# Standard Summary Project Fiche – centralised programmes

# **Project Fiche: 5**

#### 1. Basic information

- 1.1 CRIS Number:2011/023-173
- 1.2 Title: Waste water treatment systems in Cetinje and Bijelo Polje
- 1.3 ELARG Statistical Code: 02.27
- **1.4 Location**: Old Royal Capital of Cetinje and the Municipality of Bijelo Polje, Montenegro

# **Implementing arrangements**:

- **1.5 Contracting Authority**: Delegation of the European Union to Montenegro
- **1.6 Implementing Agency:** Delegation of the European Union to Montenegro.
- 1.7 Beneficiary (including details of project manager):

# Ministry of Sustainable Development and Tourism

Project manager: Mr. Sinisa Stankovic (Assistant Minister)

Tel: +382 (0)20 446-208

# The Old Royal Capital of Cetinje

Contact person: Mr. Drazen Blazic;

tel: +382 (0) 67 878 877

# The Municipality of Bijelo Polje,

Contact person: Milanko Minic, Head of the Secretariat for Communal Activities

Tel: +382 (0)69 326 847

### **Financing:**

**1.8 Overall cost (VAT excluded)**<sup>1</sup>: € 18.98 million

**1.9 EU contribution:** € 6.8 million

# 1.10 Final date for contracting:

Three years following the date of the conclusion of the Financing Agreement

#### 1.11 Final date for execution of contracts:

<sup>&</sup>lt;sup>1</sup> The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated.

Two years from the final date for contracting

#### 1.12 Final date for disbursements:

One year from the final date for execution of contract

# 2. Overall Objective and Project Purpose

# 2.1 Overall Objective:

To protect Montenegro's natural water resources, by improving the wastewater infrastructure base.

# 2.2 Project Purpose:

To improve the situation in the field of wastewater treatment in the Old Royal Capital of Cetinje and in the municipality of Bijelo Polje, through the construction of Waste Water Treatment Plants and sewerage network.

#### 2.3 Link with AP/NPAA/EP/SAA:

The project's objective is consistent with the Stabilization and Association Agreement (Article 111) which highlights the need to develop and strengthen co-operation in the environmental field in order to halt further environmental infrastructure degradation, and begin improving the environmental situation with the aim of sustainable development.

#### 2.4 Link with MIPD:

The **MIPD** 2011-2013 for Montenegro identifies the following specific objective in the field of environment: To protect Montenegro's water resources by improving water supply and integrated waste water management systems.

#### 2.5 Link with National Development Plan

N/A

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

The National Strategy for Sustainable Development of Montenegro highlights the importance of developing infrastructure, including wastewater treatment, as a precondition of implementing its strategy. The absence of such infrastructure directly inhibits the country's economic growth by jeopardizing its natural resources, by limiting the potential for foreign investment and restricting the development of tourism.

The Sewage and Wastewater Strategic Master plan (Central and Northern Region) Montenegro (EAR/03/MTG01/04/001) identified the design and construction of the wastewater system in Municipality of Bijelo Polje as a priority project.

The Waste Water Strategic Master Plan for Costal Region and the Old Royal Capital of Cetinje identified the design and construction of wastewater system in Old Royal Capital of Cetinje as a priority project.

The Regional Development Strategy of Montenegro for the period 2010-2014 underlines the importance of constructing the waste water systems in the Old Royal Capital of Cetinje and the municipality of Bijelo Polje as important projects for sustainable local economic development.

# 3. Description of project

# 3.1 Background and justification:

Water is Montenegro's greatest natural resource. With an average outflow of 40 l/sec/km² (or 19.5 km³/year) Montenegro ranks among the top 4 % of countries with the highest average outflow. Water protection measures include a set of provisions and procedures to maintain and improve water quality to the level prescribed for individual use. Water protection is monitored on the basis of the Water Act (implementing 62 % of the Water Framework Directive). A regulation on the classification and categorization of surface and groundwater was passed to ensure that 'the marginal value of quality' was brought into line with the terms of Directive 98/83/EC on the quality of waters intended for human consumption and Directives 75/440/EEC and 79/86/EEC.

Water management is critical to the sustainable development of the Montenegrin economy. The conservation of water as a natural resource is the basis of national development strategy for Montenegro as an ecological state. To date, policy intervention to address waste water and supply has largely been directed to the coastal region. The discharge of non-treated communal and industrial waste water into the natural water table is an on-going issue. Waste water treatment has been partially addressed by the municipalities of Podgorica and Mojkovac, as well as some industrial plants. However, the lack of pre-treatment of industrial wastewater discharged into the public sewage systems, and a low level of residential connection to the main sewage system compounds the negative situation.

