



Environmental Management Plan

Second Municipal Services Improvement Project

Sub-project: Construction of the storm water system in the
district Przino, in Kisela Voda municipality

October 5, 2015

I. Introduction of the Second Municipal Services Improvement Project

A. PROJECT DEVELOPMENT OBJECTIVE

The proposed Development Objective of MSIP2 Project (PDO) is to improve transparency, financial sustainability and inclusive delivery of targeted municipal services in the participating municipalities.

B. PROJECT DESCRIPTION

The proposed Second Municipal Services Improvement Project (MSIP2) of EUR25 million presents the second phase of the on-going Municipal Services Improvement Project (MSIP, P096481) with an aim to respond to the strong demand by the municipalities for the local infrastructure financing. It will be built on the experience of MSIP and its lessons learned to enhance the impact of a well-performing project.

The original IBRD Loan for MSIP (approved on March 26, 2009) was in the amount of US\$25 million equivalent. It was followed by Additional Financing loan of US\$50 million equivalent approved by the Board on May 10, 2012. More recently, a new Component introducing the EU IPA-financed Rural Investment Window of EUR15.5 million, Recipient Executed Trust Fund (RETF), was added on December 22, 2014 to provide grants for priority rural infrastructure investments in eligible municipalities through the existing MSIP implementation mechanism.

MSIP aims at improving the transparency, financial sustainability, and delivery of targeted municipal services. Its implementation is progressing well, and the sub-project results so far demonstrate good progress towards achieving its Project development objectives. Some of the MSIP accomplishments to date include: more than 11,000 households with new water connections; about 240,000 people with access to regular solid waste collection; all participating municipalities/utilities publish their budget information on their websites, and all water service public utilities of the participating municipalities take active contribution in the IBNET benchmarking network.

To date, more than 40 percent of MSIP total loan amount (including both original loan and AF funds) has been disbursed. In addition, about EUR 47.2 million have already been committed for municipal investments under the existing sub-projects pipeline. This represents 98 percent of all available MSIP investment funds, excluding the IPA-financed window. Thus, the MSIP funds are now fully committed and the project cannot respond to new applications from the municipalities. At the same time, municipalities continue to express growing interest and demand in using MSIP financing.

Given a persisting needs for improving municipal infrastructure and based on the positive experience in implementation of MSIP, the Government of FYR Macedonia requested the Bank for a new project in the amount of EUR25 million, that would present the second phase of MSIP.

MSIP2 will continue to focus on improving the transparency, financial sustainability, and delivery of targeted services under the responsibility of participating municipalities and their CSEs, such as water supply, sanitation, and solid waste management, as well as energy efficiency, urban transport, and other services delivered by municipalities. In addition, MSIP2 aims to enhance inclusive service delivery by targeting poorer and marginalized communities for infrastructure improvements through the grant component. The positive aspects of MSIP experience, which the new project will adopt, include the access to loans affordable to municipalities (sub-loans), demand-driven process with participating municipalities selecting priority investments out of the wide variety of municipal investments, support for municipalities throughout sub-project cycle contributing to capacity building, and increased transparency and disclosure of information by participating municipalities as an eligibility condition. The lessons learned include the need to improve construction supervision and quality of technical documentation prepared by the municipalities.

II. Description of local/World Bank requirements for environmental protection

A. NATIONAL ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE FOR THE PROJECT DEVELOPMENT

The Environmental Impact Assessment procedure has been prescribed into the Law on Environment Off. Gazette No. 53/05, 81/05 24/07, 159/08 и 83/09; 124/10, 51/11, 123/12, 93/13, 163/13, 42/14, 129/15 (Chapter XI/Articles 76-94) where the requirements of the EU Directives on EIA (Directive 85/337/EEC as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC) have been transposed.

The procedure starts when the **Investor** (Project Proponent) who intends to implement a project submits a **Notification Letter**, in written and electronic form to the Ministry of Environment and Physical Planning (MoEPP - Administration for Environment), which is the responsible authority for the entire procedure. The Administration for Environment is obligated to publish the Notification in at least one daily newspaper available throughout the territory of the Republic of Macedonia, and on the website of the MoEPP.

The *Screening procedure* is a stage of the EIA procedure during which the MoEPP determines whether an EIA should be carried out or not for a certain project. For the development of projects that do not belong to the list of the projects for which the EIA procedure has to be carried out (**small scale projects**), there is a requirement for the preparation of an “Environmental Impact Report-Elaborate” (**relevant for the Category B projects under the WB OP 4.0.1 Environmental Assessment procedure**).

B. NATIONAL PROCEDURE FOR ENVIRONMENTAL ASSESSMENT OF SMALL SCALE PROJECTS

During the EIA Procedure within the screening phase, if the decision has been that there is no need for EIA procedure to be carried out the investor should start with procedure for development of **Environmental Impact Assessment Report – Elaborate**. This procedure is obliged for small scale projects (e.g.reconstruction or construction of local streets, roads, construction of local drinking water supply systems, sewage systems and small scale WWTPs - less than 10 000 p.e., etc.), causing short-term, minor negative impacts to the environment.

