

IPA National Programme 2010 – Bosnia and Herzegovina
Fiche 11 “Environment”

1. Basic information

1.1 CRIS Number: 2010/022-259

1.2 Title: Rehabilitation and construction of water, waste water and solid waste infrastructure

1.3 ELARG Statistical code: 02.27 Economic criteria / Environment

1.4 Location: Bosnia and Herzegovina

Implementing arrangements:

1.5 Contracting Authority: The European Union represented by the European Commission for and on behalf of the beneficiary country in joint management with EIB, EBRD and WB, and indirect centralised management with KfW.

1.6 Implementing Agency:

Component I: European Investment Bank (EIB) through joint management with the European Commission

Component II: European Bank for Reconstruction and Development (EBRD) through joint management with the European Commission

Component III: The World Bank through joint management with the European Commission

Component IV: Kreditanstalt für Wiederaufbau (KfW) through indirect centralised management with the European Commission

1.7 Beneficiary:

Primary Beneficiary:

Ministry of Foreign Trade and Economic Relations (MOFTER)

Senior Programming Officer

Ms. Nermina Skejovic-Huric, Expert Advisor

Musala 6, 71000 Sarajevo

Tel: +387 33 552 365

E-mail: nermina.skejovic@mvteo.gov.ba

Secondary Beneficiaries:

Water and wastewater sector

Ministry of Agriculture, Forestry, Water Management RS

Ministry of Agriculture, Forestry, Water Management FBiH

Solid Waste

Federal Ministry of Environment and Tourism

Ministry of Physical Planning, Civil Engineering and Ecology RS

Financing:

1.8 Overall cost (VAT excluded): EUR 193 100 000

(EUR 289 600 000 with previous national IPA and IPA multibeneficiary contributions and IFI loans considered as co-funding for IPA 2009)

1.9 EU contribution: EUR 40 000 000

1.10 Final date for contracting: Two years following the date of the conclusion of the Financing Agreement

1.11 Final date for execution of contracts: Two years following the end date of contracting

1.12 Final date for disbursements: One year following the end date for the execution of contracts

2. Overall Objective and Project Purpose

2.1 Overall Objective

The overall objective is to contribute to environmentally sustainable economic development through infrastructure development in co-operation with International Financial Institutions (IFIs) to achieve EU environmental standards.

2.2 Project purpose

Support to sustainable environmental development and generating local economic growth and creating job opportunities through environmental infrastructure investments in Bosnia and Herzegovina.

2.3 Link with AP/NPAA / EP/ SAA

The key documents on the Enlargement Strategy and the European perspective of Bosnia and Herzegovina underline the importance of infrastructure development and upgrading as a critical factor for country's progress towards the European Perspective. In this respect emphasis is placed to the sound cooperation with the IFIs engaged in promoting infrastructure investments.

European Partnership with Bosnia and Herzegovina 2008

- Continue work on progressive transposition of the *acquis*, with particular emphasis on waste management, water quality, air quality, nature protection and integrated pollution prevention and control.

- Implement strategic plans, including investment strategies, and increase investments in environmental infrastructure, with particular emphasis on waste water collection and treatment, drinking water supply and solid waste management.
- Ensure integration of environmental protection requirements into definition and implementation of other sectoral policies.

Commitments under the Interim Agreement and SAA (Stabilisation and Association Agreement)

The Parties shall develop and strengthen their cooperation in the environmental field with the vital task of halting further degradation and start improving the environmental situation with the aim of sustainable development.

BiH Progress Report 2009

Limited progress can be reported on **water quality**. Bosnia and Herzegovina has started to implement the requirements of the Water Framework Directive by means of the Entity Water Laws. The Water Agencies are operational in the Federation and ensuring coordination with the relevant Ministries. The Agency for the Sava River Basin in Republic of Srpska (RS) is operational. According to the governmental decision from June 2009 the Agency for District River Basin Trebisnjica is going to be operational in January 2010. Further efforts are still required to ensure uniform river basin planning, proper public consultation and monitoring between the Entities. Implementing legislation has been adopted for water laws, water charges, and for harmful and dangerous substances and their maximum levels in surface waters. However, much of the implementing legislation still needs to be put in place in order to ensure further alignment with the *acquis*. Untreated discharges of waste water remain the key environmental challenge, and access to drinking water, as well as wastewater treatment infrastructure, requires more investments.

Regarding **waste management**, some progress has been made in the establishment of sanitary landfills throughout Bosnia and Herzegovina and regulations on medical waste management have been enacted. However, no progress has been made in relation to rules or regulations governing the system of recycling and recovery of priority waste streams, such as packaging, motor oil and tyres. Further efforts are still required to initiate management of waste streams of animal origin. Bosnia and Herzegovina is at an early stage of investment in solid waste management. Further efforts are required to prioritize and coordinate investment programmes, as financial resources are scarce.

2.4 Link with MIPD –

Multi-Indicative Planning Document (MIPD) 2009-2011 for BiH provides:

(i) MIPD Section 2.3.1.2. Economic Criteria

Expected results and indicators

Softening the impact of the financial and economic crisis: Support for the financial sector, investments in infrastructure and strengthening of the roles of economic and financial regulators will maintain economic stability, growth and jobs.

(ii) MIPD Section 2.3.1.3. Ability to assume the obligations of membership

Objectives and choices

Sectoral Policies: Support the adoption of the national environment strategy.

Expected results and indicators

Environment: A country-wide Environment Strategy is adopted and implemented. The alignment of the sector to the environmental *acquis* is advanced. Tools for prioritization of environmental infrastructure investments and determination of measures for environmental protection are operational. Generation of co-financing mechanisms for environmental infrastructure are advanced. Enhanced investments in environmental infrastructure.

2.5 Link with National Development Plan

Bosnia and Herzegovina has completed drafting of the National Development Strategy 2008 - 2013 and Social Inclusion Strategy that will serve as the basis for the National Development Plan. Both strategies are expected to be adopted at the beginning of 2010.

The project is linked to the strategic goal: Sustainable development – Environment and renewable energy resources.

The priorities are as follows:

- Usage of renewable and non-renewable natural resources to ensure sustainable development
- Develop the conception of measuring the sustainable development and the environmental infrastructure development.
- Ensure stronger integration of environmental policies into other sectoral policies.
- Promote development of all renewable energy resources.

2.6 Link with national/ sectoral investment plans

Water and waste water

The National Environmental Action Plan was the first document specifically oriented to environmental problems and was adopted by the entity governments of Bosnia and Herzegovina in 2003.

The planned interventions in the water sector are in line with the National Environmental Action Plan, since the priorities related to the water resource and wastewater management are (by 2020): 1) provision of sufficient quantities of high-quality water for water supply & other needs; 2) protection of water resources; 3) protection from flooding.

The water sector interventions are also in line with the BiH Water Protection Plan which is the strategic document for the implementation of the EU Urban Waste Water Treatment Directive (91/271/EC). It identifies the urban waste water as the main source of pollution of the surface water in Bosnia and Herzegovina.

Solid waste

EU funded *Solid Waste Management Strategy* in Bosnia and Herzegovina was completed in August 2000. The strategy, as a baseline, is essential document for solid waste collection, disposal, and management, and envisions construction of 16 regional sanitary requirement-compliant waste disposal landfills in Bosnia and Herzegovina. This strategy recommends series of measures for technical, institutional and financial development of waste management system in the following 15 to 20 years. One of the key measures is the construction of regional landfills and development of new technologies for solid waste management. The strategy recommends environmental standards that are required for EU accession.