In the campaign to protect water quality, Montenegro has to address the serious deficit in waste-water infrastructure. This deficit is a result of a lack of historical investment in building infrastructure resources. To improve the situation in the field of waste water management, two strategic documents were prepared with the support of the EU - a master plan for treating and removing waste water from the Montenegrin coast and Cetinje municipality and a strategic master plan for sewerage and waste water in the central and northern region of Montenegro.

The master plans set out a programme for the treatment and removal of waste water over the next 20 years, as well as suggestions for the institutional and legislative framework. The plan also includes recommendations for the improvement of the existing sewerage network and installation waste water treatment infrastructure.

To implement the national strategies on wastewater and address the infrastructure investment needs in the sector, the government has negotiated a long-term framework

loan of €57 million with the European Investment Bank. Within this framework loan, in 2008 Montenegro and the EIB have signed a financing contract "Montenegro Water and Sanitation Project – B" to the amount of 5 mil EUR. Another financing contract "Montenegro Water and Sanitation Project – C" has been signed in 2010 to the amount of 16.5 million EUR. The approved funds are to be used for urgent investment schemes for collecting and treating municipal wastewaters and for water supply schemes throughout the country.

# Bijelo Polje

The municipality of Bijelo Polje is situated on the North-West of Montenegro, bordering Serbia to the north. With a population of more than 50,000, (including suburbs) it is the third largest municipality in Montenegro. The city has a gravity based sewerage system with no pumping stations and discharges wastewater into the Lim River, with no prior treatment.

Although separate systems for sewage and rainwater exist in some areas of the town, the separation has not been enforced. As a result, the systems have become interconnected and the main sewers are regularly flooded in autumn and winter. The Lim River also receives discharges from the local Mesopromet meat factory.

Due to the dangers posed by the outflows of untreated waste water, the detrimental impact on the Lim river (and tributaries) as well as natural ground water sources, Bijelo was identified as a priority project under The Sewage and Wastewater Strategic Master plan (Central and Northern Region) Montenegro

Vodovod Bistrica which was created in 1997, is the local Public Utilities Company (PUC) responsible for water management in Bijelo Polje. The company is responsible for the construction, maintenance and renovation of water works and pipes for both water supply and sewerage systems with the administrative boundaries of the municipality of Bijelo Polije and surrounding areas.

# **Cetinje:**

The Municipality of Cetinje is located in the central region of Montenegro, 35 kms from the capital Podgorica, with a population of 18,482. The town is surrounded by the marble mountains, one of which is the Black Mountain after which the country of Montenegro was named after. The city of Cetinje was founded in the 15th century and has a very important heritage as the historical capital of Montenegro.

Cetinje has a mixed sewerage system. Storm water is discharged through the same sink hole as sewage. The sinkhole is situated in a semi-residential area. The sink hole has a limited discharge capacity and is regularly choked by sediments and wastewater residuals. This results in flooding in the lower area of Cetinje, spreading raw sewage in residential areas. Untreated mixed Sewerage and storm waters ultimately drain to the Skadar Lake, via the river Rijeka Crnojevica. Cetinje is subject to flooding from the surrounding mountains which further worsens the wastewater problem.

To address this situation, the Strategic Master Plan for Wastewater Treatment for the coast of Montenegro and the municipality of Cetinje (2005) identified the following priorities for the municipality of Cetinje:

- Completion of a new tunnel for the storm water discharge in order to reduce the flooding of Donje polje.
- Construction of a preliminary treatment plant in Donje polje.
- Cleaning, inspection and reconstruction of sewerage network in the districts of "4 Juli" and "Gipos".
- Sewerage network extension.
- Ensuring that the treatment of wastewater is in accordance with the regulations.

In 2009 a feasibility study for the construction of a waste water treatment plant (WWTP) in Cetinje was prepared. The study identified that the WWTP would drastically reduce Cetinje's pollution contribution to Skader Lake, improve the quality of surface water, eliminate underground water pollution and remove waste materials from all water surface flows in the municipality.

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

The project's main impact in <u>Bijelo Polje</u> will be the improvement of local sanitary conditions and water quality flows in the receiving river of Lim and associated network of tributaries.

The project's main impact in <u>Cetinje</u> will be the improvement of local sanitary conditions and reduction in waste water flows from Cetinje to Skadar Lake through the River Crnojevica.

The Cross border impact will be the improvement of water quality in Lim River, whose waters flow into the rivers of neighboring countries including the Drina, Sava and Danube Rivers.

The Cross border impact will be improved water quality in Skadar Lake, whose waters are shared by both Albania and Montenegro.

Addressing the deficit in waste water infrastructure can act as a catalyst for additional investment in the local economies of Cetinje and Bijelo Polje. Functioning public utilities is a basis for local economic growth and the municipalities of Cetinje and Bijelo Polje require WWTPs if they are to attract future commercial investment.