There are two Rulebooks that refer to the projects for which the EIA Report-Elaborate should be prepared:

- A) Rulebook on the list of projects for which the EIA Report – Elaborate should be prepared by the investor and the EIA Report need to be adopted by the Ministry of Environment and Physical Planning (Official Gazette of RM" No. 36/12);
- B) Rulebook on the list of projects for which the EIA Report – Elaborate should be prepared by the investor and the EIA Report need to be adopted by the Mayor of the municipality (Official Gazette of RM" No. 32/12) or Mayor of City of Skopje.

The content of EIA Report – Elaborate should be prepared in line with the Rulebook on EIA Report form and content and procedure for EIA Report adoption (Official Gazette of RM No. 123/12).

The EIA Report – Elaborate contains the main characteristics of the project activities, the main positive and negative environmental impacts identified taking into account the site-specific baseline environmental data. Very simplified Environmental Protection Program comprises various measures that will prevent, mitigate and compensate the adverse impact on all environmental elements need to be developed based on the national environmental legislation and good international practice. No public hearing is proposed during the preparation and adoption of the EIA Report-Elaborate (according national legislation). On Figure 1 the simplified scheme of the EIA Report-Elaborate procedure is presented as well as the competent authority for adoption of EIA Report-Elaborate.

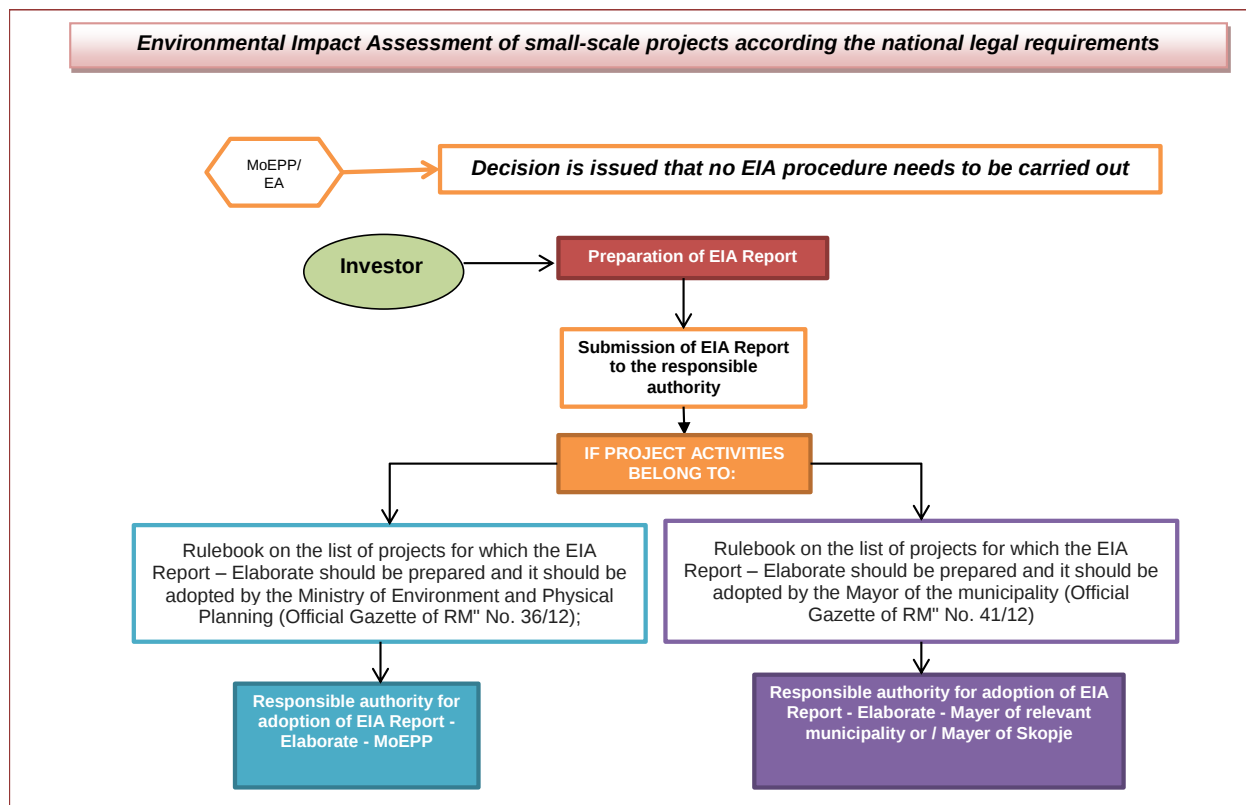


Figure 1 EIA small-scale projects national requirements

C. WORLD BANK SAFEGUARDS PROCEDURES

The World Bank has developed and implemented across the world the Safeguard Policies with main aim to ensure prevention, mitigation and compensation of adverse impacts of project development.

