

WATER AND SANITATION PROJECT
FEDERATION BIH

Questionnaire

for potential participating municipalities

PMU WATSAN FBIH

9/22/2010

Introduction – Water and Sanitation Federation BiH Project

The Financing Contract for “Water and Sanitation in Federation of BiH” project was initiated in March 2008 by the EIB representatives and BiH representatives - The Ministry of Finance and Treasury of BiH (MFT BiH), the Federal Ministry of Finance (FMF) and the Federal Ministry of Agriculture, Water Management and Forestry (MAWF) - and signed in two steps: by the Borrower (minister of MFT BiH) and Entity (Ministers of FMF and FMAWF) in Sarajevo on 15 July 2008 and the EIB representatives in Luxembourg on 18 August 2008. Pursuant to the Contract, the Federation of BiH (FBiH) undertakes to implement the Project consisting of investment schemes to be carried out by the municipalities included into the Project within the FBiH through the FMAWF and FMF using the loan funds in the amount of EUR 60 million and the equal amount of own contribution of the municipalities involved, which according to the Contract total 121.3 million EUR.

Key goals of this loan arrangement are focused on providing support for the improvement of current living conditions of the population, securing adequate hygienic conditions in water supply and sanitation and the implementation of environmental protection measures in compliance with the obligations of the EU accession and harmonization with the EU legislation, in particular with the Water Framework Directive, Drinking Water Directive and the Urban Waste Water Directive.

The purpose of the Project is to use the resources (EIB loan, grants and own funds of the municipalities) to ensure the implementation of measures contributing to the improvement of infrastructure and provision of services aimed at adequate (both in terms of quality and quantity) water supply and waste water treatment in the municipalities included in the Project.

Loan funds under the Contract shall be used for financing of various activities related to the implementation of schemes in municipalities/towns within the Federation of BiH, to be defined in Project description broken down by technical components in each individual subsidiary agreement, such as:

- development of studies (feasibility study, environmental impact assessment), preliminary designs and/or main designs;
- reconstruction and rehabilitation, upgrading of existing or construction of new facilities in:
 - water resource infrastructure
 - water supply systems
 - drinking water treatment facilities
 - waste water collection systems
 - waste water treatment plants
- measures to increase efficiency, reduction of losses, water and energy savings;
- supervision;
- technical assistance.

Questionnaire – First step towards inclusion in the Project

Purpose of the Questionnaire is to provide information and assess the following:

- municipal needs for new infrastructure development
- any possible minimal-risk investment components that are ready for immediate financing
- any potential scope for promoting particular European policy areas such as water and energy efficiency, climate change mitigation/adaptation
- needs for the Feasibility Studies or similar strategic document and to contribute to scoping such a study (if one is suggested, there will be a follow-up scoping mission)
- need for technical documentation (preliminary design, detailed design, concept solutions)
- potential benefits that will arise by project implementation
- potential environmental risks that will arise by project implementation and need for the mitigation measures

Questionnaire is divided into four parts

PART 1 – Background information on water supply and waste water system

PART 2 – Proposed project scheme for financing

PART 3 – Financing and implementation capabilities

PART 4 – General performance and physical indicators

IMPORTANT

In order to fill this Questionnaire in successful manner we strongly advise to involve representatives from the different municipal departments and utility company departments, notably

- Mayor assistant for financing
- Mayor assistant for infrastructure and urban development
- Utility company director/deputy

Contact person:

Alen Robović – PMU Technica expert

E - mail address: alen.rob@bih.net.ba

Tel: +387 61 211 285

Fax: +387 33 205 620

Ms. Alma Imamović, Transitional PMU Manager

Address:

E - mail address: sektorvoda@fmpvs.gov.ba

Tel: +387 33 233 802 / 226 849

Fax: +387 33 205 620

BASIC INFORMATION

Name of scheme/project:

Scheme Identification Code (IC):

Location:

Contact person:

Can contact person communicate in English:

Address:

Telephone no:

Fax:

E-mail:

Form filled in by:

Date:

Signature:

PART 1 - Background information on water supply and waste water system

- 1.1 Description of existing situation and reasons for wanting to undertake the scheme, including description of deficiencies/risks in water supply/wastewater/environment. In particular, highlight any known health issue to be addressed by the project or known potential impact /risk to water supplies
- 1.2 Institutional and legal framework (administration, ownership and operation of water infrastructure, existing facilities). In particular, are water services a dedicated utility or are they part of multi-utility?
- 1.3 Phasing and links to plans/programmes; is the scheme/project part of a succession of interventions.
- 1.4 Is there any existing or potential inter-municipal/cantonal cooperation regarding water or wastewater services, such as regional water supply system or cooperation with other municipalities? In particular, are there ideas, possibilities for connection to water/wastewater systems in other municipalities?
- 1.5 Current/envisaged involvement with other donors/agencies/international financing institutions.
- 1.6 Other ongoing projects in water and environment.
- 1.7 State the primary source of drinking water. If wells, please state the depth of wells.
- 1.8 State the river-basin/sub river basin to which the project area belongs and the name of the recipient's water entity. Also state if the area is karstic.