The sustainability of the investment will be promoted through the adoption of treatment technology with a degree of sophistication commensurate with the technical and financial capacities of the local public utility companies. Tariff charges will be

increased, taking into account affordability, in order to make available sufficient financial resources to cover projected operating costs.

# 3.3 Results and measurable indicators:

#### Result 1

Fully constructed and operational WWTP in Cetinje including main collector pipe, pipelines and sewerage network, constructed in full compliance with the EU standards

#### Measurable indicators:

WWTP permits to operate given by relevant authorities three months upon finalizing of construction works;

5300 meters of newly installed and reconstructed sewage pipelines;

3320 meters of newly installed atmospheric pipelines;

100 % of residents, commercial and industrial units in urban area of Cetinje having wastewater effluent connected to a WWTP (equivalent to a population of 20,000);

Qualities of discharge waters meeting required standards, immediately after putting WWTP into operation;

Minimum of 10 technical staff in Cetinje, in charge for WWTP operations, receive certified training by the contractor/equipment suppliers, until the completion of the WWTP probationary period, to ensure long lasting operation and maintenance of a whole system

# Result 2

Fully constructed and operational WWTP in Bijelo Polje, including main collector pipe, pipelines and sewerage network, constructed in full compliance with the EU standards.

Measurable indicators:

WWTP permits to operate given by relevant authorities three months upon finalizing of construction works,

6400 meters of newly installed and reconstructed sewage pipelines;

3800 meters of main collector constructed;

90 % of residents, commercial and industrial units in urban area of Bijelo Polje having wastewater effluent connected to a WWTP (equivalent to a population of 20,000);

Qualities of discharge waters meeting required standards, immediately after putting WWTP into operation;

Minimum of 10 technical staff in Bijelo Polje), in charge for WWTP operations, receive certified training by the contractor/equipment suppliers, until the completion of the WWTP probationary period.

# 3.4 Activities:

The activities on projects in Cetinje and Bijelo Polje will have a total cost of  $\in$  18.98 million ( $\in$  10.7 million for WWTP and sewerage network in Cetinje, and  $\in$  7.28 million for WWTP and sewerage network in Bijelo Polje). The IPA 2011 national programme will provide  $\in$  6.80 million -  $\in$  3.2 million for construction of sewerage network in Cetinje and  $\in$  3.6 million for construction of sewerage network in Bijelo Polje. EIB contributes to the whole project  $\in$  9.38 million ( $\in$  6.5 million for construction of WWTP in Cetinje;  $\in$  1.88 million for the construction of WWTP Bijelo Polje;  $\in$  1 million for works supervision) in a form of loan. IPF Municipal Window contributes indicatively with  $\in$  2.8 million as grant ( $\in$  1.0 million for Cetinje and  $\in$  1.8 million for Bijelo Polje.

Preparatory activities have been already performed by the beneficiary. In that respect national contribution to this project represents investments of 0,45 million Euros in preparation of feasibility studies and spatial planning documentation which are contracted before the signature of the Financing Agreement (contribution in kind).

- Procurement of works contract will be organized in accordance with the PRAG procedure (for the part of the project financed by IPA). FIDIC conditions of contracting will be used.
- Procurement of works and supplies contract in accordance with the other financing institutions procedures (for the remaining part of the project, EIB and local and national budget).

Activities related to Result 1, 2,

- 1.1 Preparation of the main design and construction of main sewage collector and sewerage pipe network and connecting points from old sewage outflows into new main sewage collectors in Cetinje. (Yellow FIDIC book)
- 1.2 Preparation of the main design and construction of main sewage collector and sewerage pipe network and connecting points from old sewage outflows into new main sewage collectors in Bijelo Polje. (Yellow FIDIC book)
- 1.3 Preparation of the main design and construction of Wastewater Treatment Plant, installation of equipment in the Old Royal Capital of Cetinje (Yellow FIDIC book)
- 1.4 Preparation of the main design and construction of WWTP, installation of equipment in WWTP in the municipality of Bijelo Polje. (Yellow FIDIC book)
- 1.5 Supervision of construction and installation activities by contracted supervisor. (White FIDIC book)
- 1.6 Assistance to beneficiary institution in the review and approval of technical designs, tender evaluation process and contract award by contracted supervisor.
- 1.7 Complete approval and acceptance test (Hand over of the WWTP to the final beneficiary).

The contractor will ensure that all technical staff of the beneficiary institution is fully trained in the operation and maintenance of the WWTP equipment to ensure the good

operation and long-term sustainability of the investment. A Minimum of 20 technical staff (10 in Cetinje and 10 in Bijelo Polje), in charge for WWTP operations, will receive certified training provided by the winning contractor in all operational equipment use, until the completion of the WWTP probationary period.

# 3.5 Conditionality and sequencing:

The municipalities of Cetinje and Bijelo Polje in partnership with central government will provide all necessary technical documentation (Feasibility studies and preliminary designs) for WWTPs and sewerage construction and provide all necessary permissions and EIA reports according to Montenegrin and EU standards.