OP/BP 4.01 Environmental Assessment

The Bank requires **Environmental Assessment (EA)** of projects proposed for Bank support to ensure that they do not have, or mitigate potential negative environmental impacts. The EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. The EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, sitting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The EA takes into account the natural environment (air, water and land); human health and safety; social aspects; and trans boundary and global environmental aspects.

The Bank classifies the proposed projects into three major categories, depending on the type, location, sensitivity, scale of the project and the nature and magnitude of its potential environmental impacts.

- **Category A:** The proposed project is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works.

- **Category B:** The proposed project's potential adverse environmental impacts on human population or environmentally important areas-including wetlands, forests, grasslands, or other natural habitats- are less adverse than those of Category A projects. These impacts are site specific; few if any of them are irreversible; and in most cases migratory measures can be designed more readily than Category A project **(All projects within the MSIP 2 belong to this category of projects).**

- **Category C:** The proposed project is likely to have minimal or no adverse environmental impacts.

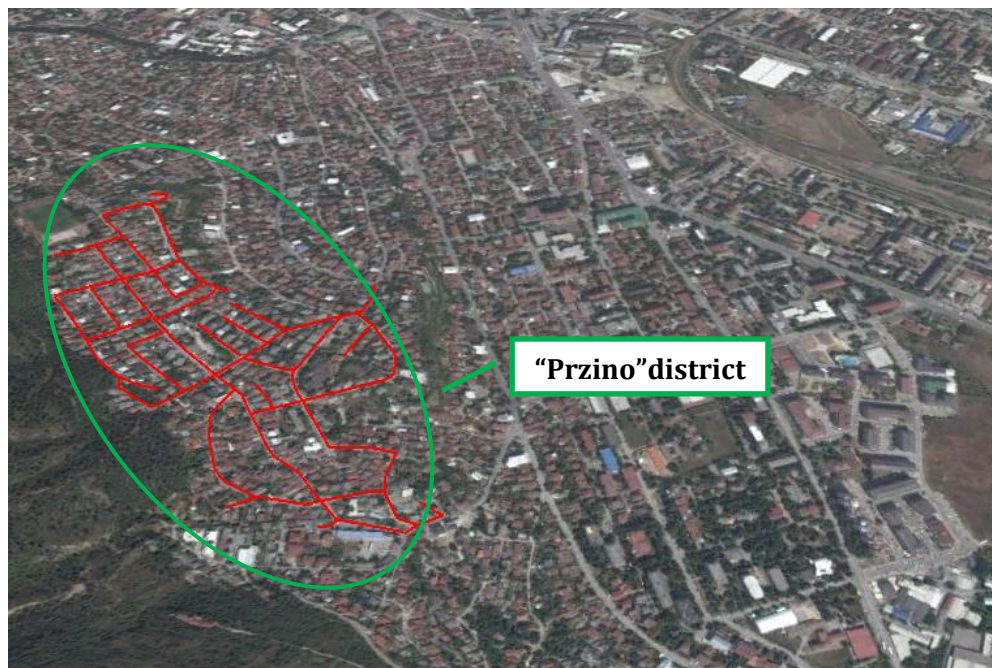
Other Bank Safeguards policies that should be taken into account during the project assessment are: a) ***natural habitat conservation and improved land use*** (OP/BP 4.04), b) ***protection and efficient usage of international waters*** (water abstraction, release of water or materials into water and hydrological impacts - OP/BP 7.50, c) ***protection of physical cultural resources*** from development project (OP/BP 4.11), d) ***protection of forests*** through consideration of forest-related impact of all investment operations (OP/BP 4.36), e) ***necessity of resettlements of people, loss of assets and impact on the livelihood*** of local residents due to the development activities (OP/BP 4.12), as well as IFC guidance on ***environment protection, occupational and community health and safety***.

III. Environmental impact of the sub-project

The project on construction of stormwater system along the streets in district Przino on the territory of the Kisela Voda municipality in the City of Skopje has the main aim to improve the existing living conditions for local residents, avoiding the flooding due to heavy rain falls and ensuring better and safe traffic along the streets and prevent the damage of family houses.

The scope of the Project is district Przino where around 4000 residents are living and currently only 20% of the necessary stormwater system is constructed along 2-3 streets in the district. The stormwater system will be constructed along 13 streets with some shorter branches. These streets are: “Przino”, “Milan Mijalkovic”, “Meglenska”, “Zelengora”, “Kavalska”, “Polog”, “Kocanska”, “Malina Pop Ivanova”, “Kara Trifun”, “Pejo Jovorov”, “Pando Kljasev”, “Blagoja Gojan” and street “Mariovska”.

