Ministry of Agriculture, Water Management and Forestry of FB&H
Terms of Reference (ToR)

WATER AND SANITATION SERVICES MODERNIZATION PROJECT IN FB&H

COMPONENT 2: Supporting improved governance and capacity of the water services sector at the local level

STRENGTHENING ORGANISATIONAL, OPERATIONAL AND FINANCIAL CAPACITIES OF PUBLIC UTILITY / WATER SUPPLY COMPANIES AND LOCAL SELF-GOVERNMENT UNITS

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Introduction

A.1. Context

Federation of Bosnia and Herzegovina (Federation of B&H) is facing a set of development challenges, including economy fall, high rate of unemployment, growing poverty and socio-economic inequality. Economy still has numerous limitations, including inadequate infrastructure and generally non-attractive investment climate. Positioning in one such complex environment, Local Self-government Units (LSU) have monotype authorisations, in spite of significant differences in their sizes. Overall policies related to LSU are diffused and fragmented, at the same time with halting of important reforms in decentralisation. Although Federation of B&H has established legal framework of local self-government, 80% of cantons in FB&H did not change its legislation. This status is additionally contributed by labyrinth of sectoral laws and sub laws, often unsynchronised with framework laws. Generally, unclear division of authority between entities, cantons and local governments in combination with lack of funding of assigned authorities resulted in inadequate provision of basic public services on local level. It is necessary to improve government capacities of LSU, if they will be driving force of local development processes and ensure quality services. LSU develop integrated strategies with which they connect social, economic and ecological sectors in order to achieve sustainable results. Almost 30% of LSUs started applying municipality and town governance approach. Still, shortcomings in decision making, internal organisation and governance, at policies and regulatory frameworks, as well as inadequate operational capacities are preventing effective enforcement of policies and reaching strategic objectives. Despite improvements through formal agreements on partnership and more transparent funding mechanisms, effective involvement of citizens and civil society organisations (CSO) in the work of LSUs is still on negligible level.

It is necessary to achieve larger progress in relations between LSUs and Public Utility / Water supply companies (PUC / PWC) on one side and citizens i.e. beneficiaries of the services on other side in order increase understanding and trust between them. By increasing conscience and understanding of representatives of LSUs and PUC / PWC on the need to establish and functioning of more efficient and sustainable water services provision organisation on local level, and their closer connection to service beneficiaries through various communication channels, will improve institutional and organisational capacities of LSUs to fulfil own legal obligations to provide quality services to all citizens. Also, with intensive and continuous training and improvement of employees of LSUs and PUC / PWC will strengthen their staff capacities.

By strengthening this relationship between LSUs and PUC / PWC on one side and citizens i.e. service beneficiaries on the other, the advantage would be given to economic criteria, and not to social. Political influence would still exist, but with this it would be easier to increase tariffs for water services and they would not be too small, and thereby it would cover work and maintenance costs, and increase self-sustainability of PUC / PWC and reduce number of insolvency proceedings of PUC / PWC.

In the sense of finances, and also priorities, services of water supply and drainage and purification of waste water are still the most important services of local authorities. Over 75% of total 3.8 million citizens in B&H has access to potable water, and around 45% is connected to public sewer systems. Water losses amounts to more than 50%, which leads to excessive utilisation of water sources and high costs of water distribution. Water supply systems are old and irregularly maintained. Currently, most of public utility / water supply companies (PUC / PWC) in Federation of B&H are not financially sustainable, which in future represents long-term problems with water supply of their citizens. Sustainability is very important for the business of PUC / PWC i.e. for provision of utility water services, because dealing with utility business is based on principles that with the policy of prices of utility and water products and services ensures sustainability i.e. sustainable development of utility business. Capacities and responsibilities in managing delivery of services are limited, and require interventions through regulatory frameworks, in order to ensure functional and fiscal synchronisation on various levels. Amounts of water tariffs are often too small to cover operation and maintenance costs,

and let alone to enable capital investments. Political influence in determination of tariff amounts is extremely strong and advantage is given to social rather than to economic criteria. It is necessary to ensure return of all costs, with emphasis on justified costs. The quality of water is also questionable, especially in water supply systems with large water loses. Depreciation of infrastructure for water services is often neglected, and there is a need to change regulations in water services sector, to enable proper operation and maintenance of water services infrastructure.

