ANNEX II: TERMS OF REFERENCE

Supervision of the implementation of the works contracts for Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo

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Annex 1 - Qualifications and Experience of Key Experts

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Abbreviations

BoQ	Bill of Quantities
СА	Contracting Authority
CBA	Cost Benefit Analysis
CDAD	Central Donor Assistance Data Base
CFCD	Central Financing and Contracting Department within the Ministry of Finance (The Contracting Authority)
DLP	Defects Liability Period
EC	European Commission
EIA	Environmental Impact Assessment
EU	European Union
EUD	Delegation of the European Union
FIDIC	International Federation of Consulting Engineers
FS	Feasibility Study
GDP	Gross Domestic Product
IPA	Instrument for Pre- accession Assistance
MEPP	Ministry for Environment and Physical Planning
OPRD	Operational Programme for Regional Development
PIU	Project Implementation Unit
PRAG	Practical Guide to contract procedures financed from the General Budget of the European Communities in the context of external actions
PSC	Project Steering Committee
PUC	Public Utility Company
SC	Steering Committee
ToR	Terms of Reference
VAT	Value Added Tax
WWTP	Waste Water Treatment Plant

1. BACKGROUND INFORMATION

1.1. Partner country

Republic of North Macedonia

1.2. Contracting authority

The Contracting Authority is Central Financing and Contracting Department, (CFCD) within the Ministry of Finance.

1.3. Country background

The Republic of North Macedonia is a landlocked country on the Balkan Peninsula with an area of 25,713 km² and population of 2,022,547 inhabitants (source: Census 2002), living in 84 municipalities. It shares a border with Greece to the south, Bulgaria to the east, Serbia and Kosovo to the north, and Albania to the west.

The geographic location places the country at the crossroads of South-Eastern Europe, making it an important transit route for land traffic between Central Europe, the Aegean Sea, the Black Sea and the Adriatic Sea.

The country is 80% mountainous, rising to its highest point at Mountain Korab (peak 2,764 meters) with the lowest elevation (44 m) on the Vardar River at the border with Greece. Three climatic types overlap in the country: Mediterranean, moderately continental and mountainous, producing hot, dry summers and cold, snowy winters.

The hydrographical territory belongs to the following river basins: the Vardar river basin which gravitates towards the Aegean Sea, the Crn Drim river basin, comprising the Prespa and Ohrid lake basins, gravitates to the Adriatic Sea and the Strumica river basin gravitates to the Aegean Sea. A negligible part of the hydrographical territory drains to Danube river basin. There are three major natural lakes: Ohrid, Prespa and Dojran lakes.

The Republic of North Macedonia is a small economy with a gross domestic product (GDP) of about \$10.1 billion, representing about 0.02% of the total world output (2016). It is an open economy, highly integrated into international trade where exports of goods and services is 49% of GDP (2016), Per capita GDP (2016) \$ 5,232, Real GDP growth (2016) 2.4%, Consumer Price Index (07.2017/ 07.2016) 101.2, Unemployment rate (first quarter 2017) 22.9%. EU is the main trading partner accounting for 77% of total imports and 66% of total exports (2015).

The strategic orientation of the Government of the Partner country is its full integration into the EU. The candidate country status for accession in the European Union and its membership in the World Trade Organization have created conditions for greater opening of the economy towards the international global market, fostering of investments, strengthening of GDP and by all these – prosperity of the national economy.

The Republic of North Macedonia was granted candidate country status for EU membership in 2005. On 18 February 2008 the Council adopted the Accession Partnership for the country, thus updating the previous European Partnership of January 2006. A visa facilitation agreement and readmission agreement with the EU has been in force since 1 January 2008. On 15 July the European Commission proposed to grant visa liberalisation.

The Stabilisation and Association Agreement (SAA) with the country was signed on 9 April 2001 and entered into force on 1 April 2004. An Interim Agreement, covering trade and trade-related aspects, entered into force in June 2001.

1.4. Current situation in the sector

1.4.1. Current state of affairs with the sewerage and wastewater infrastructure in the country

Most urban areas do not have any wastewater treatment facilities. Taking into consideration all the existing treatment plants, in operation or close to commissioning, the total rate of the population

served by wastewater treatment would be approximately 12.5% of the total population. Under the EU support within IPA 4 WWTPs are under construction in the municipality of Prilep, Radovish, Kichevo and Strumica. The WWTPs in Strumica, Kichevo and Radovish are put into operation and currently are within DNP.

The sewage water is discharged directly to the recipients without any treatment and it pollutes rivers. The quality of rivers is insufficient, due to their permanent pollution by households and industrial wastewater.

With regard to the extent of the constructed sewerage network and waste water treatment facilities, the country lags behind in comparison with the water-supply infrastructure. At national level, the sewerage network comprises 1,239.1 km of pipelines. From the total number of 697,529 dwellings (Census 2002), 65% are connected to a public sewerage system, whereas 21% of the dwellings have septic tanks and another 12% only have a system of uncontrolled waste water discharge. Generally, the existing sewerage systems in major urban areas are designed as a single system collecting and conveying both wastewater and precipitation water. The technical status of the infrastructure is in an unsatisfactory condition. The lack of regular maintenance and repair has resulted in a sewerage network with numerous breakdowns and leakages. Several of the existing waste water treatment plants (WWTPs) are not in compliance with the effluent parameters as governed by the EC legislation (Urban Wastewater Treatment Directive 91/217/EEC), resulting in discharging insufficiently treated wastewater to the recipients. The cost effectiveness of operations is low and needs to be substantially improved. Under EU financial support provided within IPA I 3 projects have been completed for rehabilitation and extension of the sewerage network in the municipalities of Prilep, Berovo and Kumanovo.

In some cases, inappropriate management led to the interrupting of the WWTP operation, due to high operation costs and lack of revenues for cost recovery. Because no penalties in regard to untreated wastewater discharge exist at present, it was easier to suspend the operation instead of undertaking the necessary actions to maintain a sustainable and viable operation, even if the infrastructure was built with donor assistance.

Within the Operational Programme for Regional Development for Transport and Environment, it has been confirmed that the highest volume of investment funds required to ensure compliance with the requirements of EU Directives in the area of water management will have to be allocated for implementation of the necessary measures for implementation of Council Directive 91/271/EEC, concerning urban waste-water treatment. Wastewater treatment is considered as one of the most important municipal problems in the Western Balkan Region and is directly in correlation with number of population, social conditions and the overall development of the specific countries and the wider region. Because of the non-existing system for treatment of the collected wastewaters, the direct discharge of untreated wastewaters into the recipient water bodies has a significant impact on the water quality of the respective surface and ground water bodies.

During 2008, MoEPP made consideration on the significant investment and technical assistance needs for upgrading/construction of wastewater infrastructure on national level, therefore National program for priority construction of WWTP and sewerage networks was confirmed and the National program which was prepared during development of National Environmental Investment Strategy (NEIS), for settlements with more than 10.000p.e was adopted. There are four agglomerations over 100,000 P.E., namely Skopje (approx. 880,000 P.E.), Kumanovo (100,000 P.E.), Ohrid (120,000 P.E.), Bitola (nearly 100,000. P.E.), and 37 agglomerations over 10,000 P.E.

Following the consideration under the Regional Development Component III under IPA I, project documentation has been prepared for rehabilitation and extension of the sewerage network in the municipality of Kichevo.

1.4.2. Current state of affairs with the sewerage and wastewater infrastructure in the Municipality of Kichevo

Kichevo is a city in the south-western part of the Republic of North Macedonia. Accordingly to actual territorial division the Municipality comprises of the following settlements: Zajas, Oslomej, Kichevo,

Drugovo, and Vraneshtica and surrounding villages. Municipality of Kichevo covers an area of 838 km2 at 620-650 meters above sea level, with a population of 56,739 citizens in the municipality.

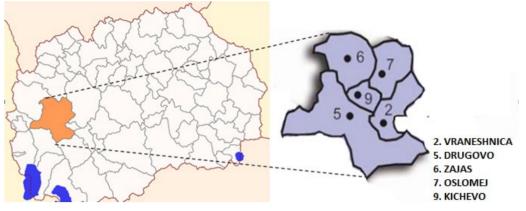


Figure 1: Location of the Municipality of Kichevo with settlements

1.4.2.1. Existing Wastewater Infrastructure

Existing wastewater infrastructure covers approximately 63% of total population in the Municipality of Kichevo. The rest of population (37 %) has either septic tanks or uncontrolled discharges the wastewater into the recipients.