Figure 2: Location of the streets and branches in district Przino



The stormwater system will be constructed in total length of approximately 5300m with different diameters of the pipes, from $\Phi 300\text{mm}$ to $\Phi 500\text{mm}$ and will be connected to the existing storm water system (connection point on street “Mariovska” with $\Phi 500\text{mm}$, street “Naum Ohridski” with $\Phi 250/300\text{ mm}$ and street “Rilski Kongres” with $\Phi 300\text{ mm}$). In summary, the length of storm water network along street “Milan Mijalkovic” will be 1010m, 374m storm water pipes will be constructed along street “Przino”, on streets right of street “Przino” the total length of 2422m and on street left of street “Przino” the storm water network with length of 1380m will be constructed. The polypropylene pipes with $\Phi 300\text{mm}$ will be used.

The streets where the stormwater system will be constructed are surrounded with family houses, kindergarten “8th September”, playground, commercial buildings, mini markets and car service. There are several bus stations along the street “Przino” of the public bus transportation in City of Skopje (Bus no. 16).

A few photos from these streets are presented below.



Street "Meglenska"



Street "Mariovska"



Street "Milan Mijalkovic"



Street "Przino"

In Figure 3, the planned storm water system network along the all 13 streets is presented.

A. MAIN PROJECT ACTIVITIES WITH ENVIRONMENTAL IMPACT

In summary, the construction of storm water system consists of the following project activities: a) marking out the route for storm water system, cleaning the routes along the streets in district Przino, b) cutting the asphalt layer along the streets, c) excavation of the trench (manual and mechanical work), d) posting the storm water sewer PP-NM pipes and all other sewer elements and fittings, e) installation of manholes and connection with the main sewage connection points, street drainage concrete gullies and cast iron grid, f) set up the signalization plastic tape with caution and label the sewer pipes, g) filling of the excavated channels with compaction and coverage of the pipelines with soil and sand and asphaltting with height of asphalt layer up to 10cm.

B. MAIN ENVIRONMENTAL IMPACTS AND SENSITIVE RECEPTORS

The implementation of all activities will take place in urban area of the district Przino in the municipality Kisela Voda, in the City of Skopje. The environmental impacts are expected to be medium-term with major local significance. Before the start of the storm water sewer system construction phase, the Contractor should fulfil the OH&S requirements and imply good construction practice (**preparation of OH&S Plan**) to reduce/minimize the risks for workers, local residents who live near the construction site, drivers passing along all relevant 13 streets. The Contractor should provide adequate protective equipment for workers, ensuring the construction site along the streets by marking and fencing them and putting alert signs.

The preparation, approval and implementation of **Traffic Management Plan** is necessary to provide safe works, to avoid the traffic jam, to ensure safety traffic through the district Przino and community safety. The safe access of local citizens to their homes as well as entrance to the workers into the commercial buildings, mini markets, kindergarten located along the street should be ensured. The Plan should include

the re-routing directions and works time schedule. Ensuring regular transportation of goods and people across the municipality Kisela Voda and beyond is also essential. The Information note/Press release about the project activities (start, timeframe and re-routes of traffic) need to be prepared by the municipal staff and announced via municipality board, web page or municipality newspaper “Kisela Voda”.

The **sensitive receptors** that will be exposed to increased level of **noise and vibrations** during construction period are citizens who live in the first row of family houses along all 13 streets in district Przino, workers and kids in the kindergarten. According the Law on noise protection (Official Gazette No. 79/07, 124/10, 47/11, 163/13 and 146/15) and secondary legislation this area belongs in second level of protection and the maximum allowed noise level should be 45dBA for night and 55dBA for evening and day (II degree of noise protection area).

Different waste streams could be found on the construction sites such as excavation soil in a total quantity of 18,219m³, construction waste, communal waste (paper, glass, plastic etc.). Possible hazardous waste like liquid waste can occur from oils, fuels and grease from mechanical equipment and rags and textile contaminated with oil from cleaning of the mechanical equipment, but in very limited quantities. Possible hazardous waste according to the List of types of waste ("Official Gazette of RM" No.100/05) should be handled with more attention. CSE “Communal hygiene” Skopje is responsible for handling with generated inert and non-hazardous waste, for hazardous waste the authorized collectors and transporters should be sub-contracted by the Contractor.

During the construction phase **air emission** is expected from construction machinery (trucks and excavators) which will be used for supply of raw material, excavation of soil, cutting the asphalt, etc.

In or near the project locations there are no registered endemic, protected and endangered animal or plant species or protected areas and habitats that will be negatively affected by the construction activities. The district Przino has been located near the mountain Vodno, which represents the protected area, but no activities are planned near the forest. There are no cultural heritage protected structures in the close vicinity or under the construction area.