#### Cetinje

The process of preparation of Detailed Urban Planning document will be initiated after the Preliminary design is prepared (the site for the construction of WWTP was not well elaborated in the Feasibility Study). It is expected that the Detailed Urban Planning document will be adopted by the end of 2011.

The preparation of preliminary design is in progress and is expected to be completed and reviewed in 2nd quarter of 2013. As the FS insufficiently elaborated on sewerage network segment, the Preliminary design will treat this issue as well.

The EIA was approved in June 2010.

# Bijelo Polje

Detailed Urban Plan of the municipality was adopted in 2006. The site for WWTP construction is currently populated by Roma population (more than 50 people), who live in illegally built objects. This issue is expected to be addressed by the Municipality by the end of 2011.

Preliminary Design for WWTP is in process of preparation and the document is expected to be revised and endorsed in the 1st quarter of 2013.

EIA is in the process of preparation and is expected to be approved by the end of 3rd quarter 2011.

The compliance of the above mentioned project documentation with the EC and EIB requirements will be assessed and, if necessary, addressed in the 3rd quarter of 2011 within the IPA 2008 TWINNING project "Support to Environmental Management".

This IPA TWINNING project will also provide support for the preparation of tender documentation for the construction of the WWTSs in Bijelo Polje and Cetinje. Tender documents for the supervision of works during the construction of these two landfills will be prepared by the PROCON.

Before launching the tender for work contracts, the beneficiary will provide the documentary proof and necessary permits that that project site locations and associated pipeline sites are free of any dispute, available and ready for the selected contractor to carry out project activities.

The Supervision service contract will be signed before the works contracts signature.

The supervisor team (at a minimum the Team leader) will be fluent in English.

The EUD will be involved (as observer) in the selection of the service contractor for Supervision.

The Construction Permit all for activities in the municipalities will be made available by the municipal authorities before launching the tender procedures for works contract.

The beneficiary should also provide an action plan for assuring the provision of adequate funding for operation and maintenance of the completed facility; such a plan should detail planned phased tariff increases and the procedures for ensuring increased collection rates.

#### 3.6 Linked activities

The proposed project is a culmination of various activities funded under the national CARDS programmes. Under the CARDS 2003 programme (*Preparation of a Sewerage and Wastewater Strategic Master Plan (Central and Northern Region) Montenegro* prepared by consortium of Safege-Tebodin-LDK, contract number 03MTG01/04/00 with amount of 765,000.00 €), a strategic investment plan for the central and northern regions of Montenegro was developed and subsequently adopted by the Government. Based on that plan, the EIB agreed to provide the €57 million framework loan to address the urgent waste water infrastructure needs.

Under CARDS 2005 (Support to the Ministry of Environment, contract number 05MTG01/06/002 with amount of 1,119,308.08 €) and 2006 (Support to the development of environment sector, contract number 06MON01/07/001 with amount of 1,364,000.00 €), support has been provided to the Ministry of Environment to establish a Project Implementation Unit (PIU - PROCON) and an Environmental Protection Agency (EPA). Although further capacity building is necessary, it is estimated that PIU has the capacity to provide technical support during the construction phase of this project and that the EPA will ensure the enforcement of procedures relating to the discharge of industrial wastewater to the new WWTP are complied with.

Under the European Investment Bank – Danube Investment Support Facility, consulting company Jacobs completed the Bijelo Polje Water Supply and Wastewater Services Development Programme and provided a Feasibility Study for the Wastewater Treatment Plant with proposals on choice of technologies and activities related to the construction of WWTP.

Under the IPA 2008 national programme, a project Upgrading of Environmental Infrastructure was approved in the amount of 3.5 million EUR. The purpose of the project is to establish functional waste water treatment system in Niksic municipality, and the project is also co-financed by the European Investment Bank in the amount of 16 million EUR.

Under the IPA 2010 national programme, a project Upgrading Pljevlja Wastewater System was approved in the amount of 3.5 million EUR. The purpose of the project is

to establish functional waste water treatment system in Pljevlja municipality, and the project is also co-financed by the European Investment Bank in the amount of 7 million EUR.

### 3.7 Lessons learned

- The experience and lessons learnt during the rehabilitation of Podgorica WWTP which was financed under the CARDS 2006 programme (Rehabilitation of wastewater treatment plant, contract number 06MON01/07/002 with amount of 1,615,404.00 €) will be exploited during the implementation of this project, particularly in terms of procurement/tendering and project supervision
- Given the relatively sophisticated technical nature of WWTP, local supervision of project implementation should be complemented with external expertise. A combination of an externally appointed consultant to manage the project, together with the use of in-house engineers to undertake day-to-day supervision duties, should ensure an adequate overall level of project supervision.
- It is crucial that the WWTP is endorsed by all key stakeholders in the municipalities and that counterpart personnel are appointed by the municipalities for the entire project duration.