The Zajashka River (Kichevska River) is a major recipient of discharged wastewater produced in the Municipality of Kichevo. Fourteen (14) discharge points (outlets) into the Zajashka River are located in the urban part of Kichevo. The river Zajashka runs downstream through Kichevo and after few kilometers it flows into the river Treska. The Treska River is a major tributary of the Vardar River and is considered as a valuable water resource in the country. Since the river Treska is a final recipient of wastewater produced in the Municipality of Kichevo, the project, together with linked projects for the construction of the WWTP Kichevo, will contribute to the water quality of the river Treska.

In accordance with the Decree on Categorization of Water Courses, Lakes, Accumulations and Groundwater (OG No.18/99), the Zajashka River is classified as Class II from inflow of the Tajmiska River to the town of Kichevo and as Class III downstream of town Kichevo till the confluence into the river Treska.

Presence of a large number of outlets of untreated wastewater into the watercourses is constant environmental pressure due to the pollutant load. Described situation significantly deteriorates the hygienic situation in the town and in other settlements in the municipality.

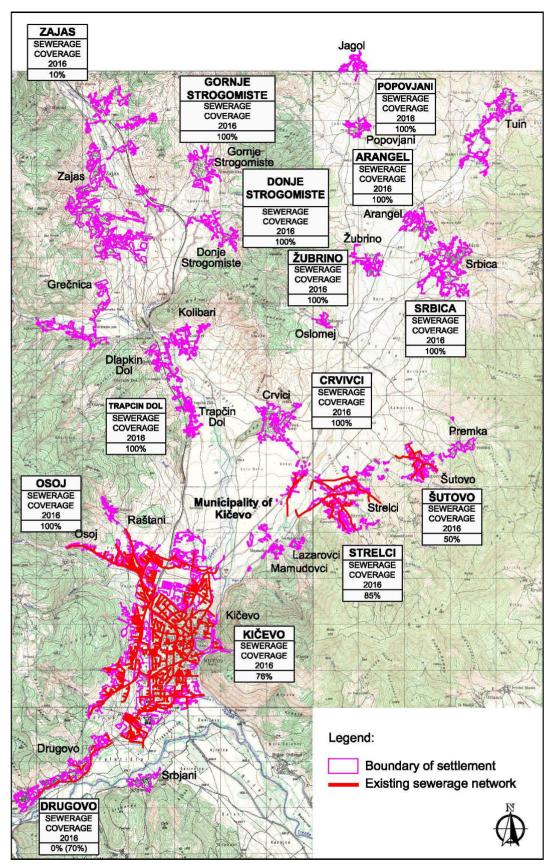


Figure 2: Wastewater sewerage network coverage in the Project Area

Basic technical characteristics of existing sewerage network in the urban part of Kichevo are:

- Wastewater collection system is separated from storm water system.
- Total length of existing sewerage network is app. 72.5 km.

- Age of pipelines varies from 4 to 50 years (50% of the sewerage network is older than 35 years)
- 76% of urban population is connected to the sewerage network.

Sewage network in urban part of Kichevo is organized as a separated system, but in a reality it is functioning as partially separated system.

Wastewater network is constructed of different pipe materials and of different diameters (from \emptyset 200 mm to \emptyset 500 mm).

The wastewater network suffers from impact of additional inflow and infiltration of storm water, especially during heavy rains. Mainly, rainwater enters into the sewage networks through connections from private buildings (i.e. house roofs and back yards are illegally connected to the sewage network within boundaries of private properties).

The sewerage network is under the responsibility of the Public Utility Company "Komunalec" from Kichevo. The sewerage network is old due to which there are often failures in the system. In addition some settlements in the municipality are not connected to the collection system of Kichevo thus the waste water is directly discharge into the recipient.

In addition, the system of wastewater collection network in urban part of Kichevo is in poor condition. Main cause is lack of adequate equipment for maintenance. The wastewater collection network has experienced frequent operational problems during heavy rains, due to insufficient capacity of pipes (i.e. undersized pipes), many system bottlenecks and frequent clogging. The sewage network is full of sedimentation (sand, gravel, etc.) that causes often clogging. Due to lack of adequate equipment, PUC "Komunalec" is not able to establish and to conduct policy of planning and continuity of sewerage cleaning. Instead of that, PUC "Komunalec" is cleaning only sections of wastewater network that has been blocked or clogged.

The main issues concerning the existing sewerage system are the following:

- Large quantities of non-revenue water are collected by the sewerage;
- Discharges of wastewater into the rivers without treatment;
- Insufficient development of sewage system;
- Overload of wastewater sewers and outpouring of wastewater to the streets and in the basements of buildings during rains, due to insufficient development of the storm water network;
- Existence of illegal connections to the wastewater sewers;
- Inadequate maintenance due to lack of equipment;
- Clogging at numerous locations in the network (based on sections inspected by CCTV);
- Existence of damaged sections in the network (based on sections inspected by CCTV);
- More than 50% of network in the town of Kichevo is older than 35 years;
- Lack of as-build drawings of existing sewerage network.

1.4.2.2. Wastewater Treatment Plant

The construction of the WWTP Kichevo was finished downstream of town Kichevo with total capacity of the plant of 48,000 PE. The treatment process is extended aeration - activated sludge secondary treatment (Enhanced biological phosphorus removal) with aerobic sludge stabilisation. Design documentation and Volume 3, Volume 4 and drawings of the Tender Dossier (TD) for works contract for construction of the WWTP and main collector in the Municipality of Kichevo according to the FIDIC Yellow contract conditions have been prepared April 2015. Works contract was signed on 24.02.2016 with total duration of 30 months including 18 months works construction and 12 months defect liability period. Construction works have been finished in March 2018in when the WWTP Kihcevo was put into operation.

Works contract for Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo to be supervised under this project is closely connected with the abovementioned works contract and is considered as second phase of the investment project for improvement of the wastewater collection and treatment system in the Municipality of Kichevo.

1.4.2.3. Existing Storm Water Infrastructure

Existing storm water sewerage only partially covers the area of the town of Kichevo. Other settlements/villages in the Municipality of Kichevo do not have storm water sewerage.

The storm water network consists of sewer pipes and concrete culverts.

Total length of storm water sewer pipes is approximately 8 km and total length of concrete open channels is approximately 1.5 km.

Storm water network is constructed of different pipe materials (PVC and concrete pipes) and of different diameters (from \emptyset 200 mm to \emptyset 500 mm). Storm water system is suffering from the huge sedimentation in the pipes.

Collected storm water is discharged into the river Sushica and into the Zajashka River.

1.5. Related programmes and other donor activities

1. "Preparation of studies (FS, CBA), design documentation and Volume 3, 4 and 5 of the tender dossier for wastewater collection investment projects in the Municipality of Kichevo" was implemented within IPA Component III, Measure 3.1 of the Operational Programme for Regional Development (OPRD) 2007-2013.

The above-mentioned project was dealing with the preparation of Feasibility Study (FS), Cost-Benefit Analysis (CBA) for wastewater collection investment project, preparation of Detailed Design and Volume 3, Volume 4 and Volume 5 of the tender dossier for works contract for improvement of the wastewater collection system in the Municipality of Kichevo according to the FIDIC Red Book contract conditions.

The project started with implementation in August 2015 and was completed in December 2016 with total duration of 18 months.

 "Construction of WWTP in Municipality of Kichevo" was under implementation within IPA Component III, Measure 3.1 of the Operational Programme for Regional Development (OPRD) 2007-2013.

The above-mentioned project was dealing with design and construction of wastewater treatment plant for 48,000 PE and construction of the main collector with 4 km length in the Municipality of Kichevo under the FIDIC 1999 Yellow Book Conditions of Contract.

The project started with implementation in April 2016 and construction works have been completed in March 2018.. Defects liability period of 12 months after the completion of the construction works is expected to finish in March 2019.

- 3. MoEPP implemented IPA Project "*Development of national water tariff study*", under Component III, Operational Programme for Regional Development (OPRD) 2007-2013, Measure 4.2. The project purpose was to prepare a National Water Tariff Study for development of an economic instrument for balanced water price system and management of financially sustainable water investment projects. Project started with implementation in May 2013 and was completed in December 2014.
- 4. "Development of National Water Study" was proposed within IPA Component III, Operational Programme for Regional Development (OPRD), Measure 4.2. The purpose of the Operation was to develop a National Water Study for sensitive areas, agglomeration, sewage sludge management and an implementation programme as an instrument for future development of sustainable water investment projects. The Operation started in February 2016 and ended in August 2017.

