GRANTEE is entitled to an Advance Payment of up to fifty (50) per cent of the eligible grant contribution. The Advance Payment will be paid to the GRANTEE within thirty (30) days upon receipt of the Request for Advance Payment. The GRANTEE can submit to the GRANTOR the request for Advance Payment only after all of the following conditions have been satisfactorily met:
 - i. An original copy of the present Grant Agreement signed by the parties has been received by the GRANTOR.
 - ii. The GRANTOR has approved by written communication the following documentation in English submitted by the GRANTEE: the detailed working schedule of the project's activities, and the Curricula of professional personnel involved in the project. The documentation must be submitted by the GRANTEE within seven (7) days upon receipt of the communication issued by the GRANTOR about the award of the grant. The GRANTOR must approve the documentation within seven (7) days upon receiving it.
- b) Final Payment. The GRANTEE is entitled to a Final Payment in the amount that constitutes the difference between the amount of the eligible expenses and the amount already disbursed to the GRANTEE as Advance Payment. The GRANTEE shall bear in mind that the sum of Advance and Final payments must not exceed the maximum grant contribution authorised by the GRANTOR as described in article 1 of the present Agreement. The Final Payment will be paid to the GRANTEE within thirty (30) days upon approval of the GRANTOR of the complete project implementation documentation and the Final Payment Request. The GRANTOR will communicate its decision in written format within sixty (60) days of receiving documentation or observing the conditions described in article 3.4. The Final Payment will be disbursed to the GRANTEE after all of the following conditions have been satisfactorily met:
 - i. The GRANTEE has prepared and submitted a narrative Final Implementation Report along with supporting documents as described in article 4.2 of the present Agreement. The Report must be submitted to the GRANTOR within sixty (60) days upon conclusion of project activities.
 - ii. The GRANTEE has prepared and submitted a Final Financial Report along with supporting documents as described in article 4.3 of the present Agreement. The Report must be submitted to the GRANTOR within sixty (60) days upon conclusion of project activities.



3.2 Should the actual expenditures for the project be lower than the envisaged total budget, the CEI grant contribution will be proportionally reduced to maintain the originally approved percentage of the grant in the total project budget (37,44% of the total project cost).

3.3 The GRANTEE recognises the fact that the GRANTOR requires its grant to be spent exclusively on the budget items authorised by the CEI Committee of National Coordinators (CNC) in their grant approval decision and not exceeding the amounts authorised by the CNC for each eligible budget item. Any variation in the purpose of the GRANTOR's grant or any alterations to the amounts of the GRANTOR's grant allotted to the budget items are subject to prior written consent of the GRANTOR. In case the GRANTEE fails to obtain such consent, adequate deductions will be made by the GRANTOR from the Final Payment in accordance with the budget approved by the GRANTOR.

3.4 At any stage of the implementation of the project the GRANTOR will be allowed to request the restitution of the amounts already disbursed to the GRANTEE in one or more of the following cases:

- a) The Progress Report (as described in article 4.1 of the present Agreement) or monitoring of the project implementation by the GRANTOR have revealed serious obstacles in the implementation of the project that cannot be mitigated and are likely to have a major negative impact on the results of the project. Such obstacles may include, but are not limited to, the refusal of the KNOW-HOW BENEFICIARIES to participate in project activities, proof that initial assumptions of the project were mistaken, and insufficiency of funds.
- b) The activities carried out by the GRANTEE show reasonable indications that they would not meet the objectives of the project due to the negligence of the GRANTEE.
- c) The expenses of the project have not been adequately documented, as described in article 4.3 of this Agreement.
- d) The scope of activities and/or project budget have been modified without prior written authorisation of the GRANTOR, as described in articles 2.3 and 3.3 of the present Agreement.
- e) The GRANTEE has failed to provide proper visibility to the GRANTOR by not displaying the GRANTOR's logo and not referring to the GRANTOR's role in the project throughout its implementation as described in point 5.2 of the Application Form and article 5 of the present Agreement.

3.5 The amounts withheld by the GRANTOR as a result of the failure of the GRANTEE to meet any of the conditions described in article 3.4 of the present Agreement will rest at the sole discretion of the GRANTOR based on its fair judgement of the points outlined in the above article 3.1b. The GRANTOR will communicate its decision in written format within sixty (60) days of receiving documentation or observing the conditions described in article 3.4. In this communication the GRANTOR will advise the GRANTEE on the amounts of the contribution to be withheld and reasons for such a decision. Upon receipt of such communication, the GRANTEE will have thirty (30) days to make any corrections or submit additional project documentation to the GRANTOR or will lose all rights to claims over the deducted amounts. The GRANTOR will review the additional documentation and will communicate its final decision to the GRANTEE within fourteen (14) days of receipt of supplemental documentation.

3.6 Both the Final Implementation Report and the Final Financial Report along with the accompanying documents must be submitted to the GRANTOR within sixty (60) days upon



completion of the project activities. Failure to do so may result in the GRANTOR's cancellation of the Final Payment and the request for the restitution of the Advance Payment in its full amount. If such a situation arises, the GRANTEE will return the amount of the Advance Payment within fourteen (14) days upon receiving written request from the GRANTOR.

4. DOCUMENTATION, REPORTING, AND MONITORING

4.1 The GRANTEE undertakes the duty to provide the GRANTOR with Progress Implementation Report(s). A Progress Implementation Report has to outline project activities undertaken as well as a list of expenditures incurred. A Progress Implementation Report must cover all project activities that have been implemented or are being implemented at the time of the drafting of the Report. Regardless of the duration of the implementation period of the project, any project lasting less than a year requires the mandatory submission of one progress report. The report should be submitted at the midpoint of the implementation period. In case of projects lasting more than twelve months, Progress Reports must be submitted at least every six months.