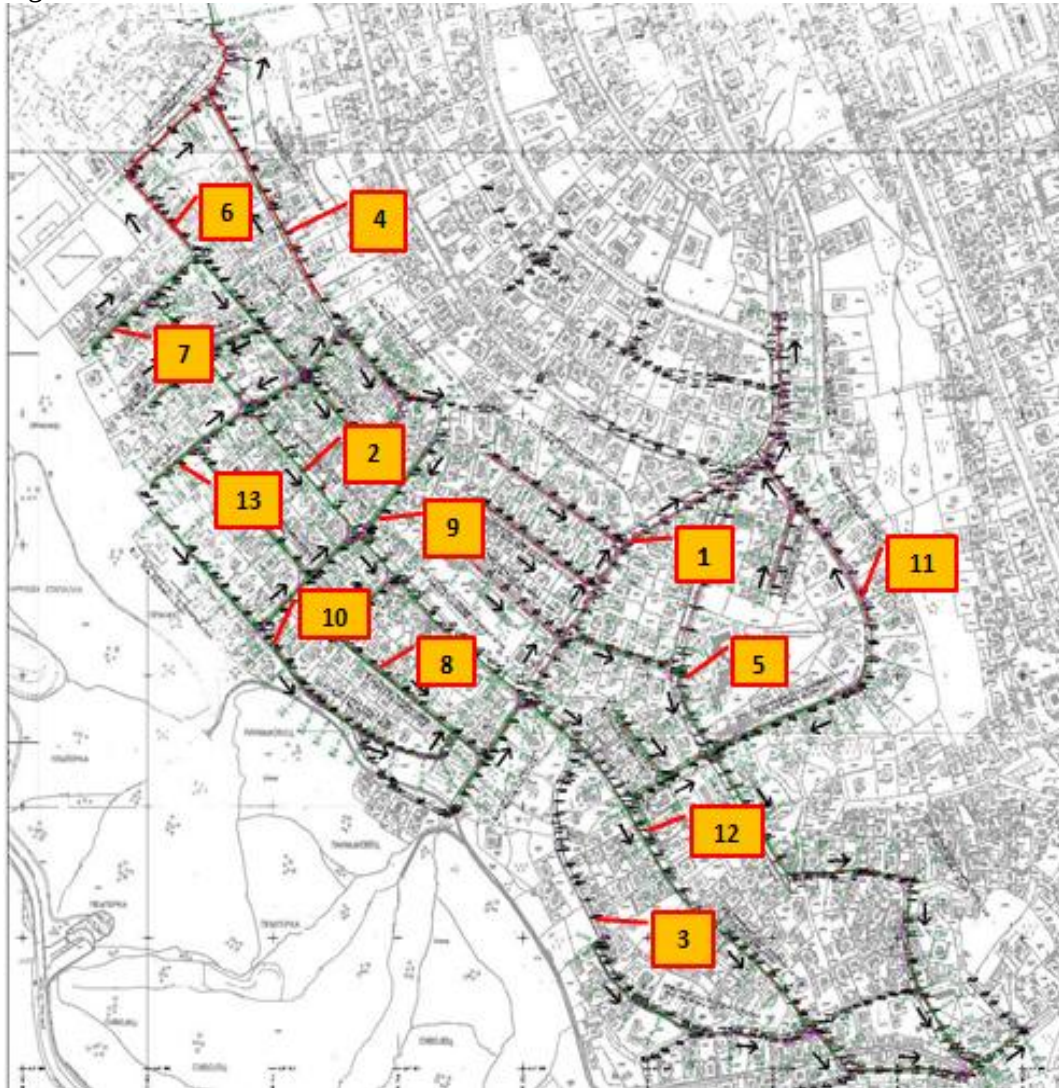
The Project will have very positive environmental and social impact during **the operational phase** and in general no adverse environmental risks are expected in this phase. Possible events could occur and environmental risks could appear: a) Water overflow due to pipe breakage or blocked manholes, b) Noise and vibration created during the excavation of pipes for repair, c) Traffic disturbance due to maintenance vehicles movements and temporary closure part of the local street.

Other mitigation measures that need to be applied before and during construction activities and into operational phase are included in the following Environmental Mitigation Plan and the parameters that should be followed on regular basis are provided in the Environmental Monitoring Plan.

EIA Report for construction of storm water system network within the streets in the district Przino was prepared according the national legislation by the Consulting Company “Enviro resources” and it has been submitted for approval to the City of Skopje.

The Contractor has the main responsibilities during the construction activities to implement the measures proposed within the EIA Report as well as the EMPs followed. The implementation of the proposed environmental measures should be performed by the Supervisor and municipality staff. The good communication between all involved (Contractor, Supervisor, municipal staff – PM, Environmental Inspector, Communal Inspector, Traffic Engineer and other relevant persons from Municipality Kisela Voda, CSE “Vodovod I kanalizacija” Skopje) and organization of regular meetings is essential for smooth project implementation.