The Environmental Protection Strategy 2008-2018 for Federation of Bosnia and Herzegovina (FBiH), which was adopted in 2008, reaffirms the regional approach to solid waste management and building of regional landfills for waste disposal based on sanitary requirements and EU directives.

3. Description of project

3.1 Background and justification:

Bosnia and Herzegovina has started comprehensive reconstruction in the environment sector in both entities with the help of the IFIs. For the needs of the environmental infrastructure development in the *water/waste water sector*, the IFIs have allocated significant loan assistance because the needs for investments in the sector are extensive. Current interventions, as part of the anti-crisis package, contribute to the alleviation of the current financial and economic crisis by creating job opportunities improving living conditions for people in Bosnia and Herzegovina and increasing the positive effect on environment in relation to water quality and waste management.

The underdeveloped water services have serious negative impacts on public health and the environment caused by poor infrastructure and strong hydrological interconnection and heavy modification of water bodies, which leaves public water supplies and bathing waters exposed to the effects of industrial pollution and discharge of untreated water. The water sector is heavily fragmented. Inheritance of weak governance has left much infrastructure poorly maintained and highly inefficient.

Investment needs have been identified and they relate to improving water supply systems, expanding sewerage systems and construction and reconstruction of water/ waste water treatment plants. The investments will improve water service and public health, with a particular focus on reducing waterborne pollution through the collection and treatment of wastewaters that are presently discharged to the environment without treatment. The operation will contribute to meeting the needs of Bosnia and Herzegovina in relation to future compliance with the EU Environmental Legislation, in particular the Urban Waste Water Treatment Directive (91/271/EC), Drinking Water Directive (98/83/EC) and Bathing Water Directive 2006/7/EC. Component III of this intervention will address the implementation of the Directive on the Landfill of Waste (99/31/EC).

The interventions will financially support infrastructure investments of municipalities. Grant co-financing combined with loans extended by IFIs will increase the affordability of such investments for municipalities. The grant funds relieve BiH's debt burden and also improve the financial rate of return of the projects.

The intervention for IPA 2010 focuses on the improvement of water, waste water and solid waste infrastructure within four components:

Component I - Rehabilitation and construction of water and waste water infrastructure in selected municipalities both in FBiH and RS (in cooperation with European Investment Bank - EIB).

Component II - Extension of the water supply system in the Dubrave region, FBiH (in cooperation with the European Bank for Reconstruction and Development - EBRD).

Component III Rehabilitation and construction of waste water treatment plants and sewage systems in Sarajevo, Zivinice and Ljubuski in FBiH as well as improvement of the existing regional sanitary landfills in Mostar, FBiH and Banja Luka, RS (in cooperation with the World Bank -WB).

Component IV - Construction of the sewerage system in Banja Luka, RS (in cooperation with KfW Bankgruppe - KfW).

Evaluation, technical and financial checks of actions will be ensured through standard provisions of the joint action agreements with the financial institutions.

Component I – Rehabilitation and construction of water and waste water infrastructure in selected municipalities both in FBiH and RS (in cooperation with EIB)

Sub-component Ia - Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS (EUR 10 000 000)

The Sub-component Ia relates to the rehabilitation and construction of water and sanitation infrastructure in selected sites in RS.

The proposed operations under this sub-component, are part of wider intervention in the water and sanitation sector and will include 24 municipalities in RS.

The value of the whole investment project is EUR 80 000 000.

European Investment Bank (EIB) contributes to the overall scheme with EUR 40 000 000,

The present national IPA 2010 contribution is EUR 10 000 000, EUR 1 250 000 was approved through the Infrastructure Project Facility – Technical Assistance (IPA 2010 IPF-TA) and local municipalities cover the remaining EUR 28 750 000.

Four feasibility studies financed by different sources were prepared and a number of detailed designs for rehabilitation activities were mainly financed by local sources. Other additional feasibility studies and detailed designs will be funded by the above mentioned approved IPA 2010 IPF-TA grant in accordance with EIB requirements.

Based on the information provided by the municipalities on their preliminary investments needs, the following summary can be made:

- Investments related to sewerage systems: Sokolac, Donji Zabar, Teslic, Vlasenica and Vukosavlje
- Investments related to water supply systems: Pale, Kotor Varos, Ribnik, Trebinje, Zvornik, Lopare, Kozarska Dubica, Samac and Trnovo
- Investments related to water supply and sewerage: Prijedor, Brod, Rogatica, Gacko, Gradiska, Han Pijesak, Laktasi, Novi Grad, Sekovici and Sipovo

Sub-component Ib - Rehabilitation and construction of the water and sanitation infrastructure in FBiH (EUR 8 000 000)

This sub-component relates to the rehabilitation and construction of water and sanitation infrastructure in 15 municipalities in FBiH

The proposed operations under this sub-component are part of a wider investment programme for the water and sanitation sector in the FBiH.

The value of the whole investment project is EUR 121 300 000. EIB contributes to the overall financial construction with EUR 60 000 000, the present national IPA 2010 project contributes EUR 8 000 000. The IPA 2009 Infrastructure Project Facility-Municipal Window (IPF-MW) contribute EUR 5 000 000 and the national IPA 2009 EUR 12 000 000.

Additionally, EUR 1 250 000 was approved through the IPA 2010 IPF-TA. The remaining balance of 35 050 000 will be covered by local contributions of the municipalities.

Seven feasibility studies¹ were prepared under the EC Environmental Project Preparation Facility. The investments in those municipalities will be supported by the above mentioned IPA 2009 IPF-MW grants.

Some funds from the and IPF-TA are planned to be used for preparation of feasibility studies and/or other project documentation for municipalities included in the project that currently do not have feasibility studies² and new municipalities that will be included in the project.

Based on the information provided by the municipalities on their preliminary investments needs, the following summary can be made:

- Investments related to sewerage systems: Zenica, Orasje, Usora, Visoko, Olovo, Doboj Istok, Mostar.
- Investments related to sewerage systems and treatment plants: Zavidovici, Doboj Jug, Velika Kladusa, Bosanski Petrovac, Posusje, Siroki Brijeg, Bosanska Krupa
- Investments related to water supply and sewerage: Tomislavgrad

Component II – Extension of the water supply system in the Dubrave region, FBiH (in cooperation with EBRD)

Second phase of the water supply system “Dubrave” (EUR 3 500 000)

The area of Dubrave suffers from the negative consequences of the underdeveloped water services on public health and the environment, caused by poor infrastructure.

The Dubrave region is a very sensitive karst area. The area does not have a water supply system and is supplied from cistern tanks – collecting rain water. There is no waste water network and the population uses individual septic tanks. Due to that, waste water very often irregularly infiltrates and pollutes underground water. The lack of drinking water supply is the main obstacle for any development. Water supply problem in this area is very complex and it is a basis for the economic development of the whole region.

The proposed intervention under this component is related to the construction of the second phase of the water supply system Dubrave in the area of Capljina, Stolac and Mostar.

The total value of the investment programme is EUR 48 000 000. The present IPA 2010 contribution is EUR 3 500 000 and with the EBRD loan of 5 000 000 the total amount of the project is EUR 8 500 000.

¹ Bosanski Petrovac, Orasje, Velika Kladusa, Posusje, Siroki Brijeg, Tomislavgrad, Bosanska Krupa.