# **4.Indicative Budget** (amounts in $\bigcirc$ )

				SOURCES OF FUNDING								
			TOTAL EXP.RE		IPA COMMUNITY CONTRIBUTION NATIONAL CONTRIBUTION			OTHER SOURCES OF GRANTS				
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)
contract 1 (IPA: works-sewerage networks - Cetinje)		X	3,200,000	3,200,000	100							
contract 2 (IPA: works-sewerage networks – Bijelo Polje)		X	3,600,000	3,600,000	100							
contract 3 (NC: works-WWTP - Cetinje)		X	7,500,000			6,500,000	87			6,500,000	1,000,000 – IPF MW	13
contract 4 (NC: works-WWTP – Bijelo Polje)		Х	3,680,000			1,880,000	51			1,880,000	1,800,000 – IPF MW	49
contract 5 (NC: services, supervision)		X	1,000,000			1,000,000	100.0			1,000,000		
TOTAL IB						100.0						
TOTAL IN			18,980,000	6,800,000	35.83	9,380,000	49.42			9,380,000	2,800,000	14.75
TOTAL PRO			18,980,000	6,800,000	35.83	9,380,000	49.42			9,380,000	2,800,000	14.75

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

Contracts 1 and 2 are managed by the European Union Delegation

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1- sewerage networks and main collectors in Cetinje	Q3 2013	Q4 2013	Q4 2015
Contract 2- sewerage networks and main collectors in Bijelo Polje	Q2 2013	Q3 2013	Q3 2015

Contracts 3, 4 and 5 are managed by the National Authorities.(EIB loan)

Contracts	Start of	Signature of	Project
	Tendering	contract	Completion
Contract 3 – WWTP Cetinje	Q3 2013	Q4 2013	Q3 2015
Contract 4 – WWTP Bijelo Polje	Q2 2013	Q3 2013	Q2 2015
Contract 5 - Supervision	Q2 2013	Q3 2013	Q4 2015

# 6. Cross cutting issues:

# **6.1** Equal Opportunity

Extensive legislation exists in Montenegro related to equal opportunity issues. The Project will ensure, as far as is practicable, that the internal policies, structure or operating procedures of the beneficiary will conform to relevant EU directives and/or laws related to the promotion of equal opportunity.

# 6.2 Environment

The project directly addresses the promotion of improved environmental conditions in Montenegro and the project will comply with relevant EU Directives.

#### 6.3 Minorities

There are current legislative provisions for the protection of minority rights. The proposed project will, as far as is practicable, take the required steps to assure that the internal policies, structure or operating procedures of the beneficiary will conform with or promote the minority issues.

# **ANNEXES**

- 1 -Log frame in Standard Format
- Amounts contracted and Disbursed per Quarter over the full duration of 2 -Programme
- Description of Institutional Framework 3 -

Reference to laws, regulations and strategic documents: Reference list of relevant laws and regulations

Reference to AP/NPAA/EP/SAA

Reference to MIPD

Reference to National Development Plan

Reference to national / sector investment plans

4 -Details per EU funded contract

ANNEX 1: Logical framework matrix –WWTP and sewerage networks in Cetinje and Bijelo Polje

Log frame Planning Matrix for The construction of waste water treatment systems in the Old Royal Capital of Cetinje and the municipality of Bijelo Polje	Programme name and number	
	Contracting period expires: Three years from the conclusion of the Financing Agreement	Disbursement period expires One years from the final date of execution of contract
	Total budget: € 18.98 million	IPA budget: € 6.8 million

Overall objective	Objectively verifiable indicators	Sources of Verification	
	Reduced levels of water and soil pollution Decreased flows of un-treated waste water from municipalities Preserved biodiversity of Skadar lake and river Lim	Annual Reports Municipality	
Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
To improve the situation in the field of wastewater treatment in the Old Royal Capital of Cetinje and in	industrial units in urban area of Cetinje	1	The Government of the Montenegro remains committed to its sustainable development