Figure 3: Location of selected 13 streets in district Przino



Legend:

1. Street "Przino"
2. Street "Milan Mijalkovic"
3. Street "Meglenska"
4. Street "Zelengora"
5. Street "Kavalska"
6. Street "Polog"
7. Street "Kocanska"
8. Street "Malina Pop Ivanova"
9. Street "Kara Trifun"
10. Street "Pando Kljasev"
11. Street "Blagoja Gojan"
12. Street "Marioska"
13. Street "Pejo Javorov"

C. MITIGATION PLAN

Potential impact	Impact scale	Proposed mitigation measures	Responsibility
Project activity: Marking out the main streets and street branches for construction of storm water system in district Przino, municipality Kisela Voda			
Possible adverse social and health impacts to the population, drivers and workers in construction phase of storm water system due to: – Lack of ensured safety measures at the start of construction works – Injury passing near by the construction sites and open trench and manholes – Not compliance with strict OH&S standards and work procedure – Inappropriate public access within the district Przino	Local/ within the district Przino Medium –term during the construction period (total length of storm water system network 5,300m) Significance - major	➤ Preparation, approval and implementation of the OH&S Plan, ➤ Preparation, approval and implementation of the Traffic Management Plan together with the municipal staff prior start up activities; ➤ Provision of the information via municipal newspaper “Kisela Voda” and municipality web site about the construction activities – start and finish of works for each day and location of activities, duration of works and traffic access on other streets; ➤ Application of good construction practice for marking out the construction sites including: • Ensure the appropriate marking out the construction sites /section by section along the streets on which storm water system will be constructed; • Placement of attention signs especially for limitation of speed driving near the construction sites; • Warning tapes and signage need to be provided; • Installation of Notice board with general information about the project, Contractor and Supervisor at the construction sites; • During construction activities access to the commercial buildings, mini markets and others, car service, kindergarten and houses should be provided; • Forbidden entrance of unemployed persons within the warning tapes; • Community and Worker’s OH&S measures should be applied (first aid, protective clothes for the workers, appropriate machines and tools); • The construction sites should be kept clean; • The mobile toilet should be placed in the vicinity of the construction sites; • Machines should be handled only by experienced and trained personnel, thus reducing the risk of accidents; • Constant presence of fire fighting devices should be ensured in case of fire or other damage;	• Contractor – Bidder • Supervisor • Municipality staff (Communal Inspector and Environmental Inspector)

Potential impact	Impact scale	Proposed mitigation measures	Responsibility
		- All workers must be familiar with the fire hazards and fire protection measures and must be trained to handle fire extinguishers, hydrants and other devices used for extinguishing fires; - Larger quantities of flammable liquids should not be kept on the sites along the construction sites.	
Project activity: Construction of storm water system at 13 streets with shorter branches in district Przino, municipality Kisela Voda			
Possible impacts on landscape and visual aspects	Local/within the district Short term as the work will be performed section by section Significance - minor	- Good construction practices have to be implemented – including fencing and protection of construction sites according to national legislation; - Minimization of the construction areas as much as possible (careful planning and designing of the project activities according to the Traffic Management Plan for a certain period of time); - Fully clean-up of the construction sites immediately after accomplishment of construction activities (section by section); - Collection of the generated waste on daily basis, selection of waste, transportation and final disposal on appropriate places (according the type of waste – more details under Waste management issue).	- Contractor – Bidder - Supervisor
Possible emissions by transportation vehicles and impact on air quality in the municipality Kisela Voda due to: - Gases emissions of dust-suspended particulates - Traffic congestion will be caused as well causing changes in	Local/ within the municipality Kisela Voda Medium term Significance - major	- Construction sites, transportation routes and materials handling sites should be water-sprayed on dry and windy days; - Construction materials should be stored in appropriate places covered to minimize dust; - Vehicle loads likely to emit dust need to be covered; - Engines of construction vehicles should be switched off when vehicles are not in use; - Usage of protective masks for the workers if the dust appears; - Restriction of the vehicle speed within the construction sites; - Perform regular maintenance (at the service facility) of the vehicles and construction machinery in order to reduce the leakages of motor oils, emissions and dispersion of pollution; - Burning of debris from ground clearance not permitted.	- Contractor – Bidder - Supervisor