² Doboj Jug, Usora, Zavidovići, Visoko.

Component III – Rehabilitation and construction of waste water treatment plants and sewage systems in Sarajevo, Zivinice and Ljubuski in FBiH as well as improvement of the existing regional sanitary landfills in Mostar, FBiH and Banja Luka, RS (in cooperation with the WB)

Sub-component III a - Construction of sewage system in Ljubuski municipality (EUR 2 000 000)

Part of waste water dropped in the river Trebizat, from the municipality of Ljubuski with its 30.000 inhabitants, directly jeopardizes very sensitive down river ecosystem, as well as the ecosystem in Neretva and Trebisnjica Basin and Adriatic seaside region. In Ljubuski municipality the waste water from households that are not connected to the sewage system are collected to individual septic tanks. Because of the soil construction, the waste water flows down and produces a negative pollution effect to the drinking water resources.

The intervention will cover the construction of new sewerage network and the reconstruction of existing sewage network. The value of the investment is EUR 2 500 000. IPA 2010 would support the investment with EUR 2 000 000. The remaining EUR 500 000 will be covered by the municipality.

This project is the follow-up of the *Neretva, Trebisnjica River Basin Management Project* financed by the Global Environmental Facility and implemented through World Bank. The Project includes reconstruction, remediation and upgrading of the second level of waste water treatment and the present intervention aims to reduce water pollution in the Neretva and Trebisnjica river basin, and a negative pollution effect to the drinking water resources on the seacoast of Croatia.

Sub-component III b - Waste water treatment plant in Butila, Sarajevo (EUR 8 000 000)

The FBiH suffers from the negative impacts of underdeveloped water services on public health and the environment. Only 2% of collected urban wastewater in FBiH is treated. This leaves public water supplies and bathing waters exposed to the effects of serious pollution and the discharge of untreated water.

The Sarajevo Waste Water Treatment Plant (WWTP) consists of 25 facilities that are all built at the location of Butila. The operation of the plant was stopped during April 1992. All facilities suffered major damages due to the war, alienation of large number of technological equipment, devastation of equipment and because the waste water treatment plant was left without maintenance for a long time.

The total value of the investment is EUR 38 000 000. The IPA 2010 would help the investment programme with EUR 8 000 000, the local contribution will be EUR 1 500 000. The remaining amount of 28 500 000 will be provided through loans from the WB and the EBRD which are currently under negotiations.

The signature of the Administration Agreement with the World Bank for Sub-component III b will depend on the signature of loans for investment in construction of the Sarajevo WWTP with the WB and/or EBRD.

The proposed intervention will finance the first reconstruction phase of the plant and will cope with the rehabilitation of existing and construction of missing facility for primary sedimentation. Revitalization of the facility is divided in two phases. The first phase considers reconstruction of facility for primary treatment of waste water, while the second phase would include revitalization of biological treatment of the waste water.

***Sub-component III c - Construction of the waste water treatment plant in Zivinice
(EUR 1 500 000)***

At present, the untreated wastewaters produced in the municipality of Zivinice flows into the river Oskova and Lake Modrac, the source of water supply for the wider region, *including* the town of Tuzla, with more than 250,000 inhabitants. This project is important for the protection of water quality in BiH and for the improvement of the water quality of Sava River basin.

Although the lake is polluted, it is currently considered to be the most feasible long-term potable water source for the area. No domestic wastewater treatment is carried out at present, and the EBRD “Water and Wastewater Project” has identified the construction project with the highest priority as the provision of a wastewater treatment and associated main collector sewers for domestic and industrial wastewater in Zivinice.

The total value of the investment is EUR 3 700 000. The IPA 2010 would help the investment programme with EUR 1 500 000. The co-financing of the Plant in Zivinice is already supported through the allocated World Bank grant funds (ongoing GEF “Water Quality Protection Project”) in the amount of EUR 630 000. The remaining EUR 1 570 000 will be provided by the municipality.

The construction of the Wastewater Treatment Plant is a direct support to the ongoing project of construction of the sewerage collectors in Zivinice and also represents the commencement of the entire water protection activity for other municipalities related to the Modrac lake basin.

In relation to the above mentioned project, the following documentation is available:

- Preliminary design of Wastewater Treatment Plant from 2003
- Tender documentation for Wastewater Treatment Plant – in preparation, in accordance with World Bank Procedure- Supply and Installation of the Wastewater Treatment Plant Zivinice

Solid waste:

***Sub-component III d – Construction of recycling facility on regional sanitary landfill
“Uborak” Mostar (EUR 2 500 000)***

Implementation of this project component will help achieve the primary goal – sanitary waste disposal for the Mostar region to effectively prevent water, soil and air pollution resulting from inadequate waste management and disposal. Total value of the recycling plant with the hall is estimated at EUR 3 000 000. IPA 2010 would contribute to the investment with EUR 2 500 000. The remaining EUR 500 000 will be covered by contributions from the municipality.

Building of the recycling plant in the initial stage of landfill operations will fully meet requirements of an adequate and comprehensive overall waste management in the Mostar region. Converting the existing landfill into the sanitary landfill will resolve the solid waste management problem in the Mostar region, which currently has the population of 110,000 people. It is estimated that a new sanitary landfill should be able to operate for the next 30 years.

***Sub-component III e - Expansion of regional landfill “Ramici” Banja Luka
(EUR 3 000 000)***

The total value of the investment programme is EUR 13 500 000. The present IPA 2010 contribution will be EUR 3 000 000. The loan of EUR 5 000 000 is provided by the World Bank. The remaining EUR 5 500 000 will be provided by the municipalities.

The regional landfill "Ramici" has been used for waste disposal for 30 years. Approximately 2 million cubic meters of waste have been disposed in the landfill so far. Daily quantity of waste sent to landfill from the City of Banja Luka and seven other municipalities is between 250-300 tons of waste.

The recent war led to massive environmental degradation due to lack of adequate disposal plan and measures for waste management. Main problems of the solid waste management process are: lack of system for drainage and management of surface and leachate water on the landfill site and lack of adequate management of landfill gases released into the atmosphere. Without rehabilitation and construction of the regional landfill, Banja Luka region, with approximately 440.000 inhabitants will be affected by soil, water and air pollution caused by wild landfills that produce negative environmental impact in a long-term perspective.

Regarding the current intervention, the Final design for Rehabilitation and expansion of the landfill was prepared and the Environmental Impact Assessment was conducted in accordance with the European Directives (Landfill Directive 1999/31/EC and CD 97/11/EC of March 1997 Directive 85/337/EEC).

Component IV – Construction of the sewerage system in Banja Luka, RS (in cooperation with KfW Bankgruppe)

Water supply and Sewerage Collection in Banja Luka (EUR 1 500 000)

The proposed operation is a priority investment according to the Water Supply Development Framework Plan of RS, and the Local Environmental Action Plan. It contributes to the construction of pumping stations, sewerage mains, secondary network and house connections for the sewage system in Banja Luka. The total investment volume for the sewage system is estimated EUR 7 600 000.

The project is embedded in the larger investment program into the water supply and sewage collection network in Banja Luka. The works include extension and rehabilitation of water supply system and construction of waste water collection system, secondary network and house connections. Feasibility studies, including the environmental assessment and (partly) detailed designs are available (partly to be upgraded).