4.2 The Final Implementation Report duly signed by the GRANTEE and by the KNOW-HOW BENEFICIARIES will provide the following information:

- a) Summary report on implemented activities and results achieved, including information on any difficulties occurred during implementation of the project as well as on planned follow-up activities. The GRANTEE shall include in the Report (in Microsoft Excel format) the lists of participants, experts, consultants, and all other stakeholders, who took part in the project's implementation, including their contact details (email addresses and telephone numbers), capacity in which they participated in project activities, and qualifications.
- b) Copies of all materials produced during the implementation of the project (e.g. programmes, analyses, reports, reviews, press releases, presentations, and others).
- c) Assessment of the achieved results by the KNOW-HOW BENEFICIARIES (i.e. usefulness and effectiveness of the project, ownership, collaboration with the GRANTEE, required follow-up actions, and others).
- d) Information on the project's publicity and CEI visibility, including information on prepared press releases, articles, websites, mailing campaigns, and others; and the use of CEI logo and references to the CEI's role in the project.
- e) Whenever appropriate, photographic material for possible publications.

4.3 The Final Financial Report will provide the following detailed information:

- a) Justification of expenses for the entire project budget, including items paid by the CEI grant.
- b) Invoices or equivalent proof of payments made. Such documents shall be submitted to the GRANTEE in original or authenticated copies in the English language or accompanied by an appropriate translation into English.
- c) With regard to personnel expenditures, the GRANTEE will submit the following documentation:
 - i. Curricula of professional personnel involved in the project



ii. Copies of payslips (or the work Terms of Reference and proof of payment made in the case of external consultants)

iii. The detailed working time sheets.

d) With regard to accommodations and travel expenses, the GRANTEE shall provide individualised invoices or equivalent proof of payments made (hotel bills and travel air tickets shall contain names of guests/ passengers).

e) With regard to in-kind contributions (with the exception of the personnel costs which must be justified as outlined in article 4.3c of the present Agreement), the GRANTEE will provide accounting documents having a probative value equivalent to an invoice.

4.4 At any time during project implementation, upon request of the GRANTOR, the GRANTEE will provide information on the status of the execution of the project, implemented activities, encountered difficulties, work schedule, as well as on all other project aspects.

4.5 The GRANTOR reserves the right to appoint its staff members or an external consultant to monitor the implementation of the project, and the GRANTEE undertakes to invite representatives of the GRANTOR to all project activities and public events organised in the context of the project.

4.6 All project documentation must be submitted by the GRANTEE to the GRANTOR in the English language.

5. GRANTOR'S VISIBILITY

5.1 The GRANTEE undertakes to acknowledge the CEI contribution and thus ensure appropriate CEI visibility, in particular by displaying the CEI logo on all materials (e.g. billboards, posters, captions, programme, leaflets, advertisements, invitations, and others) produced in the course of the project as well as at all public events organised in the context of project activities. The GRANTEE recognises that the disbursement of the grant will be subject to the proper use of the CEI logo and references to the CEI's role in the project.

6. COPYRIGHT

6.1 The GRANTEE acknowledges the GRANTOR's right to copy, use in any appropriate way, and distribute, for non profitable purposes, any documents produced within the framework of the activities funded within the project.

7. FAIRNESS AND GOOD FAITH

7.1 The GRANTOR and the GRANTEE undertake to act in good faith with respect to each other's rights under this Grant Agreement and to adopt all reasonable measures to ensure the execution of the project to the highest success level.

8. SETTLEMENT OF DISPUTES

8.1 The GRANTOR and the GRANTEE agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the present Agreement and the success of the assignment. The GRANTOR and the GRANTEE shall use their best efforts to settle amicably all disputes arising



out of or in connection with the present Agreement or its interpretation, including mediation using a Mediator acceptable to both parties.

8.2 Any dispute between the GRANTOR and the GRANTEE as to matters arising pursuant to the present Agreement that cannot be settled amicably within sixty (60) days after receipt by one Party of the other Party's request in written communication for such amicable settlement may be submitted to an Arbitrator chosen by the GRANTOR. The dispute will be settled under the provisions of Italian law.

8.3 In the event of a conflict between the provisions of the present Grant Agreement and the attached Application Form and/or KEP Rules and Procedures, the provisions of the present Agreement shall prevail over the other two in the following order of precedence:

- a) Grant Agreement
- b) KEP Application Form
- c) KEP Rules and Procedures

Attachments:

- 1. *KEP Application form dated 17 July 2013*
- 2. *Rules and Procedures for the Applicants of the CEI Know-How Exchange Programme*
- 3. *Letter of approval dated 14 December 2013*

Signed by:

For the Central European Initiative Executive Secretariat (the GRANTOR)

Ambassador Giovanni Caracciolo di Vietri
(Legal representative)



Date: 13 DIC. 2013

For the Regional Environmental Protection Agency of Emilia Romagna (the GRANTEE)

(Legal representative)

Date: _____

N. proposta: PDEL-2014-5 del 23/01/2014

Centro di Responsabilità: Servizio Idro-Meteo-Clima

OGGETTO: Servizio Idro-Meteo-Clima. Approvazione del Progetto *Improving Environmental Monitoring and Disaster Prevention Capacity in Drina River Basin – Phase II (Republic of Srpska and Montenegro) ref 1206.005-13.*

PARERE CONTABILE

Il sottoscritto Dott. Giuseppe Bacchi Reggiani, Responsabile dell'Area Bilancio e Controllo Economico, esprime parere di regolarità contabile ai sensi del Regolamento Arpa sul Decentramento amministrativo.

Data 27/01/2014

Il Dirigente