5. Project regarding *Reform in the system for water supply, collection and treatment at local level* (EuropeAid/136063/IH/SER/MK).

The purpose of the Project was to reform the existing system, concerning organizational, managerial, financial and operational aspects at local level (City of Skopje and in the Municipalities of Tetovo, Gostivar, Bitola, Kavadarci, Strumitsa, Debar, Radovish, Kichevo, Berovo and Kumanovo) in order to enable an effective and efficient management of the water supply, collection and waste-water treatment. The project started in December 2015 and ended in December 2017.

Activities of the project includes:

- Assessment of the present functioning of the City of Skopje (and the selected municipal) enterprises in technical, operational and financial sense and preparation of plans for implementation of improvements;
- Studying of the options for reorganisation of municipal services (separation water & wastewater from other services; national institutional framework, legal aspects, operational conditions) and preparation of proposals for its implementation;
- Supporting the implementation of selected internal organisational measures (business plans, internal organisation improvement, data and information management and improvement of financial management and collection rates);
- Developing a system of performance monitoring.
- 6. Project regarding Reform in water sector on central level (EuropeAid/136828/IH/SER/MK).
 - The purpose of the Project was to implement revised water tariffs policy by:
 - Supporting establishment and operations of the regulatory authority responsible for supervision of implementation of water tariffs requirements,
 - Providing guidance to Municipalities and Public Utility Companies on implementation of new water tariff methodology and on long term business and related tariffs planning,
 - Supporting national authorities in establishment of relevant inspection and enforcement system for implementation of the water tariff methodology.

Implementation period: August 2016 - November 2017.

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1. Overall objective

The overall objective of the project of which this contract will be a part is as follows:

To improve municipal wastewater collection infrastructure in compliance with the directive 91/271/EEC and National Law.

The Project envisages measures for rehabilitation and extension of sewerage network in the Municipality of Kichevo, which would contribute to the following:

- Improved hygienic standards for the population;
- Less problems in maintenance of the sewerage system;
- Prevention of surface and groundwater pollution and protection of the Vardar watercourse;
- Proper functioning of the future Central WWTP.

2.2. Purpose

The purpose of this contract is as follows:

The purpose of this contract is to provide supervision services of the works contract "Rehabilitation and Extension of the sewerage network in the Municipality of Kichevo" which will be implemented according to the FIDIC Conditions of Contract ("Red Book", 1999 edition).

The Contract shall ensure that services for supervision of the construction works shall be in accordance with all the requirements for quality control, control of design, control of quantities, supervision of the work progress, analyses of expenses as well as working on administrative questions during the construction and the defect liability period.

The works contract to be supervised will include replacement and reconstruction of old pipes of the existing sewerage network with approximate length of 8.24 km; construction of a new sewers (secondary networks) with approximate length of 69 km; construction of trunk sewers with approximate length of 27 km; construction of 7 pumping stations; construction of manholes and house connections for approximately 4,630 additionally households and procure canal jet.

2.3. Results to be achieved by the contractor

The expected results of the Project are:

Supervision of the implementation of the works contract for the "**Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo**", according to FIDIC Conditions of Contract ("Red Book", 1999 edition) and Contract documents; through efficient and effective expertise, resulting in the issuing of the Taking Over Certificate when the Works are substantially completed, and the Performance Certificate at the end of the Defects Liability Period, all of which are required to be achieved within the quality, budget and timing stipulated in the Works Contract.

Detailed description of the minimum Results to be achieved during the Administrative Issues and Completion of Document Period

- Procedures for proper works supervision is established;
- The delegation of authorities for the Engineer and sub-delegation of authorities for the Contractor's supervision staff, as per FIDIC Conditions of Contract is established;
- Works Construction Contractor's financial bonds are verified;
- Validity period is checked of all relevant documents prepared by the Contractor;
- Works Construction Contractor's insurance policies, guarantees, certificates, and other relevant documents under liability of the Works construction Contractor are approved and the timely renewal of the mentioned documents by the works construction Contractor is ensured;
- Works Construction Contractor's health, safety and Environmental Management Plan prior to the commencement of field activities is reviewed and approved;
- Provide support in organizing the Access to the site to the Works contractor;
- Works Contract documents to be checked and in case if potential risks are noted the Contracting authority to be notified;

Detailed description of the minimum Results to be achieved during the Construction Period

- Timely and in good quality supervision of all stages of the completion of the investment project, from the commencement date up to commissioning, tests on completion, taking over procedures, presentation of hand-over documentation, implementation of health, safety and environmental protection plan are supervised;
- The Plan and Program for construction works provided by the Works construction Contractor and realization the activities of the Project according the Plan, and if requested to give solution/ recommendation to the Contracting Authority are analysed and approved;

- The control of validity period of construction permission, technical documentation and other related documents and to inform the Contracting Authority in case of extension is ensured;
- Works construction Contractor's log books with filing of copies. Daily log books shall contain references regular site inspections, tests, controls and approvals are signed / counter signed;
- Tests on items such as materials and products according to the instruction of the technical specifications are approved;
- Regular site inspection with attention to quality of works, conformity of the performed works with the design documents, best available techniques as well as health, safety and environmental measures taken by the Works construction Contractor is provided;
- Works construction Contractor's interim payments, with determination of the value of works, according to the procedures defined in FIDIC Red Book. Interim payment certificates shall be verified by the Contractor within 28 days after receiving the works construction Contractor's request, and submitted to the Contracting Authority for further processing are verified;
- Supervision of the Management Mitigation Plans for the environmental protection during the construction works and Defects Liability Period as required in the Detail Design is ensured;
- As-build documentation supported with works construction Contractor's construction record, operation and maintenance manuals, securing delivery to the Contracting Authority and Beneficiary jointly with certificates, reports, records properly ordered and presented by the works construction Contractor is approved;
- Due taking-over inspection jointly with the representatives of the Contracting Authority and Beneficiary, drafting of taking-over certificates, snag lists, and other documentation stipulated in the Contract is performed;
- The draft of Works Final Acceptance Certificate prepared by Works construction Contractor is checked and approved;
- The Advance, Interim and Final Payments Certificates prepared by the Works construction Contractor together with the supporting documents and submit to the Contracting Authority for approval is checked and approved;
- The accuracy and validity of Bill of Quantities, guaranties, payments, ownership of the machinery and other, which shall be provided by the Works construction Contractor according to the Works Contract and FIDIC conditions of Contract is checked;
- After completion of the works the Final Report prepared by the Works construction Contractor with the results from all geotechnical tests, surveys etc., as well as an adequate As Built Documents necessary for the future exploitation of the sewerage network and to submit to the Contracting Authority in a hard copy and in electronic format is checked and approved.
- Report after constriction period, i.e. on completion of the works Contract is prepared.

Detailed description of the minimum Results to be achieved during the Defects Liability Period

- Work Plan and Program for the works inspection on the quality and damages of the constructed works during the Defects Liability Period on quarterly basis (every 3 months). The Work Plan must include the activities that will be inspected including time frame for each activity and submitted to the Contracting Authority are preparation;
- The Report on findings after each mission including incidental missions is prepared by the Contractor and submitted to the Contracting Authority;

- Final Report of all activities during the Defect Liability Period accompanied with all supporting documents is prepared and submitted to the Contacting Authority.
- Plan with recommendations on the removal of the detected defects is prepared and submitted to the Contracting Authority;
- Plan for organizing incidental mission(s) is prepared, submitted to the Contracting Authority and the activities according to the Plan approved are implemented by the Contractor;

3. ASSUMPTIONS & RISKS

3.1. Assumptions underlying the project

The encountered assumptions behind the Project, matter of interest of these Terms of Reference are listed as follows:

- Smooth and effective cooperation and interaction between all parties involved in the project;
- Completion of the tasks according to the time schedule and the budget;
- Sufficient support and commitment from the recipient institutions;
- Securing the availability of relevant municipal and utility specialists that will contribute for successful implementation of the Project;
- Sufficient quality of Design Documentation;
- Signing the Works contract in due time;
- Stable political and social environment;
- A Project Implementation Unit (PIU) duly established with qualified personnel for dealing with the project requirements.