Concerning gathering and purification of waste water other than generally small number of citizens connected to public sewer systems, limited is the number of constructed facilities for purification of waste water (FPWW), out of which all are not in function. Key question is funding of their operation and maintenance, and finances are also the issue in construction of new FPWW. Although certain efforts are invested into construction of sewer systems for collection and drainage of waste water, in construction of FPWW still requires a lot of room for improvements.

In accordance with that, Government of Federation of B&H in cooperation with the World Bank decided to implement Water and Sanitation Services Modernization Project in FB&H to make contribution to ensuring appropriate authorisations and finances for LSUs, whereby it would improve their democratic governance and provision of public services in inclusive, efficient and effective way, especially in the economy and environment protection sectors.

Water and Sanitation Services Modernization Project in FB&H represents initiative in duration of 6 years, with planned implementation in two phases. Duration of the project first phase is three (3) years.

Overall task within these Terms of References is the part of the first phase of the project and contributes to realisation of planned assistance to PUC / PWC in selected LSUs. Assistance shall be continued in the following years, based on results achieved according to Key Performance Indicators (KPI), at the end of implementation of the first phase. We plan a close cooperation of the project with 20 LSUs in the Federation of B&H.

Water and Sanitation Services Modernization Project in B&H has the objective to strengthen institutional capacities in Republic of Srpska (RS), Federation of Bosnia and Herzegovina (FB&H) and on local level for improvement of provision of services of water supply and sanitation which are adequately governed and improve efficiency of service providers in water supply and sanitation in LSUs that are participating in the project.

Within Project, one of the components is Supporting improved governance and capacity of the water services sector at the local level *(Component 2)*, that has the objective to strengthen local framework of provision of services of water supply and sanitation and synchronise them with institutional and regulatory framework set on entity level in order to increase to the maximum the effect of reform process. Estimated value of Component 2 for FB&H is 1.4 million USD, and it will be financed from SECO grant funding. Among other, within project the following shall be financed: (i) preparation of business plans of PUC / PWC focused on improvements in financial and operational areas of PUC / PWC for modernisation of water supply and sanitation services (including gender differences), (ii) preparation of contracts on provision of public water services (*Public Service Agreement* – PSA) between LSUs and PUC / PWC; (iii) preparation of tariff proposals, based on the laws prepared on entity level; (iv) support for organisational restructuring; and (v) development of capacities related to technical, commercial and financial issues, as well as for risk management related to environment and social issues, including gender specific areas of skill development. All these activities will improve capacities of LSUs and PUC / PWC to better cope with effects of draughts and floods caused by climate changes.

Activities within this component add on activities planned in project UNDP MEG II, that provides support for 30 LSUs and PUC / PWC. This component finances activities for strengthening of framework for provision of services of local water supply and sanitation in 20 LSUs and PUC / PWC with utilisation of best practices in B&H (i.e. experiences of the implementation of MEG Project) and World Bank project entitled „Utility of Future“.

A.2. Geographical coverage of the Terms of Reference

Terms of Reference is applied to **20 LSUs and PUC / PWC** (from the area of partner LSUs within Water services modernisation project). Beneficiaries of the Component 2 of Water and Sanitation Services Modernization Project are LSUs and PUC / PWC, which until now did not participate in implementation of MEG Project out of which is necessary to select 20 LSUs and PUC / PWC: Banovići, Bosansko Grahovo, Breza, Bugojno, Donji Vakuf, Drvar, Gornji Vakuf – Uskoplje, Fojnica, Glamoč, Goražde, **Grude, Hadžići, Jablanica, Jajce, Kakanj,** Kiseljak, Kladanj, Ključ, **Konjic,** Kreševo, Kupres, **Livno, Lukavac,** Maglaj, Neum, Novi Travnik, Olovo, **Posušje,** Prozor-Rama, Ravno, Sarajevo, **Srebrenik,** Stolac, Travnik, **Vareš,** Visoko, Vitez, Zavidovići, Zenica and **Živinice**.

Besides that, beneficiaries of the Component 2 of the Project can be LSUs and PUC / PWC that were briefly participants of the MEG Project, such as LSUs Cazin, Kalesija and Velika Kladuša.

Systems for provision of water services for water supply and drainage and purification of waste water in each of mentioned LSU are different in its size, capacity and work/operational characteristics.