the municipality of Bijelo	the sewerage network by the end of project	Environment and Sanitation	policy.
Polje, through the	period (compared to existing 30%).	Departments	
construction of Waste		Monitoring Reports Environment	Local self governments and
Water Treatment Plants	90% of residents, commercial and	Protection Agency Annual	local population remains
and sewerage network.	industrial units in urban area of Bijelo	monitoring report	favourable to the construction
	Polje having waste water effluent	Reports generated from WWTPs	of Waste Water Treatment
	connected to the sewerage network by the	monitoring equipment.	System.
	end of project period (compared to existing		
	30%).		Adopted Spatial Urban
			Planning and Detailed Urban
	100% of collected waste water will be		Planning documents.
	treated by the WWTPs (compared to		
	existing 0%).		Timely provision of IFI and
			other donor funding required
	Measurable pollution loads (BOD, COD,		for the implementation of this
	TSS) within the limits prescribed by		project.
	Montenegro water quality standards		
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
			•
R.1. Fully constructed and	R.1.	Final technical acceptance	The Government committed to
operational WWTP, in	WWTP permits to operate given by	certification;	assure the required co-financing
	relevant authorities three months upon		
collector pipelines and	finalizing of construction works.	Final Supervision Contractor report.	High quality design that meets
sewerage network,	5300 meters of newly installed and		the required effluent
	reconstructed sewage pipelines	Effluent quality sampling and testing	
compliance with the EU		reports before (baseline) and after	respective legislation,
standards	atmospheric pipelines:	WWTP is operational;	
	100 % of residents, commercial and		Beneficiary institution

=			
R.2. Fully constructed and	industrial units in urban area of Cetinje	Annual monitoring report prepared	adequately staffed with
operational WWTP in	having wastewater effluent connected to a	by the Environment Protection	qualified and dedicated
Bijelo Polje, including	WWTP (equivalent to a population of	Agency,	personnel so as to allow for the
main collector pipelines	20,000).		smooth implementation of the
and sewerage network,	Quality of discharge waters in Cetinje in	Annual financial reports prepared by	project.
constructed in full	accordance to the projected parameters and	the Water supply and sewerage utility	
compliance with the EU	according to standards, immediately after	companies.	Local self government and local
standards.	putting WWTP into operation		population remain favourable to
	Minimum of 10 technical staff in Cetinje),	Quality certificates for installed	the construction of Waste
	in charge for WWTP operations, receive	equipment;	Water Treatment System.
	certified training by the		-
	contractor/equipment suppliers, until the	Progress and final reports	
	completion of the WWTP probationary		
	period		
	R.2.		
	WWTP permits to operate given by		
	relevant authorities three months upon		
	finalizing of construction works.		
	6400 meters of newly installed and		
	reconstructed sewage pipelines		
	3800 meters of main collector constructed		
	90 % of residents, commercial and		
	industrial units in urban area of Bijelo		
	Polje having wastewater effluent		
	connected to a WWTP (equivalent to a		
	population of 20,000).		
	Quality of discharge waters in Bijelo Polje		
	Quanty of discharge waters in Dijelo Polje		

in accordance to the projected parameter and according to standards, immediate	
after putting WWTP into operation.	
Minimum of 10 technical staff in Bije	
Polje), in charge for WWTP operation	
receive certified training by the	
contractor/equipment suppliers, until the	
completion of the WWTP probationa	y
period	

Activities	Means	Costs	Assumptions
- Procurement of works contracts will be organized in accordance with the PRAG procedure (for the part of the project financed by IPA). FIDIC conditions of contracting will be used Procurement of works and supplies contract in accordance with the other financing institutions procedure (for the remaining part of the project, EIB and local and national budget).  1.1 Preparation of the	1 IPA Works contracts for the construction of sewerage networks and main collectors 2 EIB Work contracts for the construction of WWTPs 1 EIB supervision Service contract for all works contracts according to specified requirements.	- € 10.7 million for WWTP and sewerage network in Cetinje, and € 7.28 million for WWTP and sewerage network in Bijelo Polje	for the construction of WWTP and sewerage network.  Work permits and license, and necessary project documentation secured by the beneficiary  Timely provision of IFI and IPF MW funding  Supervisory contract without delay

main designs and construction of main sewage collector and sewerage pipes and connecting points from old sewage outflows into new main sewage collectors in the Old Royal Capital of Cetinje.  1.2 Preparation of the main designs and construction of main sewage collector and sewerage pipes and connecting points from old sewage outflows into new main sewage collectors in the municipality of Bijelo Polje.	for Cetinje and € 1.88 million for Bijelo Polje)  - IPF MW - € 2.8 million (€ 1 million for Cetinje and € 1.8 million for Bijelo Polje.  Supervision services contract EIB (1.5): € 1.0 million (€ 0.5 million for Cetinje and € 0.5 million for Bijelo Polje)	schedule and technical standards
1.3 Preparation of the main design and construction of Wastewater Treatment Plant, installation of equipment in the Old Royal Capital of Cetinje		

1.4 Preparation of the main design and construction of WWTP, installation of equipment in WWTP in the municipality of Bijelo Polje.		
1.5 Supervision of construction and installation activities by contracted supervisor.		
1.6 Assistance to beneficiary institution in the review and approval of technical designs, tender evaluation process and contract award by contracted supervisor.		
1.7 Certified training provided by contractor/suppliers of specialized equipment installed within the WWTP to staff until the completion of the WWTP probationary period		