3.2. Risks

The following risks can affect the project:

- Possible delays in appointment of the Works construction Contractor;
- Possible delays in obtaining relevant approvals and permits from relevant institutions (works construction Contractor's plan for excavation of streets: traffic diversion agreement by the Traffic Police according approved traffic management plan; sewerage discharge in temporary location; interference with railway traffic and electricity utility and telecommunication);
- Lack of cooperation between involved parties;
- Possible delays due to bad atmospheric (climate) conditions and unexpected soil conditions in the construction site

4. SCOPE OF THE WORK

4.1. General

4.1.1. Project description

The Contract consists of the supervision of the implementation of the works contract for the "Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo", through efficient and effective expertise, resulting in the issuing of the Taking Over Certificate when the Works are completed, and the Performance Certificate at the end of the Defects Liability Period, all of which are required to be achieved within the quality, budget and timing stipulated in the Works Contract.

The Works Contract will be tendered by the Contracting Authority applying the Practical Guide to contract procedures for EU external actions (PRAG) procedures. The contract for works will be implemented in accordance with FIDIC Conditions of Contract ("Red Book", 1999 edition).

The Contractor shall administer the contract and supervise the construction works on behalf of the Central Financing and Contracting Department (CFCD) - Ministry of Finance (which will play the role of "Contracting Authority" under PRAG and "Employer" under FIDIC respectively).

The Contractor shall be expected to carry out all the duties as required of the "Engineer" under FIDIC or of the "Supervisor" under PRAG. Under this assignment the two terms "Engineer" and "Supervisor" shall be interchangeable and shall identify the same person. Similarly the terms "Engineer's representative" and "Supervisor's representative" shall be interchangeable and represent the same person.

The supervision contract covers supervision of one (1) works contract for "Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo" which covers replacement and reconstruction of old pipes of the existing sewerage network with approximate length of 8.24 km; construction of a new sewers (secondary networks) with approximate length of 69 km; construction of trunk sewers with approximate length of 27 km; construction of 7 pumping stations; construction of manholes and house connections for approximately 4,630 additionally households and procure canal jet.

4.1.2. Geographical area to be covered

The project location is in the Municipality of Kichevo.

4.1.3. Target groups

The target group is the Ministry of Environment and Physical Planning, as the project Beneficiary, the Municipality of Kichevo and Public Utilities Company (PUC) "Komunalec" Kichevo as the Operators of the constructed infrastructure and end recipients.

4.2. Specific work

The Contractor shall ensure all supervision services to the Contracting Authority. To fulfil such requirements, the Contractor shall establish organizational structure during the construction Supervision services in accordance with all requirements for quality control, control of quantities, Supervision on the work progress, analysis of expenses, and full implementation of environmental criteria as well as working on administrative questions during the construction and Defects Liability Period.

The Contractor shall act as an Engineer, in compliance with the definition in Condition of Contract for Construction for Building and Engineering Works designed by the Employer, 1st Edition 1999 (FIDIC Red Book).

4.2.1. The specific activities on the Supervision services for the implementation of the works contract "Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo", will be as follows:

4.2.1.1. Administrative Issues and Completion of Document Period

Activities will include, but not be limited to:

The Engineer shall liaise with the Beneficiary (Ministry of Environment and Physical Planning), the Contracting Authority (Central Financing and Contracting Department CFCD), the Operator (The Municipality of Kichevo/PUC) and the Delegation of the European Union, for the purpose of maintaining regular contacts, consultations and flow/exchange of information with all stakeholders.

During the inception stage, the Contractor will, in parallel with the recruitment of staff and logistics arrangements, undertake the following tasks:

- Establishment of procedures for proper works supervision. This shall include the preparation of a Supervision manual to clearly describe:

- Outline procedures and forms for inspection, verification, reporting and approval of works related activities, site communication, variation orders and others, according to the requirements of these ToR;
- Procedures and forms for quality assurance and quality control;
- Transparent and reliable filing system in electronic and printed documentation, and document distribution.
- Establishment of the delegation of authorities for the Engineer and sub-delegation of authorities for the Contractor's supervision staff, as per FIDIC Conditions of Contract;
- Verification of works construction Contractor's financial bonds;
- Checking the validity period and approvals of works construction Contractor's insurance policies, guarantees, certificates, and other relevant documents under liability of the works construction Contractor and ensuring the timely renewal of the mentioned documents by the works construction Contractor;
- Formal establishment of the commencement date as per FIDIC conditions, subject to compliance of the pertinent conditions of Contract;
- Verification of staff qualifications and of the mobilisation of works construction Contractor's staff, in accordance with the Contractual requirements;
- Verification of works construction Contractor's detailed time and activity schedules including reporting and documents preparation;
- Review and approval of works construction Contractor's health, safety and Environmental Management Plan prior to the commencement of field activities;
- Checking the sufficiency and suitability of available technical documentation, and technical norms and standards, to be made available by the works construction Contractor;
- Checking the compliance with Communication and Visibility Requirements¹, including the verification and approval of Signboards
- Provide support in organizing the Access to the site to the works Contractor;;
- Works Contract documents checked and in case of potential risks/omissions are noted to be notified the Contracting authority;

4.2.1.2. Construction Period

The Contractor shall carry out the following works supervision activities but not be limited to:

- Timely and in good quality supervision of all stages of the completion of the investment project, from the commencement date up to commissioning, tests on completion, taking over procedures, presentation of hand-over documentation, implementation of health, safety and environmental protection plan;
- Administration and coordination of the Works Contract, providing proper implementation of work programmes, achievement of the required quality, and all related parameters as defined in the Work Contract documents;
- To analyse and approve the Plan and Program for construction works provided by the Works construction Contractor and realization the activities of the Project according the Plan, and if requested to give solution/ recommendation to the Contracting Authority;
- Preparation and coordination of site and monthly progress meetings, with provision of minutes of these meetings in the English language. The meetings shall be chaired by the Contractor and be held in English, unless otherwise agreed by all participants;

¹ <u>https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions_en</u>

- Maintaining of a continuous liaison with the Contracting Authority and the Beneficiary regarding the relevant information on matters related to works implementation, including ad hoc communication on a daily basis;
- Monitor the validity period of the works construction Contractor's insurances, guarantees, certificates, other relevant documents and ensure the timely renewal of the mentioned documents by the Contractor;
- To ensure the control of validity period of construction permission, technical documentation and other related documents and to inform the Contracting Authority in case of extension;
- Signing / counter signing of works construction Contractor's log books with filing of copies. Daily log books shall contain references regular site inspections, tests, controls and approvals;
- Approvals of tests on items such as materials and products according to the instruction of the technical specifications. The Contractor shall:
 - Check manufacturer's tests for the equipment and parts delivered by the Works construction Contractor;
 - Verify the tests on installed materials and equipment in situ;
 - Verify dry and wet tests on works and equipment;
 - Verify that installed equipment noise levels are within the declared and allowed limits;
- Providing regular site inspection with attention to quality of works, conformity of the performed works with the design documents, best available techniques as well as health, safety and environmental measures taken by the Works construction Contractor is provided;
- Instructions to the Works construction Contractor on modifications in technical specifications, parts of the design drawings, work programme in line with CA approvals;
- Administration and verification of Works construction Contractor's interim payments requests, with determination of the value of works, according to the procedures defined in FIDIC Red Book. Interim payment certificates shall be verified by the Contractor within 28 days after receiving the Works construction Contractor's request, and submitted to the Contracting Authority for further processing;
- Advising the Contracting Authority on the potential for the reduction of the project costs, works execution time, or improvements of the quality of works;
- Review and initiation of variation orders upon Works construction Contractor's proposals. The Contractor shall submit to the Contracting Authority a variation report explaining:
 - Reason / need for variation;
 - Impact of the variation on the Contract in regard to costs, time and quality;
 - Engineer's conclusions and determinations;

The Contractor shall prepared the variation order and shall sign the variation order, Note: Variation orders and changes in the Contract, leading to the increase in the total contract amount including contingencies and/or the duration of the Contract cannot be issued without the prior approval of the Contracting Authority.