Purpose, objectives, results to be achieved for Component 2, target groups and scope of services

B.1. Purpose and objectives

General objective of the assignment is provision of support to further strengthening of operational effectiveness and financial management of PUC / PWC in selected LSUs, to enable partner LSUs to fulfil obligations in provision of water services to their citizens. Terms of Reference has the objective to hire qualified and professional Consultant to provide technical assistance with the objective of strengthening institutional, organisational and staff capacities of selected LSUs and PUC / PWC. Consultant ensures tailored support to LSUs and PUC / PWC to continue with further tailoring and implementation of action plans where key priority areas are identified for necessary improvements in provision of services of water supply and drainage of waste water. However, Consultant can suggest additional activities necessary to achieve wanted financial and operational results for each selected LSU and its PUC / PWC. Concerning effects improvements, focus will be on the following issues:

- Quality (water safety) and continuity of the services;
- Efficient human resource management;
- Effective measurement and operation over non-revenue water;
- Asset management (including emphasis on investment maintenance);
- Cost control (cost efficiency) and revenue increase.

B.2. Target groups

Foreseen target groups for technical assistance within this Terms of Reference are:

- Mayors and councillors of LSU (for example, chairman, members of thematic committees, etc.);
- LSU employees who are directly responsible for (i) organisation and ensuring provision of water services on the territory of the LSU for all beneficiaries of the services (population), (ii) supervision over PUC / PWC; (iii) planning, designing and construction of utility infrastructure; (iv) budget and finances;
- Members of steering committees of PUC / PWC;
- General directors of PUC / PWC;
- Technical, executive and financial directors of PUC / PWC;
- Employees of PUC / PWC who are directly responsible (if such responsibility have been delegated within PUC / PWC) for (i) human resource management; (ii) relations with beneficiaries of the services; (iii) network mapping, modelling and zoning; measurement;

management of non-revenue water; (iv) accounting, bookkeeping and financial management; (v) development of water services tariff proposals; (vi) budgeting and business planning; (vii) quantities and quality of water, (viii) energy efficiency of pumping facilities.

B.3. Results to be achieved for Component 2

This Component aims to strengthen the local water and sanitation (WSS) service delivery framework in the FBiH and ensure its alignment with the institutional and regulatory provisions being developed, in order to maximize the impact of the ongoing reform processes. The Component will finance technical support for, inter alia:

- preparation of water utility business plans, targeting improvements in organizational, financial, and operational areas of water utilities for the modernization of WSS services (including gender-specific gaps);
- development and signing of PSAs between the municipalities and the respective water utilities.
- preparation of tariff proposals, based on the developed tariff methodology.
- supports organizational restructuring.
- capacity building on commercial, financial and technical topics, as well as in environmental and social risk management, including gender-specific areas of skill development.

The activities under this component complement those foreseen under the UNDP MEG II project, which will support water utilities and local governments. This component will finance activities to strengthen the local WSS service delivery framework in an additional 20 LSUs and PUC / PWC not being covered under MEG II using best national practices (e.g., MEG project) and from the World Bank Utility of the Future Framework.

The project approach will be organized as a flexible technical support facility, being able to respond to the emerging needs and level of commitment of the utilities to be considered and supported throughout the duration of the Project. It will build upon the results and priority measures from already developed business plans and/or PSAs and help utilities meet mini-mum requirements and gradually improve their performance.

During the phase of Inception Assessment of needs, for each selected LSU and PUC/PWC, a comprehensive assessment of service performance will be conducted using the UoF methodology to identify gaps and priority areas for improvement across commercial, financial, organizational, technical, environmental, climate-resilience and human-resource dimensions (including gender equality, diversity, and inclusion aspects). Based on this assessment, individual action plans will be developed for each LSU and PUC/PWC, outlining short-, medium- and long-term improvement measures to be supported by the Project.

Specific activities to be implemented under this Component will be confirmed upon completion of the Phase of Inception assessment and can be further refined during project implementation in order to ensure responsiveness to actual needs.

Capacity-building activities will make use of ongoing regional and national training platforms, including the MEG Project, the Danube Learning Partnership (D-LeaP), and the Regional Capacity Development Network (RCDN), as well as tailored on-the-job support, workshops, and advisory assistance delivered directly to LSUs and PUC/PWC in the Federation of BiH.

B.4. Time schedule / duration of the services

Time schedule for delivery of services within ToR is from **June 01, 2026 to August 01, 2027 (which also includes reporting)**.