# **ANNEX 2:** Amounts (in €) Contracted and disbursed by quarter for the project:

Contracted	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Contract 1		3,200,000								
Contract 2	3,600,000									
Cumulated	3,600,000	6,800,000								
Disbursed	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Contract 1		320,000.00		700,000.00	800,000.00	200,000.00		200,000.00	660,000.00	320,000.00
Contract 2	360,000.00		300,000.00	850,000.00	900,000.00	150,000.00		680,000.00	360,000.00	
Cumulated	360,000.00	680,000.00	980,000.00	2,530,000.00	4,230,000.00	4,580,000.00		5,460,000.00	6,480,000.00	6,800,000.00

# **ANNEX 3: Description of Institutional and Legal Framework**

#### **Institutional Framework**

The beneficiaries of the proposed investment are JP Vodovod i Kanalizacija Cetinje and JP Vodovod i Kanalizacija Bijelo Polje, a public service companies of Old Royal Capital of Cetinje and the municipality of Bijelo Polje. The company's responsibilities comprise the operational management, development and maintenance of infrastructure relating to water supply, wastewater collection and disposal, and surface water drainage.

# Legal Framework

# Reference to laws, regulations and strategic documents

### 1. Reference list of relevant laws and regulations

#### Laws:

Law on coastal zone (OG RM No. 14/1992)

Law on Municipal Activities (OG RM No. 7/4 1995)

Law on Environment, Official Gazette of Montenegro, 48/08

Regulations on environmental impact assessment (OG RM No. 14/1997)

Guidelines on EIA Study content (OG RM No. 21/1997)

Law on the Basic Principles of Environmental Protection (OG FRY No. 24/1998)

Law on Local Self-Government (OG RM No. 42/2003)

Law on Environmental Impact Assessment (OG RM No. 80/2005)

Law on Strategic Environmental Assessment (OG RM No. 80/2005)

Law on Integrated Pollution Prevention Control (OG RM No. 80/2005)

Law on Waste Management (OG RM No. 80/2005)

Law on Environmental Noise (OG RM No. 45/2006)

Law on Public Procurement (OG RM No. 46/2006)

Law on Water, Official Gazette of Montenegro, 27/07

Law on Spatial Planning, Official Gazette of Montenegro, 51/08

Law on nature protection, Official Gazette of Montenegro, 51/08

Regulation on the quality and sanitary-technical conditions for wastewater discharge into the recipient and the public sewage system, the method and the examination of waste water, the minimum number of tests and determined the contents of the report on the quality of wastewater, Official Gazette of Montenegro, 09/10

# Plans, Programmes, and Strategies

Strategy for Development of Food Production and Rural Areas (2006)

Strategic Framework for Development of Sustainable Tourism in Northern and Central Montenegro (2006)

Tourism Development Strategy until 2020 (2006)

Foreign direct investment incentives strategy of Montenegro (2006)

National Strategy for Sustainable Development (2007)

Regional Development Strategy 2010-2014

# 2. Reference to other strategic documents

The Strategic Master Plan for Sewerage and Wastewater in Central and Northern Region (2005)

The Waste Water Strategic Master Plan for Costal Region and the Old Royal Capital of Cetinje (2005)

National Strategy of Sustainable Development, Action Plan 2006 – 2009 (2006)

#### • Reference to EP / SAA

# The European Partnership Document

Short-term priorities

- o Continue approximating Montenegrin legislation to EU legislation and standards, notably environmental protection framework legislation. Develop the administrative capacity to implement and enforce adopted legislation.
- o Develop an overall environment protection strategy (water, waste, air). Adopt the land use plan; adopt the sustainable development strategy and sector strategies (integrated coastal zone management, biodiversity, and climate change). Strengthen environmental management administrative capacity.

## *Medium-term priorities*

- o Begin implementing the land use plan and the overall environment protection strategy. Begin implementing the sustainable development strategy and other sector strategies (integrated coastal zone management, biodiversity, climate change). Ensure a viable financial framework for implementing a mid- to long-term environmental protection policy.
- o Ratify and start implementing the Kyoto protocol.
- o Continue strengthening the administrative capacity of ministries and bodies in charge of environmental planning, permitting, inspecting, enforcement and monitoring, as well as project management.

#### The Stabilisation and Association Agreement (SAA, March 2007)

#### Article 111:

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

The parties shall, in particular, establish co-operation with the aim of strengthening administrative structures and procedures to ensure strategic planning of environment issues and co-ordination between relevant actors and will focus on the alignment of Montenegro's legislation to the Community *acquis*. Co-operation could also centre on the development of strategies to significantly reduce local, regional and transboundary air and water pollution, to establish a framework for efficient, clean, sustainable and renewable production and consumption of energy, and to execute environmental impact assessment and strategic environmental assessment. Special attention will be paid to the ratification and the implementation of the Kyoto Protocol.