- To ensure Supervision of the Management Mitigation Plans for the environmental protection during the construction works and Defects Liability Period as required in the Detail Design;
- Approval of as-build documentation supported with Works construction Contractor's construction record, operation and maintenance manuals, securing delivery to the Contracting Authority and Beneficiary jointly with certificates, reports, records properly ordered and presented by the Works construction Contractor;
- Approving and witnessing of Works construction Contractor's tests on completion;

- Facilitating Works construction Contractor's manuals and maintenance instructions to be properly delivered to the Beneficiary;
- Performing of due taking-over inspection jointly with the representatives of the Contracting Authority and Beneficiary, drafting of taking-over certificates, snag lists, and other documentation stipulated in the works Contract;
- To ensure Inspection of the machinery and equipment used by the Works construction Contractor on the construction, for all temporary or permanent works with respect to the normative technical standards, safety and environmental requirements;
- To timely inform the Contracting Authority if the implementation of Works Contract does not meet the technical requirements and to suspend the construction works if the project solution is changed not in accordance with the technical procedure;
- To organize and conduct meetings with the Works construction Contractor on site, the Contracting Authority and Beneficiary institution or other relevant institutions;
- To assist in the collection by the works construction Contractor of relevant documents for issuing necessary and additional permits if needed, related to construction works (e.g. traffic, electricity, water, sewerage, environment etc.);
- To supervise, control and approve unforeseen activities related to the implementation of construction works;
- To check and approve the draft of Works Final Acceptance Certificate prepared by Works construction Contractor;
- To participate during technical acceptance missions together with other relevant authorities;
- To check and approve the Advance, Interim and Final Payments Certificates prepared by the Works construction Contractor together with the supporting documents and submit to the Contracting Authority for approval;
- To check the accuracy and validity of Bill of Quantities, guaranties, payments, ownership of the machinery and other, which shall be provided by the Works construction Contractor according to the Works Contract and FIDIC conditions of Contract;
- To prepare temporary Check-list for Bill of Quantities and an overview on the rest of payments for the works with regard to the final calculations of the works;
- To check and approve after completion of the works the Final Report prepared by the Works construction Contractor with the results from all geotechnical tests, surveys etc., as well as an adequate As Built Documents necessary for the future exploitation of the sewerage network and to submit to the Contracting Authority in a hard copy and in electronic format;
- Checking that the Project visibility complies with the EU Visibility Requirements;
- To ensure execution of the construction works respecting national legislation related to construction;
 - Without written permission from the Contracting Authority the Contractor cannot make the following:
 - To approve time for extension of the construction works;
 - To approve any kind of the activities which are not in a correspondence with Works Contract, where the Contracting Authority shall give an approval.
- Beside the mentioned above the Contractor team is obligated to ensure performance of all other activities which are prescribed in the (FIDIC, Red Book), First Edition 1999.
- Upon completion of the Works Contract (that is, upon the issue of the Taking–over Certificate), the Contractor shall submit Report after construction period which shall include as a minimum:

- ✓ Short description of achievements including problems encountered and recommendations;
- ✓ copies of the Taking-over-Certificate(s);
- ✓ verified "as-built drawings", prepared by the works contractor, showing all revisions to the design of the Works;
- \checkmark a complete analysis of the costs of the completed Works;
- ✓ an overview of the actual progress of the Works, including details of reasons for delays and/or extensions of time;
- ✓ commissioning reports for the various mechanical and electrical components of the Works – if any;
- ✓ details of all permits required for the construction of Works;
- ✓ an overview of site safety procedures, any problems in this respect and recommendations for improvements;
- ✓ an overview of the Contractor's working practices and resources;
- ✓ an assessment of the quality of materials and workmanship, any problems in this regard and recommendations for improvement;
- ✓ details of technical difficulties encountered and how these were resolved;
- \checkmark details of administrative difficulties encountered and how these were overcome, and
- ✓ an appraisal of the strengths and weaknesses of the design of the works and the Contract Documents, including the design details and drawings, bills of quantities, general and particular specifications and the Conditions of Particular Application, with recommendations on how improvements can be made for future contracts;
- ✓ details of all remedial works carried out by the works construction Contractor to rectify any defects found.

The Contracting Authority will communicate detailed instructions on the size and format of the above mentioned deliverables during the inception stage of this Contract with the relevant stakeholders.

4.2.1.3. Defects Liability Period

After the completion of the works the Contractor is obligated to carry out temporary inspection of the works and to support the Contracting Authority in the activities related to the Works Contract.

The Contractor is expected to assign the Team Leader/ Resident Engineer for sewerage during the Defects Liability Period of 12 months when the assignment is expected to be split in 4 (four) missions, on every 3 months with duration of 20 days in total.

In case of detected defects during the Defects Liability Period the Contractor is required to respond on the request of the Contracting Authority with a competent team of experts within 5 (five) days of the receipt of the request from the Contracting Authority.

The activities of the Contractor during the Defects Liability Period include but are not restricted to the main points listed below:

- Preparation of the Work Plan and Program for the works inspection on the quality and damages of the constructed works during the Defects Liability Period on quarterly basis (every 3 months). The Work Plan must include the activities that will be inspected including time frame for each activity and submitted to the Contracting Authority,
- In case of the incidental damages during the Defects Liability Period, the Contractor, within 5 (five) days, must respond to the Contracting Authority with the Letter of information on the incidental damages. In this case, the Contractor must inspect the construction and to start with preparation of the Work plan for organizing incidental mission and submit it to the

Contracting Authority within 15 (fifteen) days after receiving of the Letter of information on the incidental damages. After the Work plan is approved by the Steering Committee the Contractor is responsible for the organization and performance of the incidental mission;

- After each mission including incidental missions during the Defects Liability Period (within 5 days after completion of each mission.) the Contractor (Supervisor/Engineer) shall prepare Report on findings during Defects Liability Period that will contain details about the status of the object and of any defects found.
- In case of detected defects, within seven days after identification of the defects, the Contractor must prepare the Work Plan with recommendations on the removal of the defects including a list of the activities that will be done and the time frame for each activity and submit it to the Contracting Authority;
- The Contractor must prepare Report after completion of DLP that will contain details of all remedial works carried out by the Works Contractor(s) to rectify any defects found. This Report shall comment on and make recommendations with regard to the Beneficiary's operation and maintenance practices

The total duration of the contract will be 39 months out of which 24 months correspond to construction works supervision, 12 months of Defects Liability Period and 3 months for administrative issues and completion of documents. The 3 months refers to approximately one month for administrative issues that is to be implemented before the start of the works contract and two months are to be implemented after the end of the Defects Liability Period in order to prepare final documents for the project

4.3. Project management

4.3.1. Responsible body

The Contracting Authority is the Central Financing and Contracting Department (CFCD) within the Ministry of Finance.

4.3.2. Management structure

Central Financing and Contracting Department – will be the Contracting Authority. The Head of the Contracting Authority for the IPA II – Sector Operational Programme for Environment and Climate Action 2014-2020 is at the same time the Head of the Operating Structure (HOS) for IPA II Programme. Therefore, besides the responsibilities of CFCD in launching tenders, organizing evaluations, preparing/signing contracts, as defined in Article 5 of the Operational Agreement signed between the NIPAC, HOS and the IPA Coordinator, CFCD also supports HOS in performing its supervisory role over the Operating Structure for IPA II Programme. The Contractor will report to CFCD and the Contractor's Team Leader will have to perform regular communication with the Contracting Authority and coordinate the Contract activities in close consultation with HOS.

Ministry of Environment and Physical Planning through the IPA Coordinator / Department for EU, IPA Units as part of the operating structure is a body within the OS for IPA II Programme which have tasks mainly related to technical implementation and monitoring, as defined in Article 6 of the Operational Agreement signed between the NIPAC, HOS and the IPA Coordinator. Furthermore, the IPA Coordinator has to ensure that the Contractor is provided with all necessary information needed for preparation of Project.

Project Steering Committee (PSC) at the highest level will be established to oversee the implementation of all project activities.

The Steering Committee (SC) will be chaired by high level officer from the Ministry of Environment and Physical Planning and will be composed as follows:

- Representatives from IPA structure within the Ministry of Environment and Physical Planning;
- Representatives from Department for Waters within the Ministry of Environment and Physical Planning;

- Representatives from the Municipality of Kichevo;
- Representatives from the PUC "Komunalec" Kichevo;
- Representative from the Contracting Authority, as observer;
- Representative from the NIPAC Secretariat, as observer;
- Representative from the Delegation of the European Union (EUD), as observer.

Other bodies, agencies or institutions may be proposed (in consultation with the final beneficiary) as Committee members/observers.

The Steering Committee will have regular meetings to oversee the implementation of the project. Ad-hoc meetings shall take place whenever necessary and if convoked by at least two members with the agreement of the beneficiaries.