Potential impact	Impact scale	Proposed mitigation measures	Responsibility
existing traffic flow			
Possible noise disturbance as a result of outdoor equipment usage and transportation vehicles driving along the streets and around the sites	Local/ within the district Przino short term /minor	- The area (family houses, commercial buildings, mini markets, kindergarten) where storm water system will be constructed belongs to second level of noise protection which indicates that the maximum allowed noise level should be 45dBA for night and 55dBA for evening and day; - The control of noise level should be performed during work peaks; - The temporary noise protection barriers should be installed around the kindergarten; - The construction work should be not permitted during the nights; the operations on sites shall be restricted to the hours 7.00 -19.00.	- Contractor – Bidder - Supervisor
Possible adverse environmental impact and health effects could occur as a result of generation of the different waste streams The inappropriate waste management and not in time collection and transportation of waste streams	Medium term /Local within the district Przino Short term Significance: Major	- Identification of the different waste types at the construction sites (soil, sand, asphalt, bottles, food, etc.); - Classification of waste according the national List of Waste (Official Gazette no.100/05); - The main waste would be classified as an inert waste under the Waste Chapter 17 “Construction and demolition wastes (including excavated soil from contaminated site)” with the waste code 17 05 (17 05 06 - Excavated soil, 17 09 04 – Mixed waste from construction sites, 17 03 - Asphalt; - Small amount of solid municipal waste could be found (food, beverages), as well as packaging waste (paper, bottles, glass, etc.). - Collection, transportation and final disposal of the inert and communal waste by CSE “Communal hygiene” from Skopje; - Possible hazardous waste (motor oils, vehicle fuels,rags and textile contaminated with oil)should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose the hazardous waste; - The materials should be covered during the transportation to avoid waste dispersion; - Burning of construction waste should be prohibited. - Keeping records of temporary and final disposal of waste should be done on regular	- Contractor - Bidder - Supervisor - City of Skopje staff (Environmental Inspector and Communal Inspector) - Mayor of the Municipality Kisela Voda - CSE “Communal hygiene” from Skopje

Potential impact	Impact scale	Proposed mitigation measures	Responsibility
		basis (type, quantity and waste management – temporary and final disposal, contracts with authorized collectors of waste, etc); It is prohibited the temporary or final disposal of waste streams near the roads, river banks, channels, etc.	
Operational phase			
<i>Regular inspection and maintenance of the streets with special attention of the constructed storm water network;</i> <i>Development of Preventive and maintenance Plan and ensure the spare parts needed for replacement of failure storm water network parts (CSE “Vodovod I kanalizacija” Skopje);</i> <i>Development of briefly EMP if any accident happens (to protect the water overflow, to minimize the noise and traffic disturbance – CSE “Vodovod I kanalizacija “ Skopje together with Environmental Inspector at the Municipality Kisela Voda);</i> <i>Regular checks on manholes to prevent the water overflow (especially important for the manholes near the houses which are below the street;</i> <i>Positive impacts are expecting from the construction of storm water system.</i>			

D. MONITORING PLAN

What Parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?	When is the parameter to be monitored (frequency of measurement)?	Why is the parameter to be monitored?	Cost		Responsibility	
					Constru ction	Operation s	Construction of storm water system	Operations of the storm water system
Project stage: Preparation activities/ Start up of the construction work (sites clean up and marking out the routes and construction sites along the streets and branches in district Przino)								
The safety protection measures applied for the workers	On the construction sites	Visual checks and Review of the OH&S Plan	During the clean-up activities At the beginning of each working day during the project activities	To prevent health and safety risks – mechanical injuries To be in compliance with national communal health regulation and OH&S standards			Contractor - Bidder Supervisor PM of the municipality Kisela Voda	
Project stage: Construction of storm water system at 13 streets with branches in district Przino in municipality Kisela Voda								
Safety traffic flow through the municipality Kisela Voda and particular within the district Przino	On the construction sites	Visual monitoring and Review of the Traffic Management Plan	During the each working day	To ensure the coordinated traffic flow through the area and to ensure easy and safety access of local residents to their homes and working places			Contractor - Bidder Supervisor PM and Communal Inspector at the municipality Kisela Voda	
Primary selection of the waste streams as they are generated at the spots	On the sites	Review the documentation (keeping records on waste streams generated during construction works)	At the beginning of work with new material/s	To separate hazardous from the non-hazardous waste as well as inert from biodegradable waste			Contractor – Bidder Supervisor PM and Communal Inspector at the	

What Parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?	When is the parameter to be monitored (frequency of measurement)?	Why is the parameter to be monitored?	Cost		Responsibility	
					Constru ction	Operation s	Construction of storm water system	Operations of the storm water system
							municipality Kisela Voda	
Collection, transportation of hazardous waste (if any occurs).	On safety temporary storage place till the authorize company collect it and final dispose on proper manner	Review the Contract with the authorized company to deal with hazardous waste	Before the transportation of the hazardous waste (if there is any)	To improve the waste management practice on municipality and national level/ Not to dispose the hazardous waste on the waste disposal spots			Contractor – Bidder Authorized Contractor for collection and transportation of hazardous waste (if there is any) Supervisor	
Collection transportation and final disposal of the solid waste	On the sites (along the streets in the district, but also near the neighbouring streets in the district Przino	Visual monitoring and reviewing the transportation and disposal lists from the Contractor	After the collection and transportation of the solid waste on regular base each day	Not to leave the waste on the spot to avoid the environmental and health impact on residents To have the real data for generated waste streams and to improve the waste management			Contractor – Bidder Supervisor PM and Communal Inspector at the municipality Kisela Voda	
Fulfilled Annual Report for collection, transportation and disposal of waste	Local self- government administration	Review of documentation – Identification waste List	After the accomplishment the task of collection, transportation, temporary disposal and final disposal	To improve the waste management on local and national level To be in compliance with national legal requirements			Mayor of municipality Kisela Voda / Ministry of Environment and Physical Planning	

What Parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?	When is the parameter to be monitored (frequency of measurement)?	Why is the parameter to be monitored?	Cost		Responsibility	
					Construction	Operations	Construction of storm water system	Operations of the storm water system
			of waste					
Temporary noise protection barriers installed around the kindergarten	Around the kindergarten	Visual check	Before the construction work start at the sites near the kindergarten	To minimize the noise disturbance of the sensitive group of people (small kids)			Contractor – Bidder Supervisor PM at the municipality Kisela Voda	
Noise measurements	Near the kindergarten	Noise measurements	During the work peaks	To ensure noise level limits according regulation			Contractor – Bidder Supervisor PM at the municipality Kisela Voda	
Testing and commissioning of the storm water system network	Along all 13 streets where the storm water system has been constructed	Visual check if any failure or water overflow occurs	Prior start up with operational phase	To ensure that the pipe connections, manholes and connections on the receiving manholes are made on proper manner To minimize the floods at the houses yards and to prevent environmental and social risks				Mayor of municipality Kisela Voda in coordination with Mayor of the City of Skopje and CSE ”Vodovod i kanalizacija” Skopje
Development of	Along all 13	Review of the	Regularly on 6	To prevent or minimize				Mayor of

What Parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?	When is the parameter to be monitored (frequency of measurement)?	Why is the parameter to be monitored?	Cost		Responsibility	
					Construction	Operations	Construction of storm water system	Operations of the storm water system
<i>Preventive and Regular Maintenance Plan</i> and ensure the spare parts needed for replacement of failure storm water network parts Regular maintenance of the streets and storm water system	streets in the district	Preventive and Regular Maintenance Plan and proposed measures for proper operation of all constructed elements	months within the operational phase	the risks to blockage of storm water system network, manholes and water overflow causing flood and damage to the family houses in the district , but also in the flat area of the municipality Kisela Voda.				municipality Kisela Voda /Director of CSE “Vodovod i kanalizacija” Skopje and CSE responsible for maintenance of local streets

Municipal Services Improvement Project 2 (MSIP2)

PUBLIC CONSULTATION

For the environmental impact of the sub-project: Construction of the storm water system in the district Przino in Kisela Voda municipality

Minutes of meeting

IV. PREPARED BY: MSIP PMU
SKOPJE, 07/10/2015

The public consultation was organized by the municipality at the local community Przino that will be directly influenced by the project. The Public consultation was opened by the Director of the MSIP project who explained the reason for the organization of this public consultation and provided some information regarding the sub-project for Construction of the storm water system in the district Przino in Kisela Voda municipality. Afterwards, the Civil engineer in the MSIP PMU provided more details regarding the technical part of the project. The project envisages construction of the storm water system at 13 streets including: “Przhino”, “Milan Mialkovic”, “Kocanska”, “Zelengora”, “Polog”, “PejoJavorov”, “Milan Pop Ivanov”, “Karatrifun”, “Pando Kljasev”, “BlagojaGojan”, “Kavalska”, “Meglenska”, “Mariovska” and some smaller branches. The total length of the planned storm water system pipes is around 5300m with different diameters from 300mm up to 500mm and connection pipes with 200mm diameter from gullies to the manholes.

The Environmental Consultant presented the aspects of environmental protection for the sub-project construction of the storm water system including:

- Project aims and goals;
- Project description;
- Location of all 13 streets assumed in the project;
- Project technical characteristics;
- Main project activities which affect the environment;
- Main influences on the environment and sensitive receptors;
- Environmental mitigation plan;
- Monitoring plan.

DISCUSSION

First question was raised by citizen (Teresa Szaurek): to whom the citizens may complain if there are technical problems during the project implementation. The project director explained that once the project is approved there will be information put on the municipal board (municipality and local community) and municipal website who is the contact person from the municipality side for citizens.

Second question was raised by Mr.Pero Stefanovski – president of local community Crnice: what will be benefit for settlements Crnice and Birarija from the discussed project. Ms. Mirjana Jordanova – head of sector on communal works answered that there will be observed benefits also in settlements Crnice and Birarja due to the fact that presently in the settlement Przino there is mixed system and storm water goes along with waste water in the same pipes. With the project implementation the storm water will be separated from the waste waters and this will result in lack of floods in Crnice and Birarija.

A next question was whether after the project completion the streets will be rehabilitated. MSIP project engineer Roza Perkovska explained that the project assumes return of the streets to the pre-project status that means that should be covered and the functionality returned.