PART 2 – Proposed project scheme for financing

- 2.1 Describe the purpose of the project, what benefits should be expected
- 2.2 Describe technical components of the project, including key dimensions, capacities and materials. Attach table with key physical indicators (length of pipes, diameters, number of pumping stations, installed power, capacity of water treatment plant and similar)
- 2.3 Please provide a plan showing the scheme layout, indicating existing and proposed key water and waste water infrastructure – water/wastewater mains, pumping stations, treatment plants etc.
- 2.4 For networks, what is the total unit water demand per inhabitant (including uses such as garden watering etc.) used for sizing pipes.
- 2.5 What technical documentation for the proposed investment Scheme exists. Is it still valid or it is outdated, is there need for the revision. Stated who prepared and when existing technical documentation
Navesti da li postoji tehnička dokumentacija za predloženi investicijski projekt. Da li je još uvijek valjana ili je zastarjela, da li postoji potreba za njenom revizijom? Navesti ko ju je izradio i kada!
- 2.6 Option analysis; please describe what alternative solutions have been considered to the proposed technical solutions, if any. Why were they discarded?

Impacts, risks, permitting issues

- 2.7 Please explain briefly the any potential negative effects that the scheme may have on the environment (construction phase / operation phase).
- 2.8 Is an Environmental Impact Assessment required under law?
- 2.9 Is the there any flooding experience/risk of flooding at important installations?
- 2.10 Are there any areas of nature conservation interest in the vicinity or downstream (nature reserves, area with special wildlife/natural features)?. Will they be affected?
- 2.11 Main industrial enterprises operating in the area. What industries have operated in the past?
- 2.12 What type of sewage sludge management/facility is in use (if any)?
- 2.13 What permits if any are already obtain (urban approval, water approval, and construction permit). Are there any obstacles and/or risks for the Municipality to obtain all needed permits?

2.14 Land ownership and property issues. Are they resolved, if not when municipality intend to resolved those issues, is there any obstacles or hidden risks.

PART 3 – Financing and implementation capabilities

Financial Balance of Municipality

- 3.1 Provide summary breakdown of Municipal Budget
- 3.2 What are average annual investment from the municipal budget in water and waste water infrastructure?
- 3.3 Describe types and amounts of existing significant loans/debt
- 3.4 Estimate your current loan capacity, what size of loan municipality is capable to take in line with BiH legislation (Loan on Public Debt)
- 3.5 What size of loan Municipality is willing to take in order to finance proposed investment Scheme

Investment Scheme Cost

- 3.6 Investment cost estimate (2008 price levels)

ITEM	COST (EURO)
Detailed design	
Construction works	
Supervision	
Land purchase	
Other items	
Price variations (% inflation)	
VAT 1)	
Total	

1) Note (Please explain the VAT procedures and percentage)

3.7 Investment cost indicators

	Water Supply	Wastewater
Population affected, new construction		
Population affected, reconstruction cost/inhabitant of scheme		
Cost/inhabitant of scheme in areas of new construction (Euro/inhabitant)		
Cost/inhabitant of scheme in areas of reconstruction (Euro/inhabitant)		

3.8 Planned implementation period

3.9 Expected financing and expenditure schedule (Euro)

Year	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Total Cost (Euro)						
Municipality contribution *(Euro)						
Other own/cantonal/national contribution (Euro)**						
Loan through the project (Euro)						

* - This item include Municipal own contribution from the budget

** - This Item include grant component provided for the project participating municipalities, size of the grants is proportional to the size of the Loan and app is 22% of the Loan size

Responsibilities for preparation/implementation

3.10 State which agencies/organisations will be responsible for scheme preparation and design/tender documents, contract management, supervision of works as well as final operation and maintenance of the infrastructure?

3.11 Describe the value and type of contract (Design-Build/Works/Supply) and manner of tendering envisaged for each component (local, international) tendering procedure(s)

Financial Balance of Utility Company

3.12 Water Tariff in 2009

Present Current tariff composition

Water component	
Wastewater component	
Abstraction tax	
Pollution tax	
Development tax (if relevant)	
VAT	
TOTAL COMBINED TARIFF	

- Also, describe planned increase of tariffs over the next few years.