The role and main functions of the Steering Committee will be to:

- Assess the performance of the Contractor and the Contractor's inception report, quarterly reports Draft Final and Final Reports and make recommendations as appropriate to the CA which will approve these reports;
- Assess the project progress as agreed in the Contract;
- Jointly discuss any critical points or bottlenecks for further project implementation and propose and discuss remedy actions to be taken in order to tackle problems;
- Ensure close cooperation and transparency between stakeholders;

The first meeting of the SC will be held after the inception phase to examine the Inception report. Thereafter the Project Steering Committee will meet at quarterly intervals at least to oversee the implementation of the project or more regularly if needed with prior invitation and agenda sent in advance to all participants. The Contractor will support with the preparation of the Minutes of the meetings, which will be distributed to all participants within max. 5 days after the meeting of the Project Steering Committee.

The Contractor shall ensure proper functioning of the Steering Committee, organizing the meetings, preparing and circulating the agenda, writing and distributing the minutes, and follow-up/implementing the Committee decisions. The date of the SC meetings, the agenda and the necessary documents shall be set and circulated among the interested parties tentatively with a reasonable time in advance (i.e. approximately 10 days in advance). The Contractor has to keep them in a file as project documentation. These tasks will be performed in co-ordination with the beneficiary. During the inception phase of the project, a detailed working plan will be developed in cooperation with the Beneficiaries and the IPA Coordinator.

The Contractor has overall responsibility for ensuring sufficient visibility for project activities.

The IPA Coordinator retains full responsibility for an appropriate technical implementation of the project. The IPA Coordinator will nominate Project Manager from Department of Water (MEPP).

The Project Steering Committee (PSC) will be established to monitor the activities identified in the various phases of the Project in an adequate way. It will operate as Advisory Committee and shall approve all project reports.

Delegation of the European Union (EUD) in Skopje shall execute ex-ante control and shall be kept fully informed on the progress by means of regular briefings during the course of the operation.

4.3.3. Facilities to be provided by the Contracting Authority and/or other parties

The Contracting Authority or/and Project beneficiaries shall supply the Contractor promptly with any useful information and/or documentation which may be relevant to the performance of the Contract.

Some facilities for the Contractor (Supervisor/Engineer) will be secured under Works Contract. Other elements not covered are to be covered by the supervisor/engineer as part of their fee rates.

5. LOGISTICS AND TIMING

5.1. Location

The location of the assignment of the Contractor shall be in the Municipality of Kichevo.

5.2. Start date & period of implementation

The intended start date is August 2019 and the period of implementation of the contract will be 39 months from this date, out of which 24 months correspond to construction works supervision, 12 months of Defects Liability Period and 3 months for administrative issues and completion of documents. If the duration of the related Works contract is extended, the period of implementation of this Supervision contract can be extended respectively. Please see Articles 19.1 and 19.2 of the special conditions for the actual start date and period of implementation.

6. **REQUIREMENTS**

6.1. Staff

Note that civil servants and other staff of the public administration, of the partner country or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

6.1.1. Key experts

Key experts have a crucial role in implementing the contract. These terms of reference contain the required key experts' profiles. The tenderer shall submit CVs and statements of exclusivity and availability for the following key experts:

Key expert 1: Team leader

Copies of her/his CVs and the supporting documentation (in English) must be enclosed with the tenderer's proposal together with the below table Annex 1 - Qualifications and Experience of Key Experts. All claims of qualifications and years of experience must be substantiated by documentary proof provided, i.e. employers' references.

Self-statements by individual experts will not be accepted as references.

If the profile of the proposed expert does not fulfil or deviates substantially from one or more of the technical award criteria laid down in the tender dossier, and in accordance with PRAG, 3.3.10.3 the tender will be automatically rejected.

All experts must have an excellent command of English, oral and writing and computer literacy.

The core Project Team shall consist of the one (1) key expert - Team Leader/Resident Engineer for Sewerage and a pool of non-key experts. During the inception phase of the project, a deployment plan of the short term assistance will be developed in cooperation with the direct Beneficiary.

The indicative inputs of the key experts for this Contract are as follows:

Expert	Position	Indicative minimum number of working days for the Construction period	Indicative minimum number of working days for the DL period	Indicative minimum number of working days for the Administrative Issues and Completion of Document Period	Total Indicative minimum number of working days
1	1 Team Leader/ Resident Engineer for Sewerage 4		50	20	500

Total Key experts	430	50	20	500
-				

Key expert 1: Team Leader/ Resident Engineer for Sewerage - 500 working days (24 months construction period, 12months Defects Liability period and 3 months Administrative issues and completion of documents period- full time during construction period, visiting during Defects Liability Period and mobilization and up to the settlement of final account within the administrative and completion of document period).

The Team Leader/ Resident Engineer for Sewerage shall be responsible for supervision activities and act as the Engineer for the Works contract for rehabilitation and extension of sewerage network in the Municipality of Kichevo under FIDIC Red book Contract Conditions first edition 1999. The Team Leader/ Resident Engineer for Sewerage is in charge of overall project co-ordination and quality control of the construction and its timely completion. He/she will be overall responsible for supervision of construction activities, carrying out general contract administration, checking the Contractor's monthly statements, issuing the Taking Over and Performance Certificates, etc. It is expected that at the beginning of the project, the Team Leader to spend more time in the country in accordance to the works implementation schedule.

Qualifications and skills

At least University/Bachelor degree² in civil engineering or three (3) years above the general professional experience required below;

General professional experience

- Minimum of ten (10) years of professional experience in implementation (design/ construction/reconstruction/rehabilitation/ supervision) of waste water infrastructure projects (WWTP's or sewerage networks).

Specific professional experience

 Experience as Resident Engineer of at least one (1) successfully completed project for supervision of construction and/or reconstruction and/or upgrading and/or extension of sewerage network of at least 30 km implemented under FIDIC Red Book Conditions of Contract or any other equivalent Conditions or procurement rules.

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

6.1.2. Non-key experts

CVs for non-key experts should not be submitted in the tender but the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles.

The contractor must select and hire other experts as required according to the profiles identified in the organisation & methodology and these terms of reference. It must clearly indicate the experts' profile so that the applicable daily fee rate in the budget breakdown is clear. All experts must be independent and free from conflicts of interest in the responsibilities they take on.

All experts shall have at least a University Degree (where a university degree has been awarded on completion of a minimum of three years of study in a university or equivalent institution) or 3 years of general experience above the minimum relevant experience requested in the field.

All experts shall have the relevant experience in the field of the activity foreseen and an excellent command in English. For senior non-key experts, the minimum experience which shall be required is: at least 7 years relevant general professional experience in the field of the activity. For junior non-key experts, the minimum experience which shall be required is: at least 3 years relevant general professional experience is: at least 3 years relevant general professional experience is: at least 3 years relevant general professional experience is: at least 3 years relevant general professional experience is: at least 3 years relevant general professional experience is: at least 3 years relevant general professional experience in the field of the activity.

² EPSO website-Annex, http://europa.eu/epso/doc/diplomes-fortheweb_en.pdf

The selection procedures used by the contractor to select these other experts must be transparent, and must be based on pre-defined criteria, including professional qualifications, language skills and work experience. The findings of the selection panel must be recorded. The selected experts must be subject to approval by the contracting authority before the start of their implementation of tasks.

6.1.3. Support staff & backstopping

The Contractor will provide support facilities to their team of experts (back-stopping) during the implementation of the contract. The Contractor is expected to put down the mechanisms of backstopping during the project implementation to be provided in the technical offer.

A Project Director from the Contractor's headquarter shall be appointed for the whole duration of the project. He/she shall have the overall responsibility for overseeing smooth and timely implementation of the project and the efficient use of project funds. The Project Director must be an efficient senior manager with experience in similar assignments.

He/she will have the following responsibilities:

- Oversee the co-ordination of the overall project activities from the Contractor's headquarter;
- Ensure proper reporting to the Contracting Authority according to EC reporting guidelines and requirements ordination between the project office, the Contractor's headquarters, the Contracting Authority and the Project Partner;
- Ensure co-ordination between the project office, the Contractor's headquarter, the Project Beneficiary, the IPA Coordinator of the Ministry of Environment and Physical Planning, the Contracting Authority and the EU Delegation in Skopje;
- Ensure proper administrative control of the project's expenses, preparation of invoices with supporting documentation, and the timely delivery of reports. Quality control of reports in terms of contents, layout and quality of language is a key aspect of quality assurance. The backstopping personnel available for this task will be nominated, and their professional experience summarised in the offer.