The total value of the investment programme is EUR 19 100 000. EUR 2 000 000 is provided from the IPA 2009 IPF- MW and EUR 1 000 000 from the national IPA 2009 for the first phase of this project. For the second phase, an additional EUR 1 500 000 is provided from the present IPA 2010 contribution in order to finalise the works. The KfW contributed to the investment with the grant in the amount of EUR 4 000 000. KfW also participates in the investment with the loan in the amount of EUR 10 000 000. The remaining EUR 600 000 will be contributed by the municipality.

The funds deriving from IPF-MW, IPA 2009 and IPA 2010 shall be utilised for contributing to the financing of the sewerage system along river Vrbas, incl. construction of main collectors, installation of pumping stations, construction of secondary sewer network and house connections.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact

The aforementioned interventions will have a strong positive environmental and public health impact with an overall benefit to quality of life in Bosnia and Herzegovina. Furthermore, the improved collection and treatment of wastewaters will have a very strong positive cross border impact and thus reduce pollution of surface and ground waters in Bosnia and

Herzegovina and the region as a whole. In parallel with investment in the collection and treatment of wastewater, investments in efficiency generating measures will be sought with a view to reducing wastage of water and the reduction of power consumption, thus improving overall resource efficiency and reducing atmospheric emissions relating to energy production.

Additionally, the projects will result in a significant environmental improvement of water quality which will contribute to public amenity, *incl.* water supply, fishing, swimming and tourism. There is also a potential impact on business in the region by removing one of the key constraints to the future urban development.

The interventions as regards solid waste treatment will also have a strong positive impact on the environment and on public health. Since the landfill affects the quality of groundwater and surface water, soil and air, sanitary disposal of waste is a condition for minimizing these negative effects as much as possible.

At last, but not the least, the project interventions will have a positive impact on the economy of Bosnia and Herzegovina and the region as such. Investments in the infrastructure projects will trigger of and open new opportunities for employment in the country, thus creating new jobs that are to be considered valuable contribution in the alleviation of the current economic and financial crises.

The Primary and Secondary Beneficiaries will ensure that a maintenance and sustainability plan is in place for the investments targeted in this fiche.

3.3 Results and measurable indicators:

Results and measurable indicators in relation with Component I

Sub-component Ia - Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS

Result 1: With the financial support of IFIs, water supply system, sewage collection system and waste water treatment plant rehabilitated and constructed in RS.

Indicators:

Water infrastructure projects implemented in 24 municipalities.³

Sub-component Ib - Rehabilitation and construction of the water and sanitation infrastructure in FBiH

Result 1: With the financial support of IFIs, water supply system, sewage collection system and waste water treatment plant rehabilitated and constructed in FBiH.

Indicators:

- Water infrastructure projects implemented in 15 municipalities.
- Number of household connected to water supply or sewage systems (#)
- Parameters (chemical/physical) indicating reduction of the recipient pollution by the construction of the wastewater treatment facilities (BOD, pH, COD, etc).

³ As there is no reliable information, at the moment, specific indicators and their values will be set jointly by the relevant authorities at the beginning of the project implementation.

Results and measurable indicators in relation with Component II

Extension of the water supply system in the Dubrave region, FBiH

Result 1: Municipalities Capljina, Stolac and city of Mostar connected to the urban water supply network.

Indicators:

- Number of household connected to water supply systems (#) - good quality and sufficient quantity of drinking water in respective municipalities.

Results and measurable indicators in relation with Component III

Sub-component III a - Construction of sewage system in Ljubuski municipality

Result 1: Discharge of communal waste waters in surface waters and pollution of underground waters decreased.

Indicators:

- Amount of waste water in Ljubuski municipality collected, evacuated and treated
- Number of householders connected to sewage network (#)

Sub-component III b- Waste water treatment plant in Butila, Sarajevo

Result 1: Pollution and direct discharge of untreated wastewater to surface waters of Miljacka and Bosnia Rivers reduced.

Indicators:

- Amount of waste water collected and treated (m³)
- Number of household connected to sewage system (#)
- Parameters (chemical/physical) indicating reduction of the recipient (Bosna River) pollution by the reconstruction and rehabilitation of the facility for primary wastewater treatment (BOD, pH, COD, etc).

Sub-component III c - Construction of the waste water treatment plant in Zivinice

Result 1: Municipality of Zivinice connected to effective waste water and sewage treatment infrastructure

Result 2: Protection of the water quality of Modrac lake which is a source for water supply for Tuzla city

Result 3: Groundwater and surface water resources in Zivinice Municipality are protected

Indicators:

- Amount of waste water collected and treated (m³)
- Number of household connected to sewage system (#)

- Parameters (chemical/physical) indicating reduction of the Modrac lake pollution (Water quality of Modrac lake improved - BOD, pH, COD, etc).

Sub-component III d – Construction of recycling facility on regional sanitary landfill “Uborak” Mostar

Result 1: Industrial hall constructed

Result 2: Recycling equipment installed and operational

Indicators:

- Number of recycled solid waste increased
- Amount of recycled solid waste at regional sanitary landfill Uborak Mostar increased
- Number of municipalities and households covered by recycling

Sub-component III e – Rehabilitation and Expansion of regional landfill “Ramici”Banja Luka

Result 1: Landfill infrastructure extended and constructed

Result 2: Old landfill rehabilitated

Result 3: New sanitary cell for new waste constructed

Indicators:

- 16 hectares of old waste is stabilized and covered
- 2750 meters of operational and transport roads are constructed
- System for collection of landfill gases and their incineration constructed

Results and measurable indicators in relation with Component IV

Construction of the sewerage system in Banja Luka, RS

Result 1: Main collectors and secondary sewer network constructed and pumping stations installed

Result 2: Banja Luka along Vrbas river up-graded and operational.

Indicators:

- Two main sewage collectors constructed
- Two pumping stations constructed.
- The incidence of the bacterial contamination (Escherichia Coli) of the raw water captured at Novoselja is decreased⁴.

⁴ As there is no good baseline data available, the values for this indicator will be set jointly by the relevant authorities (consultant and waterworks) at the beginning of project implementation.

3.4 Activities:

Activities in connection with Component I

Sub-component Ia - Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS

1. To rehabilitate, upgrade or construct new
 - water resource infrastructure;
 - water supply systems;
 - extension of drinking water treatment facilities;
 - water and energy efficiency measures.
 - bulk and consumer metering;

Sub-component Ib - Rehabilitation and construction of the water and sanitation infrastructure in FBiH

1. To rehabilitate, upgrade or construct new
 - water resource infrastructure;
 - water supply systems;
 - extension of drinking water treatment facilities;
 - waste water collection systems;
 - waste water treatment facilities;
 - bulk and consumer metering;
 - water and energy efficiency measures.