B.5. Methodology approach

Consultant with the objective of improving operational and financial effect (performances) shall provide high quality technical support to strengthening of institutional, organisational and staff aspects of the business of 20 selected PUC / PWC. Finally, progress coming from technical support shall be measured through improvement of value of several selected key performance indicators. These indicators relate to operational and financial business of PUC / PWC, i.e. to human resource management, management of non-revenue water, increase of energy efficiency, establishment of cost accounting and cost centres, asset management, application of tariff methodology and tariff calculation. Besides that, Consultant shall ensure high quality technical support to strengthening of institutional, organisational and staff aspects of selected LSUs, especially regarding organisation of provision of long-term efficient and sustainable water services and their development, as well as supervision over business (work) of PUC / PWC.

Consultant should have in mind that to selected PUC / PWC will be offered general technical support and assistance which includes (but does not have to limited to) on-work site training; workshops for smaller works groups; development and facilitation of training for capacity strengthening; advisory assistance; direct technical support and execution of specific activities; enabling and support to joint activities with employees of LSUs and PUC / PWC; monitoring of execution of planned activities of LSUs and PUC / PWC, where applicable, and counselling on necessary improvements when possible. In its approach and methodology for realisation of this Terms of Reference it is expected of Consultant to propose type of support that ensures effective, economic and sustainable results.

Principles of horizontal work that need to be translated into methodology of the Consultant include: i) inspiring exchange of best practices and peer-to-peer learning between various LSUs and PUC / PWC; ii) proposing approach that ensure that all separate activities conducted within PUC / PWC fit into broader system of LSUs and their structures and processes; iii) encouraging strong ownership of PUC / PWC in all work areas; iv) intensification of broader cooperation, interaction and coordination between PUC / PWC, LSUs and LSU Councils; v) in all cases, support provided to PUC / PWC is ensured in direct interaction with responsible employees, whereby increases learning and development of capacities of technical support users (unlike approach where experts are doing all the work for LSU and/or PUC / PWC).

Results, progress, trends, remarks, challenges, achievements, learned lessons and concrete results are than recorded in concise reports (for each LSU and for each PUC / PWC, as described in Section 4. Main results and deliveries of project activities / tasks).

Support to LSUs and PUC / PWC is envisaged and realised within broader set of improvement areas described in detail later on. Each improvement area covers certain number of activities that LSUs and PUC / PWC have to execute in short-term and mid-term period. In that sense, these activities provide contours for specific job that needs to be done with support of the Consultant during next 3 years of contract duration. Consultant has to prepare a list of specific activities that need to be done (initiated or completed) for LSU and/or PUC / PWC within 36 months, and include them in elaborated methodology for this assignment.

Every improvement area is described later on, including general description, defined long-term objectives as well as list of activities to be implemented during the assignment (i.e. short-term). Consultant should be aware that this assignment is based on recommendations from earlier implemented projects (project MEG, from year 2016 – 2024) and Project ¨Utility of Future¨, year 2022 – 2023). Consultant should bear in mind that defined long-term objectives for each improvement area can be achieved even outside of timeframe for this assignment; therefore, the ones do not represent objectives for this specific Terms of Reference. However, based on minimum activities to be conducted in the next 27 months in each of the improvement areas, it is expected from the Consultant to determine certain progress objectives that will be achievable upon completion of the project.

All below described tasks and expected engagement of the Consultant are in accordance with the tasks foreseen by the MEG Project and Project "Utility of Future". Precise distribution of the engagement of the Consultant within contracted number of man/days will be presented in Inception report as per all tasks for each LSU and PUC / PWC. However, all mentioned tasks will not be or will not have to be implemented in all LSUs and PUC / PWC through identical engagement of the Consultant (the same

number of man/days) but the engagement of the Consultant and his intensity as per tasks in each LSU and its PUC / PWC will be defined during previous assessment of needs for improvements of organisation in provision of water services in LSU and improvement of business in PUC / PWC, which will be conducted in the first 6 months of the implementation of Water Services Modernisation Project. The engagement of the Consultant during implementation of the Project (second part of the Terms of References that lasts 18 months) will largely be impacted by the results of conducted analysis of shortcomings, definition of improvement measures according to operational and financial business indicators of PUC / PWC in each LSU. All necessary improvement measures and activities, including distribution of engagement of Consultant per all tasks shall be planned in individual action plans of each LSU and its PUC / PWC, and presented in Inception report which has to be approved by LSU, PUC / PWC and FMAWMF.