Backstopping staff cost and the cost of quality control are also included in the fee rates. The Contractor will describe in the offer the system of quality assurance, and how the head office will support the experts on site with all required logistics and technical support.

The Contractor shall engage support staff, office manager and interpreter for office management, administration and translation for the duration of the project in order to enable the key experts to concentrate on their core tasks. The support staff will be in charge of the day-to-day management of the office and will, in particular, assist the key experts in liaison with the project beneficiary. Preferably the support staff should have previous experience in office management in the context of other international, preferably EU supported projects.

Backstopping and support staff costs must be included in the fee rates.

6.2. Office accommodation

Office accommodation of a reasonable standard and of approximately 10 square metres for each expert working on the contract is to be provided by the Works contractor as stated in Annex 2 to this Terms of Reference (Annex 2 – Volume 3, Part 1, General Requirements of Works Contract - Extract from TS).

6.3. Facilities to be provided by the contractor

The contractor must ensure that experts are adequately supported and equipped. In particular it must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion. The Contractor shall provide all required office equipment (such as; personal computers, printers, copy machine, digital camera, etc.), supplies, services, documentation, logistical support, international and local travels, etc for the implementation of the contract All monthly bills for electricity, water supply, sewerage, solid waste, telephone, internet and cleaning service of the offices shall be paid by the Contractor.

Any additional office accommodation, equipment and vehicles for the needs of the Contractor outside the provided conditions specified in the Tender documents for the Work Contract and as included in Annex 2 to this Terms of Reference shall be paid by the Contactor. All costs for the above will be considered as included in the expert's fees.

6.4. Equipment

No equipment is to be purchased on behalf of the contracting authority / partner country as part of this service contract or transferred to the contracting authority / partner country at the end of this contract. Any equipment related to this contract that is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

6.5. Incidental expenditure

The provision for incidental expenditure covers ancillary and exceptional eligible expenditure incurred under this contract. It cannot be used for costs that should be covered by the contractor as part of its fee rates, as defined above. Its use is governed by the provisions in the general conditions and the notes in Annex V to the contract. It covers:

- Travel costs and subsistence allowances for missions, outside the normal place of posting, (Kichevo) undertaken as part of this contract. If applicable, indicate whether the provision includes costs for environmental measures, for example C0₂ offsetting;
- The costs for promotional publications, brochures, etc. related to the project visibility items.

The provision for incidental expenditure for this contract is **EUR 14.000.** This amount must be included unchanged in the budget breakdown.

Daily subsistence costs may be reimbursed for missions foreseen in these terms of reference or approved by the contracting authority, and carried out by the contractor's authorised experts, outside the expert's normal place of posting.

The per diem is a maximum fixed flat-rate covering daily subsistence costs. These include accommodation, meals, tips and local travel, including travel to and from the airport. Taxi fares are therefore covered by the per diem. Per diem are payable on the basis of the number of nights spent on the mission by the contractor's authorised experts for missions carried out outside the expert's normal place of posting. The per diem may be paid in full or in half: for each night spent on the mission= 100% of the per diem rate is paid, for periods of missions not entailing overnight stay= 50% of the per diem rate is paid. Travelling time is to be regarded as part of the mission. When an expert travels during night time the full per-diem rate of the country of arrival shall be paid. In case of longer stop-overs in another country the per diem rate of the country where the stop-over takes place shall be paid. Any subsistence allowances to be paid for missions undertaken as part of this contract <u>must not exceed</u> the per diem rates published on the website -

http://ec.europa.eu/europeaid/funding/about-calls-tender/procedures-and-practical-guide-prag/diems_en - in force at the time of contract signature.

The contracting authority reserves the right to reject payment of per diem for time spent travelling if the most direct route and the most economical fare criteria have not been applied.

Prior authorisation by the contracting authority for the use of the incidental expenditure is not needed

6.6. Lump sums

No lump sums are foreseen in this contract.

6.7. Expenditure verification

The provision for expenditure verification covers the fees of the auditor charged with verifying the expenditure of this contract in order to proceed with the payment of any pre-financing instalments and/or interim payments.

The provision for expenditure verification for this contract is **EUR 18.000**. This amount must be included unchanged in the budget breakdown.

This provision cannot be decreased but can be increased during execution of the contract.

7. REPORTS

7.1. Reporting requirements

Please see Article 26 of the general conditions. Interim reports must be prepared every six months during the period of implementation of the tasks. They must be provided along with the corresponding invoice, the financial report and an expenditure verification report defined in Article 28 of the general conditions. There must be a final report, a final invoice and the financial report accompanied by an expenditure verification report at the end of the period of implementation of the tasks. The draft final report must be submitted at least one month before the end of the period of implementation of the tasks. Note that these interim and final reports are additional to any required in Section 4.2 of these Terms of Reference.

Each report must consist of a narrative section and a financial section. The financial section must contain details of the time inputs of the experts, incidental expenditure and expenditure verification.

To summarise, in addition to any documents, reports and output specified under the duties and responsibilities of each key expert above, the contractor shall provide the following reports:

Name of report	Content	Time of submission
Inception report	 The Inception Report shall include as a minimum: Define the aims, objectives and methodology of the project and its components; Set out a detailed work plan for the provision of each activity, area of expertise and list of deliverables and identify the local support personnel, and the management of the project; Provide a list of incidental costs elaborated in details; Provide a detailed description concerning cross-cutting issues foreseen under the project; Implementation program and timetable of the works that is showing the planned usage of all resources (personnel, equipment and funds) within the time that is allowed for completion of this service contract; Agreement on the detailed lay-out and content of the progress reports; Provide other information as specified by the Contracting Authority. 	No later than 1 month after the start of implementation
Monthly Progress Briefs	The Monthly Progress briefs (short report 2-3 pages) should summarise the current status of the project against indicators for project immediate objectives and results (outputs and activities), major activities undertaken during the period of the report compared to the implementation schedule, deviations and delays in activities, problems and	The Contractor shall submit Monthly Progress Briefs to the IPA Coordinator and Project Steering Committee members no later than 5 working days after the end

6-month progress report	 constraints encountered and corrective/ remedial actions proposed or planned, and major activities planned for the next period (schedule). Achievements with respect to the Indicators should be assessed and documented in each Monthly Progress briefs to the extent possible. The structure of the report shall be agreed with the IPA Coordinator. Short description of progress including problems encountered; planned activities for the ensuing 6 months accompanied by an invoice and the expenditure verification report. These reports, among others shall consist of: Summarise in detail project progress including comparison of achievements against planned activities and overall progress against the initial timetable; Compare actual versus projected cash flow (working days per individual expert and incidental expenditure per activity) in spread-sheet format and reasons therefore in detail; Describe difficulties encountered and corrective measures taken; Describe results accomplished; 	of each month for the previous month of the implementation period No later than 1 month after the end of each 6-month implementation period.
	 Describe resources utilised during the reporting period; Provide recommendations, requests and plans for the project activities for the forthcoming period; Describe cross-cutting initiatives undertaken in the reporting period; Provide other information as specified by the Contracting Authority. 	
Draft final report	 The draft final report shall include as a minimum: a complete overview of all activities implemented during the project; a summary of outputs, and a critical study of any major problems, which may have arisen during the performance of the Contract, with recommendations regarding resolving similar problems in the future and proposals for future actions; an assessment of the outcomes of the project measured against the stated project objectives and the indicators of achievement; an assessment of cross-cutting issues in all aspects of the project implementation. provide other information as specified by the Contracting Authority. 	The Contractor will submit the Draft Final Report to the Contracting Authority and the Steering Committee no later than 1 month before the end of the implementation period. (comprising of supervision during construction, supervision during DLP and administrative issues and completion of documentation phase).
Final report	The Final Report shall also contain a summary of the Final Statement for all work done in accordance with the Contract. The Final Report shall also include a complete financial statement for the activities undertaken, a signed and completed asset register of the purchase and hand-over of all assets purchased under the contract and proposals for future actions. Also, the Final Report shall include details of all remedial works carried out by the Works Contractor to rectify any defects found and make recommendations	The Contractor will submit the Final Report to the Contracting Authority and the Steering Committee within 1 month of receiving comments on the Draft Final Report from the Contracting Authority and the Steering Committee.

with regard to the Beneficiary's operation and maintenance practices. The Final Report shall include all previously approved reports and other relevant documents on one CD- R. The executive summary should be translated into the language of the Partner country. The Final Report should include all previously approved project results (see article 2.3.) on hard copy and on the CD-ROM.	
The Final Report must be accompanied by the invoice and an expenditure verification report confirming the final certified value of the contract. The Final Payment shall be subject to the approval of the Final Report and the acceptance of the expenditure verification report.	