3.13 Provide summary breakdown of budget for the utility, showing different sources of income and operational and capital expenditure, including

- Total water revenues
- Total wastewater revenues
- Total non-water related income (multiutility / other business activities like construction). Please state sources of income.
- Transfer from municipality or other sources

	2007	2008	2009
Total annual billed water volume (m3)			
Total annual water/wastewater billed value (Euro)			
Total annual water/wastewater revenues collected (Euro)			

3.14 Operation and maintenance costs:

	Present		Expected after scheme implementation	
	Water	Wastewater	Water	Wastewater
Total annual operating and maintenance costs (Euro)				
Cost of energy consumption				
Operating and maintenance costs per m ³ of produced water / treated wastewater (Euro)				

3.15 What is the staffing dedicated to providing water and wastewater services (man years, where staff is shared with other communal services).

PART 4 – General performance and physical indicators

4.1 Summary indicators

	Parameter	Before the project	Expected after the project	Unit
GENERAL	Population of service area (i.e. area under the utility's jurisdiction)			peoples
	Number of settlements			
	Population of largest settlement/town			
	Is the scheme part of a regional water project?			yes/no
	Is an EIA required?			yes/no
PHYSICAL INDICATORS	Length of water mains to be constructed (excl. service pipes)			m
	Length of sewers to be constructed (excl. service pipes)			m
	Drinking water treatment capacity			person equivalent
	Wastewater treatment capacity			person equivalent
DESIGN INDICATORS	Per capita water demand used for design of new drinking water treatment			l/cap/day-
	Per capita waste water generation used for design of new wastewater treatment			l/cap/day
	Resident population immediately affected by waste supply components			peoples
	Resident population immediately affected by waste water components			peoples
WATER SERVICE INDICATORS	Population coverage (resident population with piped water supply)			%
	Total water production (consumption + non-revenue water)			m3/year
	Domestic consumption			m3/year
	Non domestic consumption (commercial , institutional etc.)			m3/year
	Average domestic consumption			L/person/day
	Is supply discontinuous to any area for any part of the year?			yes/no
	Metered customers			%

Parameter	Parameter	Parameter	Parameter	Parameter
	Resident population served by WWTP			%
	Treated wastewater in WWTP			%
	- preliminary treatment			%
	- primary treatment			%
	- secondary treatment			%
	- tertiary treatment			%
PHYSICAL EFFICIENCY INDICATORS	Network water losses			m3/conn/year
FINANCIAL & MANAGERIAL INDICATORS	Project cost for water supply components			EUR
	Project cost for waste water components			EUR
	Collection Rate (Value of bills collected per year / value of bills emitted)			%
	Average water charges for direct consumption (ex. VAT/taxes)			EUR/m3
	Average wastewater charges for direct consumption (ex. VAT/taxes)			EUR/m3

4.2 Service and Project Area

(to the extent that the information is available, otherwise provide estimate and indicate with *)

Total population of the administrative area (municipality)	
Physical area of administrative area (municipality)	
Population of largest town included in the scheme	
Average household size in municipality	
Average household income per month	
Number of towns/villages included in the scheme	
Number of people affected by the scheme	
Number of people supplied with piped water supply from the central system	
Number of people supplied with pipe water supply in the administrative area (municipality), including decentralised systems	
Is supply discontinuous to any area for any part of the year? If so, when and how many hours of supply are provided?	
Length of central system water supply network (excluding service pipes)	
Number of water supply connections	
Number of water supply connections that are metered	
Number of people with piped waste water collection	
Number of households with piped waste water collection	
Number of people using septic tanks	
Number of households using septic tanks	

4.3 Water Balance for 2009

(to the extent that the information is available, otherwise provide estimate and indicate with *)

Groundwater Abstraction (m3/day)			
Spring/Source Abstraction (m3/day)			
Surface Water Abstraction from River/Lake (m3/day)			
Produced amount of drinking water (m3/day)			
Type/level of drinking water treatment			
Amount of water <i>pumped</i> into the distribution network (m3/day)			
Amount of water <i>gravity fed</i> into the distribution network (m3/day)			
	Domestic	Commercial	Other
Metered legal consumption (m3/day)			
Un-metered legal consumption, approximately (m3/day)			
Total billed consumption (m3/day)			
Wastewater collected (m3/day)			
Wastewater treated (m3/day)			
Type/level of current wastewater treatment			
Mention types of industrial waste water discharged into system and level of pre-treatment			
Per capita domestic consumption (liters / person / day)			
Night time flow into distribution network (m3/hour) (measured approx 0400-0500 in the early morning)			
Estimated leakage from network of water pumped into network (m3/day)			
Estimated infiltration into sewers from groundwater/surface (m3/day)	-		
Number of network bursts per year			

4.4 Trends for last 5 years

Year	Served Population	Total Water Production	Consumption, Domestic	Consumption, Other	Network leakage	Number of pipe bursts
2005						
2006						
2007						
2008						
2009		-	-	-	-	-