Besides that, realisation of all tasks and activities has to be coordinated and implemented in order to completely fulfil their objectives and achieve efficiency, which requires, among other, close cooperation of experts engaged in implementation of this assignment.

Institutional, organisational and staff, i.e. operational and financial improvements of business (effects) of LSU and PUC / PWC are based on recommendations from previously implemented projects in B&H (MEG Project and Project "Utility of Future") and application of strategic approach of *Plan, Do, Check, Act* (PDCA) cycle whose concept of management is based on the fact that improvement is always possible, and strong organisations stand out thanks to continuous efforts for improvements.

PDCA shall be used as basis for universal approach to each of identified improvement areas for efficiency, ensuring, in such way, approach to various areas like HR management, management of non-revenue water, increase of energy efficiency or establishment of appropriate tariff policy. If management and leading officials of PUC / PWC gain skills and discipline to apply PDCA in their future work, it is possible to reach recommendations for earlier implemented projects. During this assignment, proposal applicant shall initiate the first cycle of PDCA and finally adjust defined deadlines and responsibilities for next phases / periods, i.e. *Do, Check* and *Act*. Such approach also enables revision and updating that will initiate next cycles of PDCA, which leads to constant improvements in each of the suggested areas with recognised potential. Therefore, activities for each improvement area are contained in phases of *Plan*, *Do*, *Check* and *Act*, which increases achievability and sustainability of expected results of implementation of mentioned recommendations from earlier implemented projects.

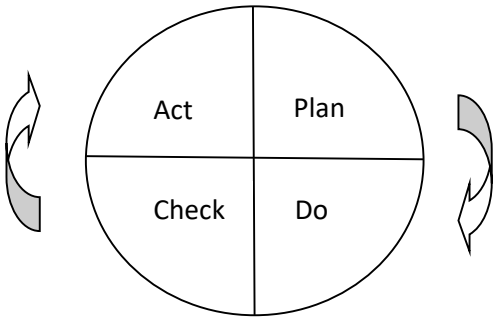

Image 1. cycle Plan Do Check Act

C Assumptions and Risks

C.1 Assumptions underlying the assignment

For the timely and effective implementation of the assignment, the following assumptions are made:

- Smooth and effective cooperation between all involved parties.
- Active participation and availability of delegated staff from LSUs and PUC/PWC throughout all phases of the assignment, including during the UoF diagnostic, action plan preparation and subsequent implementation.
- Completion of tasks according to the agreed schedule, work plan and allocated budget.
- Timely and adequate flow of relevant information between all parties ensuring that data required for diagnostics, planning and implementation is readily accessible.
- Continuous engagement of LSU and PUC/PWC management, and their commitment to applying the PDCA approach and implementing agreed improvement measures.

C.2 Risks

The following risks may affect the implementation of the assignment:

- Insufficient political support or lack of prioritisation for the reforms required to strengthen WSS service delivery at the local level.
- Limited cooperation between key parties leading to delays or reduced quality of outputs.
- Insufficient interest, commitment or cooperation from selected LSUs and their PUC/PWC, including lack of timely provision of data and documents necessary for assessments and preparation of action plans.
- Frequent staff rotation in LSUs or PUC/PWC, resulting in loss of institutional memory and disruptions in implementation.
- Delays in decision-making, approval processes or selection procedures, which may negatively affect the project timeline.

The Consultant must present a risk management plan in organisation and methodology.

D Scope of services

D.1. Description of the assignment

To achieve its objectives, the Project will be implemented through the following main activities:

- Assessment of the functioning of the selected municipal/city utilities in an operational, financial and technical sense and preparation of plans for implementation of the improvements.
- Supporting the implementation of selected internal organizational measures (business plans, internal organization improvement, data and information management, reduction of non-revenue water, increase in energy efficiency of pumping plants, development of cost accounting, tariff policy and calculation of water service tariffs and improvement of financial management and collection rates).
- Developing a system of performance monitoring.
- Ensure effective transfer of knowledge and capacity building of local government staff and utility companies. The Consultant shall provide on-the-job training and formal workshops to enable beneficiaries to apply the developed tools and recommendations after project completion.
- The Consultant shall, where relevant, integrate gender and social inclusion considerations in the analysis and recommendations, ensuring equal participation and benefits for women and vulnerable groups.
- The Consultant shall consider climate change and resilience aspects in the analysis and recommendations, in line with international best practices.