Activities in connection with Component II

Extension of the water supply system in the Dubrave region, FBiH

- Construction of the second well at the intake “Bjelave, reservoirs Gradina, Kriz and Bat and belonging pressure and gravitation pipeline
- Purchase and installation of mechanical and electrical equipment for pump station Domanovici (presently under construction –civil works) as well as for existing pump station “Bjelave” and “Tasovcici”

Activities in connection with Component III

Sub-component IIIa - Construction of sewage system in Ljubuski municipality

- To rehabilitate existing sewage network infrastructure
- To construct new sewage network infrastructure

- To connect new beneficiaries into sewage system
- To connect new sewage network with main collector and waste water treatment plant

Sub-component IIIb - *Waste water treatment plant in Butila, Sarajevo*

- Reconstruction of existing waste water treatment plant
- Construction of missing pre-treatment facilities of waste water treatment plant

Sub-component IIIc - *Construction of the waste water treatment plant in Zivinice*

- To construct of wastewater treatment plant in Zivinice

Sub-component IIIId - *Construction of recycling facility on regional sanitary landfill "Uborak, Mostar"*

- Building the industrial hall which will house recycling equipment
- Purchase, installation and testing of entire recycling equipment

Sub-component IIIe - *Rehabilitation and Expansion of regional landfill "Ramici"Banja Luka*

- Rehabilitation of the old part of landfill, relocation of old waste, waste stabilization and cover construction
- Construction of sanitary cells for waste receiving and treatment, system for surface and leachate water in old and new part of landfill
- Construction of operational transport roads on the landfill site

Activities in connection with Component IV

Construction of the sewerage system in Banja Luka, RS

- To construct the sewerage main on left river side
- To construct the sewerage main on right river side
- Transmission main to municipal sewer system
- To construct two pumping stations
- To construct secondary network and house connections

All activities fully correspond to the above mentioned results for all four components.

The joint management modality for the cooperation with the EIB, the EBRD and the Worldbank as well as the indirect centralised management modality for the cooperation with KfW are chosen because the present project describes a joint action to be financed through pooling of EU and IFI resources. This pooling of resources includes a combination of IFI loans (and in some cases IFI grants) with EU grants for which the most efficient implementation modality are joint and indirect centralised management respectively.

3.5 Conditionality and sequencing:

Cooperation and support from the relevant authorities and beneficiaries is of the utmost importance for the successful implementation of the project. The continuous engagement and full cooperation of IFIs is another critical success factor as well as coordination with all relevant stakeholders.

In relation to the conditionality it is important that relevant Ministries (Primary and Secondary Beneficiaries) dedicate competent staff and other resources required for support of the project(s). IFI requires from the authorities to form Units for managing their projects within the ministries (e.g. PMU for EIB projects, PMT for WB projects, etc). Technical documentation are prepared and revised; Land acquisition is completed; Necessary permits and conformities are obtained; Co-financing mechanism is in place and operational; Good co-operation and co-ordination of activities amongst all projects' stakeholders, including complementarity and coherence with regional IPA programmes (IPF MW); Contracts for execution of the construction works are concluded in accordance with the procurement schedule. Ministry for Environment and Tourism in FBiH has a Project Management Unit for implementation second phase solid waste management project. The Unit is responsible for project implementation including procurement and financial management.

The signature of the Administration Agreement with the World Bank for Sub-component III b will depend on the signature of loans for investment in the Sarajevo WWTP construction with the WB and/or EBRD.

3.6 Linked activities

Infrastructure Project Facility – Municipal Window (IPF-MW) was launched at the Steering Committee⁵ of the IFI Facilities on 5th March 2008 with the purpose to combine grants for capacity building and co-finance the loans to remedy the very low income of the IPA countries which hinder financing of infrastructure projects. The EU has contributed to the IPF-MW 2008 in the Western-Balkan region by EUR 24 000 000, BiH receiving in total EUR 9 000 000. The proposed intervention (components I and III) will be complementary to the IPF-MW and all the recommendations of the IPF secretariat should be followed⁶.

Additional activities in the municipal water and waste water sector are as follows:

KfW finances municipal infrastructure and providing technical assistance to water utilities also in Kakanj, Kostajnica, and Derventa. Apart from Banja Luka, a further project is under preparation in Bihac (wastewater collection and construction of a wastewater treatment plant).

There are also two GEF project implemented through **the World Bank**. First is Water Quality Protection, aiming to provide support for investments in wastewater treatment in

⁵ The Steering Committee of the IFI Facilities is a structure set up to manage the Facility programmes SMEFF, MFF, MIF and EEFF combining EU grants with credit lines from the EIB, the EBRD and CEB in association with KfW. The members of the Steering Committee are the Commission and representatives of the IFIs participating in the Facilities.

⁶ The IPF-MW is linked to Technical Assistance provided through IPF (IPF-TA) since it is developed under the same umbrella. Infrastructure projects for which preparation and feasibility studies would have been financed from the IPF-TA may benefit from the IPF-MW.

municipalities Odzak, Trnovo, Mostar and Zivinice and the second project is “Neretva and Trebisnjica Management Project”, implementing together with Republic Croatia providing support for wastewater collection and treatment for municipalities of Konjic, Ljubuski, Bilece, Nevesinje and Trebinje.

EBRD prepares financing of the Plava Voda Regional Water Supply Project. The Project is financed under the Infrastructure Project Facility (IPF-TA) with the aim to construct new regional water pipeline.

Commissioned by the EBRD, the “Water and Wastewater Project (Protection of Lake Modrac) 2005” (environmental impact and feasibility study) prepared via the Danube Regional Investment Support Facility (EU funded), identified the level and sources of lake pollution which discharges into the river Spreca and subsequently into the River Bosna, then to the river Sava and ultimately to the river Danube.

On a bilateral basis the Swiss Development Cooperation is supporting 17 municipalities in the Una Sana River Basin with regard to water management and environment issues and is financing the rehabilitation of the water supply in Prijedor.

The Norwegian Development Cooperation is financing water supply projects along the Vrbas river.

Under the **EC CARDS** project Water Quality Management prioritized the agglomerations facing pressing issues of waste water collection and treatment in order to ensure water protection. Zivinice municipality was defined as one of the priorities.

Under **IPA 2007** the project *Construction of Sewage Collectors in Zivinice* is being implemented. The construction of sewage collectors represents the first phase of an integrated project to protect Lake Modrac from pollution and to secure its future as the main source of potable water in the Tuzla Canton.

3.7 Lessons learned

Experience obtained from past and ongoing infrastructure investments projects from the CARDS programme will be applied as much as possible. Experience gained from such programmes has shown that mutual cooperation with beneficiary partners in BiH and their full commitment during all phases of the project implementation is needed.

It is important that all stakeholders’ incl. relevant ministries take an active role during the project implementation. Apart from the need to have good coordination with IFIs and other stakeholders in the sector to implement the infrastructure projects, it is crucial that relevant designs, feasibility studies, permits etc. are available a priori in order to avoid delays in the project implementation. Lessons learned from the existing cooperation projects with the IFIs will be taken into account, especially with regards to the revenue collection by the water utilities (sustainability of the water companies).

The key lessons in the environment sector in BiH based on previous interventions can be summarised as follows:

- The institutional set up in the environment sector remains problematic and the needs in the sector are considerable and growing rapidly as the sector seeks to meet the challenges of meeting EU Directives as well as its growth.
- The non-implementation of European Partnership priorities (short-term) has hampered progress in the sector, and the coordination between the State and Entity Governments needs to be improved.