## • Reference to MIPD

*Main Priorities and objectives (environment-related)* 

Strengthening the competitiveness of the Montenegrin economy and improve the business environment via, *inter alia*, the introduction of key environmental legislation and its enforcement, including environmental impact assessment; implementation of activities and investments in the areas of waste water, solid waste and air pollution.

# • Reference to national / sector investment plans

The Government's **National Strategy for Sustainable Development** identifies the following priority tasks to improve environmental management:

the establishment of the efficient legislative and institutional framework for environmental protection (particularly relating to free access to information, implementation of EIA, SEA and IPPC legislation and strengthening other regulatory and market instruments for environmental management). The measures to achieve this include further harmonisation with EU legislation, building capacities of administration at all levels, particularly relating to efficient application of the new legislation, establishment of the Environmental Protection Agency and the eco-fund, alignment of monitoring programmes and reporting systems with EEA standards, activities to enable free access to information and more significant public participation in decision-making, etc. Certain measures relevant for the achievement of this objective are given also within other sectors and topics — in industry, new technologies, water, air, waste, governance and participation, etc.

# <u>Commission Opinion on Montenegro's application for membership of the European Union states the following:</u>

"Regarding environment, further coordinated and significant efforts will be needed to align with the EU acquis and to implement it effectively. These should include substantial investments and strengthening administrative capacity for the enforcement of legislation in order to achieve compliance on the most important issues, including climate change, in the medium term. Full compliance with the acquis could be achieved only in the long term and would necessitate increased levels of investment."

# **ANNEX 4: Details per EU funded contract**

#### **Available Technical documentation:**

- Bijelo Polje Water Supply and Wastewater Services Development Programme
- Feasibility Study for Wastewater Treatment System in Bijelo Polje prepared in 2007.
- Feasibility Study for the construction of waste water system in the Old Royal Capital of Cetinje prepared in 2009.
- EIA for the construction of waste water system in the Old Royal Capital of Cetinje prepared in 2009.
- The preparation of preliminary designs for the construction of waste water treatment system in the Old Royal Capital of Cetinje and the municipality of Bijelo Polje is in progress. It is funded by the Government of Montenegro and it is estimated to be approved and revised by the end of 2<sup>nd</sup> and 1<sup>st</sup> Quarter of 2013 respectively.

# **IPA** works contract:

Two works contracts funded by IPA will be implemented within the project through the "Design and Build" model of contracting. This actually means that contracted company will do the technical design first and on the base of prepared design perform construction works. Consequently, precise technical specification and technical drawings will be available after designing phase of the project is completed.

The first works contract will cover the following activities:

- The Preparation of the main design for the construction of main sewage collector and sewerage pipes in the Old Royal Capital of Cetinje
- Execution of works in the Old Royal Capital of Cetinje

The second works contract will cover the following activities:

- The Preparation of the main design for the construction of main sewage collector and sewerage pipes in the Municipality of Bijelo Polje
- Execution of works in the Municipality of Bijelo Polje

Each of the works contracts will be implemented through local open procedure. No derogations from PRAG rules are expected within the works contract. The contracts will be 100% financed from IPA funds.

#### **National contracts**

#### Works contracts

Two works contract funded by the National Authorities (through loan provided by the EIB) will be implemented within the project through the "Design and Build" model of contracting (FIDIC Yellow Book). This actually means that contracted company will

do the technical design first and on the base of prepared design perform construction works. Consequently, precise technical specification and technical drawings will be available after designing phase of the project is completed.

The first works contract will cover the following activities:

- The Preparation of the main design for the construction of WWTP in the Old Royal Capital of Cetinje
- Execution of works

The second works contract will cover the following activities:

- The Preparation of the main design for the construction of WWTP in the municipality of Bijelo Polje
- Execution of works

The works contract will be implemented in accordance with the Law on Public Procurement of Montenegro and the Guide for Public Procurement of the European Investment Bank.

#### Service Contract

One service contract funded by the National Authorities (through loan provided by the EIB) will be implemented within the project (FIDIC White Book).

The service contract will cover the following activities:

- The revision of the main design for the construction of WWTP in the Old Royal Capital of Cetinje
- The revision of the main design for the construction of WWTP in the municipality of Bijelo Polje
- The revision of the main design for the construction of sewerage network in the Old Royal Capital of Cetinje
- The revision of the main design for the construction of sewerage network in the municipality of Bijelo Polje
- Works supervision on the construction of WWTPs and sewerage networks in the Old Royal Capital of Cetinje and the municipality of Bijelo Polje.

# Ownership of assets (current and after project completion)

Cetinje - The land where the WWTP is to be constructed is privately owned.

Bijelo Polje - The land where the WWTP is to be constructed is owned by the municipality.

Upon completion of the works, the physical assets will come under the ownership of "JP Vodovod i Kanalizacija Cetinje" and "JP Vodovod i Kanalizacija Bijelo Polje", local public utility companies.