D.2. Type of assistance and tasks

Water and Sanitation Services Modernization Project in FB&H

Section 1 – Previous assessment of needs of LSUs and PUC / PWC

In order to ensure that project measures and activities reach maximum and sustainable effect, it is necessary that the ones are defined in such manner to respond to specific needs for improvement of each selected LSU and PUC / PWC i.e. to be adjusted to current state and capacities in each selected LSU and PUC / PWC. For that purpose, first it is necessary to conduct analysis of existing state and identify individual needs for improvement in 20 LSUs and their PUC / PWC though execution of individual diagnostic assessment.

Previous analysis of existing state and assessment of needs for improvement is necessary to be conducted in a way that each project LSU and its PUC / PWC with appropriate support of the Consultant, conducts systematic analysis of current performance according to improvement areas, and plan desired level of performance and define activities/measures of improvement that will lead to reaching desired effect/performance (progress) as well as their implementation dynamics. In this way, besides definition of specific and targeted measures/activities for each LSU and their PUC / PWC it will enable taking over ownership over the process because the very LSUs and PUC / PWC will be completely involved in process of analysis of current status, assessment of own capabilities, determination of desired achievement level, definition of measures and dynamics of its implementation. That way, full understanding of the LSUs and PUC / PWC shall be achieved about what needs to be done in order to reach specific effect, i.e. what changes have to be made to improve corporative governance and operational and financial business, as well as synergy of LSU and PUC / PWC in process of planning and implementation of necessary improvement measures.

Previous assessment of needs of LSU and PUC / PWC shall be conducted using tools of the World Bank entitled "Utility of Future" (UoF) that enables through detailed analysis to determine current status ("diagnosis") of LSU and PUC / PWC in key improvement areas. After analysis of current status and needs is conducted for each LSU and PUC / PWC, and with support of the Consultant, the desired improvement level is determined, LSU and PUC / PWC with the support of the Consultant will start with the planning of specific activities and measures for necessary improvements for each of the analysed improvement areas.

"Utility of Future" is the program of the World Bank for assessment of status of LSUs and PUC / PWC and guidance through transformation process in order to improve business of PUC / PWC and, finally, improve quality of provision of water services. Program helps each LSU and PUC / PWC to recognise where is it at, what are current capabilities and lead it through process of transformation to improve its performances and eventually service provided to its beneficiaries of the services.

"Utility of Future" is company focused on future, that provides reliable, secure, inclusive, transparent services, oriented toward beneficiaries of the services of water supply, collection and purification of waste water through best practices that enable it to work in efficient, resilient, innovative and sustainable way. Water services defined like that include:

- reliable: 24/7 continuous supply of water services;
- secure: upholding quality standards;
- inclusive: not exclude any party or group in provision of services;
- transparent: consider and publish operational data;
- oriented toward beneficiaries of the services: dedication of employees and giving priority to satisfaction of service beneficiary.

Besides that, focus on future and achieving goals in resilient and sustainable way includes:

- short-term, mid-term and long-term strategic planning;
- recognition of responsibility for maintaining growth, development and economic and social vitality of PUC / PWC and areas covered by service;
- ability to predict and overcome significant challenges;
- motivation, innovation and adaptability;

- effort to implement best adjusted/tailored practice for provision of efficient, resilient and sustainable services.

Specialised tool "Utility of Future" enables detailed analysis of key improvement areas with their topics:

- organisation and strategy: business strategy, monitoring and reporting, efficiency and continuity, digital strategy and management, digital company, project management and technologies;
- commercial business: managing relations with service beneficiaries, department for service beneficiary relations, measurement, invoicing, payment, orientation on service beneficiaries;
- technical operations: asset management, GIS, quality of drinking water, non-revenue water, waste water management, environment and climate changes, energy efficiency, "smart" operations;
- financial management: financial strategy and management, planning and budgeting, accounting and financial reporting, booking of fixed assets, control and transparency, financial sustainability and creditworthiness;
- management of human resources development: human resource management, attraction and employment, sustainability of human resources, training and development, performance management, remunerations, incentives and benefits, corporate culture and values, corporate digital and innovation culture.

Every topic is further analysed through certain number of relevant themes.

Besides that, very detailed analysis is foreseen in five additional improvement areas (so called dimensions): non-revenue water management, energy efficiency, environment management and climate changes, creditworthiness and gender equality, diversity and inclusion as well as special analysis in area of work of LSU.