4. Indicative Budget (amounts in EUR)

			SOURCES OF FUNDING									
			TOTAL EXP.RE	IPA EU CONTRIBUTION		NATIONAL CONTRIBUTION					PRIVATE CONTRIBUTION	
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(c)+(d)	EUR (b)	%(2)	Total EUR (c)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Activity 1 Component I		X	121 800 000	18 000 000	14,78	103 800 000	85,22		63 800 000	40 000 000		
Contract 1.1 (EIB contr agr.)	-	-	121 800 000 ⁷	18 000 000	14,78	103 800 000	85,22		63 800 000	40 000 000		
Activity 2 Component II		X	8 500 000	3 500 000	41,18	5 000 000	58,82			5 000 000		
Contract 2.1 (EBRD contr agr.)	-	-	8 500 000	3 500 000	41,18	5 000 000	58,82			5 000 000		
Activity 3 Component III		X	60 700 000	17 000 000	28,01	43 700 000	71,99		9 570 000	34 130 000		
Contract 3.1 (WB adm agr.)	-	-	60 700 000	17 000 000	28,01	43 700 000	71,99		9 570 000	34 130 000		
Activity 4 Component IV		X	2 100 000 ⁸	1 500 000	71,43	600 000	28,57		600 000			
Contract 4.1 (del agr. KfW)	-	-	2 100 000	1 500 000	71,43	600 000	28,57		600 000			
Total IB												
TOTAL INV			193 100 000	40 000 000	20,71	153 100 000	79,29		73 970 000	79 130 000		
TOTAL PROJECT			193 100 000	40 000 000	20,71	153 100 000	79,29		73 970 000	79 130 000		

⁷ The figure does not include the following contributions from other sources: EIB loan (already considered for IPA 2009 co-funding): 60 000 000, national IPA 2009: EUR 12 000 000, IPA IPF MW 2009: EUR 5 000 000, IPA IPF MW 2010: 2 500 000. Considering these additional resources, the total expenditure of the project is 201 300 000 Euro

⁸ The figure does not include the following contributions from other IPA sources (EUR): KfW loan EUR 10 000 000 (already considered for IPA 2009 co-funding), KfW grant 4 000 000 (already considered for IPA 2009 co-funding), national IPA 2009: 1 000 000, IPA IPF MW 2009: 2 000 000, Considering these additional resources, the total expenditure of the project is 19 100 000 Euro

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

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1 (Contribution agreement with EIB)	n/a	Q1 2011	Q4 2014
Contract 2.1 (Contribution agreement with EBRD)	n/a	Q1 2011	Q4 2014
Contract 3.1 (Administration agreement with WB)	n/a	Q1 2011	Q4 2014
Contract 4.1 (Delegation agreement with KfW)	n/a	Q1 2011	Q4 2014

6. Cross cutting issues

6.1 Equal Opportunity

Equal opportunity for participation of men and women will be assured in all aspects of project implementation.

6.2 Environment

This works project is specifically targeting the improvement of the environment. These investments will mainly focus on the water and waste management sectors. All investments shall be carried out in compliance with the relevant EU environmental legislation.

The procedures for environmental impact assessment as set down in the EIA directive (Council Directive 85/337/EEC of 27 June 1985) fully apply to all investments financed under IPA. If the EIA directive has not yet been fully transposed, the procedures should be similar to the ones established in the above-mentioned directive.

If an investment is likely to affect sites of nature conservation importance, an appropriate nature conservation assessment shall be made, equivalent to that provided for in Article 6 of the Habitats directive (Council Directive 92/43/EEC of 21 May 1992).

6.3 Minorities

Participation in the project activities will be guaranteed on the basis of equal access regardless of racial or ethnic origin, religion or belief, disability, sex or sexual orientation.

ANNEXES

- I Log frame in Standard Format
- II Amounts contracted and Disbursed per Quarter over the full duration of Programme
- III Description of Institutional Framework
- IV Reference to laws, regulations and strategic documents
- V Details per EU funded contract

ANNEX I: Logical framework matrix

LOGFRAME PLANNING MATRIX FOR Project Fiche		Programme name: IPA National Programme 2010 – Bosnia and Herzegovina; Fiche 11 -"Environment"		
		Contracting period expires: Two years following the date of the conclusion of the Financing Agreement		Disbursement period expires: One year following the end date for the execution of contracts
CRIS Number:		Total budget : 193 100 000 EUR	IPA budget: 40 000 000 EUR	
Overall objective	Objectively verifiable indicators	Sources of Verification		
To contribute to environmentally sustainable economic development through infrastructure development in co-operation with International Financial Institutions (IFIs), to ensure the implementation of infrastructure measures to achieve EU environmental standards.	Increased number and type of investments for new and/or upgraded infrastructures in water and sanitation and solid waste sector (e.g. number of household connection to water supply and sewage network; volume of treated waste water; number of international and domestic investors; reduced pollution impact).	Statistic on utilities management and services provision; levels of public and private sector investments.		
Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions	
To provide financial support to the environmental infrastructure investments in Bosnia and Herzegovina by providing grant funds to IFIs loan investments.	Sustainable mechanism for investment projects identification, preparation, implementation and monitoring in place with proactive involvement of all projects' stakeholders.	Number of selected projects implemented.	Continued State supports to environment infrastructure sector to improve attractiveness of the investors in the water and sanitation and solid waste sectors.	
Results	Objectively verifiable indicators	Sources of Verification	Assumptions	