7.2. Submission & approval of reports

In three (3) hard copies and one (1) electronic copy (CD) of the final versions of the reports referred to above must be submitted to the project manager identified in the contract The reports must be written in English. The project manager is responsible for approving the reports.

Inception, 6-month Progress Report and draft-Final Reports will be submitted via e-mail to each of the members of the Project Steering Committee, as well as to the observers of the Project Steering Committee, at least 5 days prior to the meetings. The Monthly progress briefs will be submitted via e-mail to the IPA Coordinator of Ministry of Environment and Physical Planning and Project Steering Committee members..

The above mentioned reports, except for the Monthly progress briefs, shall be approved by the Contracting Authority upon recommendation by the IPA Coordinator, following the comments from the Project Steering Committee. Furthermore, the approval of other project reports and documents, Contractors' invoices, addenda to the contract and any other requests related to the contract lies with the Contracting Authority.

The EU Delegation shall receive simultaneously with the Contracting Authority all project outputs, materials, documents and reports produced within the frame of the project.

All reports must be clear and concise, thus enabling the executive bodies concerned to take an informed decision on this basis.

All reports should be prepared in the English both in hard copy and in electronic version (readable by a Microsoft Office application for the text and AutoCAD for drawings). The Final report shall be translated into Macedonian language as well.

At the end of the project, the Final Report shall be submitted on one CD in English and Macedonian language. All previously approved reports and all project outputs, materials and documents shall be submitted on one CD.

The Team Leader shall be responsible for the timely presentation of the reports and deliverables of the assignment.

Quality control of reports in terms of contents, layout (standardised) and quality of language is a key aspect of quality assurance.

No major report or document (technical papers, newsletters, etc.) shall be published or distributed to third parties without the approval of the Contracting Authority and the Beneficiaries. Reports or other major documents produced by the Contractor for publication or distribution to third parties shall:

- pay particular attention to the confidentiality of data;
- mention the source of funding of this project the IPA programme, and follow the visibility rules of the EU;

- make clear that any opinions expressed therein remain and do not represent the opinion of the European Union, its services or agencies but those of the Contractor.

Copyright on all reports and other material prepared under this contract shall remain with the Contracting Authority.

8. MONITORING AND EVALUATION

The Contractor shall continuously monitor the project according to standard procedures (inception phase monitoring, periodic monitoring and final assessment). Project monitoring and evaluation shall be based on a periodic assessment of progress on delivery of specified project results and towards achievement of project objectives.

The Contracting Authority shall monitor the project and ensure implementation in a timely and efficient manner, in particular through commenting on inception, monthly briefs, interim and final reports, and advising on progress on the delivery of specific project results and towards achievement of project results, supported as appropriate and relevant by on-site visits.

The PSC shall be established to monitor the progress and outputs of the project, to provide project oversight and guidance for the project implementation, operating as Advisory Committee to the Contracting Authority.

8.1. Definition of indicators

The following indicators must be met to confirm the successful achievement of the project results:

• Completed Supervision of the implementation of the works contract for Rehabilitation and Extension of Sewerage Network in the Municipality of Kichevo.

8.2. Special requirements

Tax and VAT arrangements

Under no circumstances can duties and taxes, including VAT; be paid by a community programme.

The European Commission and Partner country have agreed in the Framework Agreement between the Government of the Partner country and the European Communities on the rules for cooperation concerning EC financial Assistance to the Partner country in the Framework of the Implementation of the Assistance under the Instrument for Pre-Accession Assistance (IPA) that taxes, customs and import duties or other charges having equivalent effect are not eligible under IPA.

The Contractor is encouraged to register the project within the Central Donor Assistance Data Base (CDAD) in the Government, Secretariat for European Affairs which is necessary for exemption from payment of Customs and other duties as well as for the reimbursement of VAT for the project needs.

Furthermore, each EU funded project should be registered also in the Central register at the protocol Department within the Ministry of Foreign Affairs and the Public Revenue Office. The registration of the project is the sole responsibility of the Contractor.

Details on the tax exemption procedure can be found on the following link: <u>http://www.sep.gov.mk/en/content/?id=97#.UkQX9H9LgdU</u>

Professional licenses

After two month from the date of signature of the contract the Contractor, in accordance to the Law on Construction, has to provide to the Contracting Authority a Certificate from the Ministry of Transport and Communication (http://mtc.gov.mk) to perform supervision on construction works for the Contractor (Leader and members of consortium, if applicable) as legal entity(ies). In addition, the key experts engaged should obtain Certificates from the Macedonian Chamber of certified architects and certified engineers (http://komoraoai.mk/en/).

Cross cutting issues (environment, gender, minorities)

Cross cutting issues have to be systematically addressed during the project lifetime. Project actions must be screened in order to ensure they won't impact negatively on gender, the environment and minorities.

The Contractor is expected to ensure that the needs of woman and minority ethnic groups are taken into consideration in all aspects of project implementation. Improved legal and managerial environment in the environmental sector shall positively influence to the economic activities in the country.

Furthermore, the new national environmental legislation, harmonized with the EU's shall include provisions directly related to protection of the environment.

Good governance

All relevant requirements to insure a sound financial management of the project will be fulfilled in accordance with the principle of good governance.

All necessary provisions will be taken to fight against corruption in accordance with Article 19 of R.(EC) N. 718/2007:

"[The] beneficiary countries shall take any appropriate measure to prevent and counter any active or passive corruption practices at any stage of the procurement procedure or grant award procedure or during the implementation of [the] contract."

Communication and visibility

The Communication and Visibility Requirements for European Union External Actions set out the compulsory requirements for all contractors and implementing partners.

Applicants must comply with the objectives and priorities and guarantee the visibility of the EU financing (see the Communication and Visibility Requirements for EU External Actions specified and published by the European Commission at https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions_en. The contractors must ensure that actions that are wholly or partially funded by the European Union (EU) incorporate information and communication activities designed to raise the awareness of specific or general audiences of the reasons for the action and the EU support for the action in the country or region concerned, as well as the results and the impact of this support. All visibility events as well as materials produced within the EU-funded project need to incorporate mandatory information that actions are wholly or partially funded by the European Union (EU), as follows: EU logo, the title of the project and the sentence: "This project is funded by the European Union".

The project should allocate appropriate budget for communication activities in order to be sufficient to have a real impact, and reflect the size, and, consequently, the likely impact of the action. A budgeted communication and visibility plan should be included in the work plan of any EU-funded or co-funded action, highlighting the external communication activities that need to take place at key stages in the life of the action. However, there should also be provision in any communication plan to capture and incorporate in it any unforeseen visibility opportunity that may arise unpredictably. A good communication reflex and the ability to exploit unexpected opportunities to the benefit of the action are often as important as more formal efforts and may even sometimes be free of cost.

In order to ensure transparency and enhanced visibility of the EU assistance, the project summary will be published on the websites of the relevant institutions, such as of EU Delegation, CFCD, Secretariat for European Affairs, etc., as well as will be easily shared via social media networks, e-mail.

Having in mind importance of digital communication in today's era of web technologies and social media, creation of EU-funded projects' communication materials in an internet friendly format is essential.

Before initiating any information, communication or visibility activity, contractors, implementing partners and international organisations should contact the EU Delegation, Press and Information Officer and Task Manager of the EU-funded project.

The EU Delegation should always be invited to participate in visibility and communication events.

The relevant Contracting authority is any responsible for monitoring the successful implementation of all visibility provisions.

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Annex 1 - Qualifications and Experience of Key Experts - to be completed for each Key Expert and attached to C.V.

	Minimum Qualifications M/B/Prof Exp as per the ToR	University	Year of award			
Α	Highest level of relevant Diploma/Degree as obtained by expert:					
CV Ref No	<u>Relevant General Experience</u> of expert -Description of position as extracted from the CV which matches or exceeds the requirements of the ToR	Name/Abbrev of Employer	Months	Indicate those extracts from GE that correspond to the <u>Specific Experience</u> required in months, if required by the ToR		Employers Reference translation attached YES/NO
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
		Total GE in months		Total SE in months		
	Minimum Total required:YRS	TOTAL IN YEARS		TOTAL YEARS		

Name of Key Expert No:.....