<p>Component Ia With the financial support of IFIs, water supply system, sewage collection system and waste water treatment plant rehabilitated and constructed in RS.</p> <p>Component Ib:</p> <p>With the financial support of IFIs, water supply system, sewage collection system and waste water treatment plant rehabilitated and constructed in FBiH.</p> <p>Component II:</p> <p>Municipalities Capljina, Stolac and city of Mostar connected to the urban water supply network.</p> <p>Component III a</p> <p>Discharge of communal waste waters in surface waters and pollution of underground waters decreased.</p> <p>Component III b</p>	<p>Component Ia Water infrastructure projects implemented in 24 municipalities.⁹</p> <p>Component Ib;</p> <ul style="list-style-type: none"> - Water infrastructure projects implemented in 15 municipalities. - Number of household connected to water supply or sewage systems (#) - Parameters (chemical/physical) indicating reduction of the recipient pollution by the construction of the wastewater treatment facilities (BOD, pH, COD, etc). <p>Component II:</p> <ul style="list-style-type: none"> - Number of household connected to water supply systems (#) - good quality and sufficient quantity of drinking water in respective municipalities. <p>Component III a</p> <ul style="list-style-type: none"> - Amount of waste water in Ljubuski municipality collected, evacuated and treated - Number of householders connected to sewage network (#) <p>Component III b</p> <ul style="list-style-type: none"> - Amount of waste water collected and 	<p>Component Ia Projects reports Final acceptance of the works</p> <p>Component Ib</p> <p>Projects reports Final acceptance of the works</p> <p>Component II:</p> <p>Utility records on users connected to system Customer meters Project reports Final acceptance of work</p> <p>Component III a</p> <p>Utility records on users connected to system Project reports Final acceptance of the work</p> <p>Component III b</p>	<ul style="list-style-type: none"> - Proactive involvement of all stakeholders involved in projects implementation, in particular IFIs, EC Del. and beneficiary staff. - All participating IFIs do commit their funds according to the Financing Plans. - The BiH authorities participate with their co-financing - Funds for effective mobilisation are available and operational. - Preconditions for works execution are in place (e.g. land acquisition completed; Construction and related permits are in place; technical documentation prepared; Revised and of good quality).
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<p>Pollution and direct discharge of untreated wastewater to surface waters of Miljacka and Bosnia Rivers reduced.</p> <p>Component III c: 1) Municipality of Zivinice connected to effective waste water and sewage treatment infrastructure 2) Protection of the water quality of Modrac lake, which is the source for water supply for Tuzla city</p> <p>Component III d: 1) Industrial hall constructed 2) Recycling equipment installed and operational</p> <p>Component III e: 1) Landfill infrastructure extended and constructed 2) Old landfill rehabilitated 3) New sanitary cell for new waste constructed</p>	<p>treated (m3)</p> <ul style="list-style-type: none"> - Number of householders connected to sewage system (#) - Parameters (chemical/physical) indicating reduction of the recipient (Bosna River) pollution by the reconstruction and rehabilitation of the facility for primary wastewater treatment (BOD, pH, COD, etc) <p>Component III c:</p> <ul style="list-style-type: none"> - Amount of waste water collected and treated (m3) - Number of household connected to sewage system (#) - Parameters (chemical/physical) indicating reduction of the Modrac lake pollution (Water quality of Modrac lake improved – BOD, pH, COD, etc.) <p>Component III d:</p> <ul style="list-style-type: none"> - Number of recycled solid waste increased - Amount of recycled solid waste at regional sanitary landfill Uborak, Mostar, increased - Number of municipalities and households covered by recycling <p>Component III e:</p> <ul style="list-style-type: none"> - 16 hectares of old waste is stabilized and covered - 2750 meters of operational and transport roads are constructed - System for collection of landfill gases and 	<p>Utility records on users connected to system Project reports Final acceptance of the work</p> <p>Component IIIc: Project reports utility records Final acceptance of the work</p> <p>Component III d: Final acceptance of work.</p> <p>Component III e: Final acceptance of work</p>	
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<p>Component IV:</p> <p>1) Main collectors and secondary sewer network constructed and pumping stations installed</p> <p>2) Banja Luka along Vrbas river up-graded and operational.</p>	<p>their incineration constructed</p> <p>Component IV:</p> <p>- Two main sewage collectors constructed</p> <p>- Two pumping stations constructed</p> <p>-The incidence of the bacterial contamination (Escherichia Coli) of the raw water captured at Novoselja is decreased</p>	<p>Component IV:</p> <p>Project reports</p> <p>Final acceptance of the work</p>	
Activities	Means	Costs	Assumptions
<p>Component I a</p> <p>-To rehabilitate, upgrade or construct new:</p> <p>-water resource infrastructure;</p> <p>-water supply systems;</p> <p>-extension of drinking water treatment facilities;</p> <p>-water and energy efficiency measures.</p> <p>-bulk and consumer metering;</p> <p>Component I b</p> <p>-To rehabilitate, upgrade or construct new:</p> <p>-water resource infrastructure;</p> <p>-water supply systems;</p> <p>-extension of drinking water treatment facilities;</p> <p>-waste water collection systems;</p> <p>-waste water treatment facilities;</p> <p>-bulk and consumer metering;</p> <p>-water and energy efficiency measures.</p> <p>Component II</p> <p>- Construction of the second well at the</p>	<p>Component I</p> <p>Works contract - Contract 1.1</p> <p>Contribution Agreement with EIB</p> <p>Component II</p> <p>Works contract - Contract 2.1</p>	<p>Component I</p> <p>The IPA budget: EUR 18 000 000</p> <p>The total budget: EUR 121 800 000 (EUR 201 300 000 with previous contributions)</p> <p>Component II</p> <p>The IPA budget: EUR 3 500 000</p>	<p>- Proactive involvement of all stakeholders involved in projects implementation, in particular IFIs, EU Delegation and beneficiary staff.</p>

<p>intake “Bjelave, reservoirs Gradina, Kriz and Bat and belonging pressure and gravitation pipeline</p> <ul style="list-style-type: none"> - Purchase and installation of mechanical and electrical equipment for pump station Domanovici (presently under construction –civil works) as well as for existing pump station “Bjelave” and “Tasovcici” <p>Component III a</p> <ul style="list-style-type: none"> - To rehabilitate existing sewage network infrastructure - To construct new sewage network infrastructure - To connect new beneficiaries into sewage system - To connect new sewage network with main collector and waste water treatment plant <p>Component III b</p> <ul style="list-style-type: none"> - Reconstruction of existing waste water treatment plant - Construction of missing pre-treatment facilities of waste water treatment plant <p>Component III c</p> <ul style="list-style-type: none"> - To construct wastewater treatment plant in Zivinice <p>Component III d</p> <ul style="list-style-type: none"> - Building the industrial hall which will house recycling equipment - Purchase, installation and testing of entire recycling equipment 	<p>Contribution Agreement with EBRD</p> <p>Component III</p> <p>Works contract - Contract 3.1</p> <p>Administration Agreement with the WB</p>	<p>The total budget: EUR 8 500 000</p> <p>Component III</p> <p>The IPA budget: EUR 17 000 000</p> <p>The total budget: EUR 60 700 000</p>	
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<p>Component III e</p> <ul style="list-style-type: none"> - Rehabilitation of the old part of landfill, relocation of old waste, waste stabilization and cover construction - Construction of sanitary cells for waste receiving and treatment, system for surface and leachate water in old and new part of landfill - Construction of operational transport roads on the landfill site <p>Component IV</p> <ul style="list-style-type: none"> -To construct the sewerage main on left river side -To construct the sewerage main on right river side -Transmission main to municipal sewer system -To construct two pumping stations -To construct secondary network and house connections 	<p>Component IV</p> <p>Works contract - Contract 4.1</p> <p>Delegation Agreement with KfW</p>	<p>Component IV</p> <p>The IPA budget: EUR 1 500 000</p> <p>The total budget: EUR 2 100 000 (EUR 19 100 000 with all previous contributions)</p>	
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ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project

Contracted	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q4 2013	Q1 2014
Contract 1.1 - Contribution Agreement with EIB	18 000 000										
Contract 2.1 - Contribution Agreement with EBRD	3 500 000										
Contract 3.1 - Administration Agreement with WB	17 000 000										
Contract 4.1 - Delegation Agreement with KfW	1 500 000										
Cumulated	40 000 000										
Disbursed											
Contract 1.1 - Contribution Agreement with EIB		8 100 000				8 100 000				1 800 000	
Contract 2.1 - Contribution Agreement with EBRD		1 575 000				1 575 000				350 000	
Contract 3.1 - Administration Agreement with WB		7 650 000				7 650 000				1 700 000	
Contract 4.1 - Delegation Agreement with KfW		675 000				675 000				150 000	
Cumulated		18 000 000				36 000 000				40 000 000	

Annex III Description of Institutional Framework

The country of Bosnia and Herzegovina has two major, highly autonomous “Entities”: the FBiH, and RS. Each has its own laws that impact the delivery of water and wastewater services, addressing most aspects of technical, administrative and financial matters.

The role of Ministry of Foreign Trade and Economic Relations BiH

The role of the State in the sector has been increasing in Bosnia and Herzegovina over the past years, in view of increasing international obligations of the country and a need for an improved coordination at state level and ensuring more efficient use of scarce resources available to the Sector. The State level coordination role is assigned to the Ministry of Foreign Trade and Economic Relations and its Sector for Environment, Energy and Natural Resources. Consensus has been reached on creation of temporary Water Framework Directive Unit attached to Ministry of Foreign Trade and Economic Relations, which in return must receive more significant assistance to increase human and technical capacities. The Water Framework Directive Unit will facilitate and coordinate in meeting the international obligations in water sector (e.g. ICPDR and Sava Commission, Barcelona Convention etc.). Currently, the "embryo" of the Unit has been formed, with the engagement of a water expert who is engaged (with the support of ICPDR) on the implementation of the Water Framework Directive in Bosnia and Herzegovina, and obligations towards the ICPDR and Sava Commission.

Water and Environment Ministries in the Entities

In the Federation the main authorities responsible for environment and water issues are the Federal Ministry of Agriculture, Water Management and Forestry and the Federal Ministry of Environment and Tourism (following a recent restructuring). The Federal Ministry of Agriculture, Water Management and Forestry is responsible for the water policy and strategy development, the issue of approvals and permits, setting of standards and regulations. The Federal Ministry of Environment and Tourism is responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector.

Similar to FBiH, there are two Ministries in RS, responsible for environment and water issues, namely: the Ministry of Agriculture, Forestry and Water Management in RS and the Ministry of Spatial Planning and Ecology of RS. Their competencies are similar to the competences of the ministries in FBiH.

In addition to the above-mentioned ministries, several other institutions in Bosnia and Herzegovina deal with water issues indirectly. These include other ministries, independent administrative offices and institutions, and institutions related to the ministries. Other ministries with secondary responsibilities for water are usually the ones dealing with health, industry, energy and mining (or the economy in general), labour and public welfare.

The main authorities on entity level for waste management are the Ministry for Environment and Tourism in FBiH, and the Ministry of Physical Planning, Construction, and Ecology in RS. Those Ministries are also responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector.

Water Agencies in Bosnia and Herzegovina

There are two watersheds in BiH. Four (two in each Entity) Water Agencies have been set up for the two watersheds. In FBiH, the water agencies are located in Sarajevo (for watershed area of Sava river basin) and Mostar (for watershed area of Adriatic sea basin). In RS, Water Agencies are located in Bijeljina (for watershed area of Sava river basin) and Trebinje (for watershed area of Adriatic sea basin).

Responsibilities of the Water Agencies comprise, *inter alia*, data collection and monitoring, preparation of plans, reporting and projects, disaster management and prevention, issuance of licences and permits, reporting, research and development and awareness raising.

Cantons (applicable for FBiH) and Municipalities

The cantons' environmental authorities are the respective ministries of civil engineering, physical planning and environmental protection and the ministries of agriculture, water management and forestry. Cantons and municipalities have also related inspection services

Municipalities, in accordance with the law, are responsible for communal activities.

Municipalities are governed by a "Municipal Council". Municipal Councils are elected by the voters of the municipality. They also have an executive body headed by a mayor. Municipalities are very important to the water and wastewater sector because they essentially control the water utility companies and have the responsibility for the provision of public services to all the people within its borders.

Water Utility Company (Vodovod)

Water and wastewater services are now generally provided either by "Vodovod", a company that usually provides only water and wastewater services, or as part of a compound public utilities company in the municipality. In smaller municipalities water and wastewater are included along with many other municipal services, such as street maintenance, central heating, management of parks and cemeteries, solid waste collection and other services.

Annex IV Reference to laws, regulations and strategic documents

Reference list of relevant laws and regulations:

Water Law of Republic of Srpska, (Ref. Official Gazette of RS 50/2006)

Water Law of Federation of Bosnia and Herzegovina, (Ref. Official Gazette of FBiH 70/2006)

Law on Waste Management of the Federation of Bosnia and Herzegovina (Ref. Official Gazette FBiH 33/2003)

Law on Waste Management of Republic of Srpska(ref. Official Gazette RS 51/2002)

Water-related Implementing Legislation in FBiH

Based on the Water Law of FBiH it was envisaged to promulgate 48 by-law documents by 1st January 2008. Some of the by-laws have already been adopted, some of them are currently under preparation and there are still many remaining to be drafted.

Currently, there are eight by-law documents which are already adopted and published in Official Gazettes. The list of by-law documents together with the number of by-laws publication is as follows:

1. Decree about river basin boundaries in Federation of Bosnia and Herzegovina (Ref. Official Gazette FBiH 41/2007)
2. Decree about specific water fees (Ref. Official Gazette FBiH 46/2007)
3. Regulation about estimation, procedure and deadlines for estimating, paying and control about acquitting general water fee and specific water fee (Ref. Official Gazette FBiH 92/2007)
4. Regulation about changes and updates of regulation regarding the allocation of public revenues to budget and out-budget funds in federation of BiH (Ref. Official Gazette FBiH 97/2007)
5. Regulation about content, shape, conditions and way of issuing and keeping water acts (Ref. Official Gazette FBiH 06/2008).
6. Regulation about conditions and criteria to be fulfilled by legal entities for preparing a documentation needed for issuing water acts (Ref. Official Gazette FBiH 17/2008)
7. Master Plan of operational measures for flood protection for 2008 (Ref. Official Gazette FBiH 23/2008)
8. Regulation about the content and rules for keeping the evidence and data submission regarding the amount of abstracted water (Ref. Official Gazette FBiH 83/2008).

Water-related Implementing Legislation in RS

The list of the by-law documents which are currently valid in RS is as follows:

1. Decree about classification and categorisation of surface waters (Ref. Official Gazette RS 42/2001).
2. The order about main operational plan for flodd protection for 2007 (Ref. Official Gazette RS 50/2006).
3. Instruction about activities and deadlines for estimation and payment of specific water fees (Ref. Official Gazette RS 42/2001)
4. Instruction about changes and updates of instruction regarding activity and deadlines for estimation and payment of specific water fees (Ref. Official Gazette RS 50/2006)
5. Regulation about the conditions for discharging wastewater into sewer system (Ref. Official Gazette RS 44/01)

6. Regulation about the conditions for discharging wastewater into surface waters (Ref. Official Gazette RS 44/2001)
- 7.

Waste Management-related Implementing Legislation in FBiH

1. Regulation on issuing permit for small-scale activities on waste management (Ref. Official Gazette FBiH No 9/2005)
2. Decree on reporting obligations for operators and manufacturers of waste (Ref. Official Gazette FBiH No. 31/2006)
3. Decree on collective system packaging and designation of waste (Ref. Official Gazette FBiH No. 38/2006)
4. Decree on financial and other securities to cover the risk of possible damage, clean up and closure of landfills (Ref. Official Gazette FBiH No. 39/1996)
5. Regulation on Conditions of Operation of Waste Incineration Plants (Ref. Official Gazette FBiH no. 12/2005)
6. Regulation on the contents of conditioning plans for existing landfills (Ref. Official Gazette FBiH No. 09/2005)

Waste Management-related Implementing Legislation in FBiH

1. Categories of Waste, Characteristics of Hazardous Waste (HW), Activities of Recovery Components and Disposal Rulebook (Ref. O.G.of RS, No. 39/2005)
2. HW Shipments Rulebook (ref. O.G.of RS, No. 86/2005)
3. Rulebook on Transfer of Obligation of Waste Management from Producer and Dealer to Responsible Person of Waste Collecting System (Ref. O.G.of RS, No. 118/2005)
4. Regulations on Contents of Plan of Transposition (Adaptation) for Existing Establishment and Equipment for Waste Management Activities and Activities which takes Competent Authority (Ref. O.G.of RS, No. 39/2005)
5. Regulations on Conditions for Work of Incineration Plants (Ref. O.G.of RS, No. 39/2005)

Annex V Details per EU funded contract:

The actions will be implemented by joint management in accordance with Article 53 (d) of the Financial Regulation through the following:

Component I – Contract 1.1 - Contribution agreement with EIB

Component II – Contract 2.1 – Contribution agreement with EBRD

Component III – Contract 3.1 – Administration agreement with WB

Component IV – Contract 4.1 – Delegation Agreement with KfW