Tool also enables that after execution of precise diagnostics of current business and definition of desired level of performance and business of LSU and PUC / PWC as per these key and additional improvement areas to generate possibilities for definition of measures/activities for business improvement as well as dynamics of their implementation.

Current status assessment and determination of desired level of business improvement of LSUs and PUC / PWC by using of tool "Utility of Future" covers and includes analysis of all 17 business improvement topics of LSU and PUC / PWC that are implemented within Municipal Environmental Governance (MEG) Project: level of operational independence of PUC / PWC, organizational structure, employees, service beneficiary relations, mapping (and modelling) of network, effective zoning, measurement program, non-revenue water management (loses), tariff policy, payments and income management, payment cycle, accounting procedures and management information systems, budgeting and business planning, financial management, inventory and fixed assets cycle, ownership and depreciation, water quantity and quality in the system, energy efficiency.

Main objective of the engagement of the Consultant for this part of Terms of Reference is to provide support in preparation and execution of assessment of current status and determination of desired, but at the same time realistic level of business improvement of selected LSUs and PUC / PWC, and analysis of needs for improvement and planning of specific activities and improvement measures.

Expected engagement of the Consultant

Consultant, in close cooperation with Federal Ministry of Agriculture, Water Management and Forestry (FMAWMF) and selected LSU and PUC / PWC, should implement specific tasks, as follows:

1. Preparation of previous assessment of needs for business improvement of LSU and PUC / PWC,
2. Execution of previous needs assessment for each LSU and PUC / PWC,
3. Development of gap analysis, definition of improvement measures and development of action plan of implementation for each LSU and PUC / PWC,
4. Preparation of Inception report.

Specific task 1: Preparation of preliminary assessment of needs for business improvement of LSU and

PUC / PWC

In order to prepare process of previous assessment of needs of LSU and PUC / PWC and mobilise project LSUs and PUC / PWC, Consultant should participate in initial meeting with representatives of FMAWMF (*kick-off*). Consultant after that shall participate in the training organised by FMAWMF in cooperation with the World Bank where he will get detailed presentation of approach, methodology and tool "Utility of Future". After that, Consultant needs to develop and propose detailed methodology and work plan which will be agreed with FMAWMF.

Specific task 2: Execution of previous needs assessment for each LSU and PUC / PWC

In accordance with agreed methodology and work plan, Consultant should provide support to project LSUs and PUC / PWC to, by using tool "Utility of Future", perform self-assessment of current status and define desired level of business and organisation of provision of water services. Support will be provided individually for each LSU and its PUC / PWC.

Consultant should prepare individual reports on the results of performed assessment of needs for business improvement for each LSU and PUC / PWC. Individual reports for each LSU and its PUC / PWC should be a combination of reports that are automatically generated in the tool "Utility of Future" and complementary information gathered by the Consultant.

Specific task 3: Development of gap analysis, definition of improvement measures and development of action plan of implementation for each LSU and PUC / PWC

For each improvement area and defined topics and themes, Consultant has to prepare analysis of shortcomings, and develop action plans of implementation for each LSU and PUC / PWC. Consultant should conduct analysis of current business level of LSU and PUC / PWC in relation to desired level, and together with representatives of LSU and PUC / PWC define improvement measures that will enable overcoming of differences between current and desired business level. In cooperation with LSU and PUC / PWC, Consultant has to perform analysis of proposed individual improvement measures in relation to their relevance and urgency, i.e. to volume of impact that realisation of that measure shall produce. In accordance with that, improvement measures need to be grouped per priority for realisation, and it is necessary to make action plans for business improvement for each LSU and PUC / PWC individually. Action plans for implementation of improvement measures should be short-term (100 days), mid-term (1 year) and long-term (5 years).

Specific task 4: Preparation of Inception report

Consultant shall, after execution of previous needs assessment for LSUs and PUC / PWC and preparation of action plans, prepare Inception report that will cover the phase of analysis of shortcomings and preparation of action plans, and selection of 12 LSUs and their PUC / PWC, including definition of priority activities per all tasks individually for each LSU and their PUC / PWC. Besides that, Consultant, according to real needs, in Inception report should propose distribution of number of man/days for each improvement measure, i.e. for each of 17 key tasks taking care that larger number of days should be given to those tasks / activities with whose realisation the largest effects / results will be achieved, i.e. improve operational and financial business indicator. The smallest number of man/days Consultant should distribute to those tasks / activities for which PUC / PWC have very good operational and financial indicators, which are done successfully and for which they do not need technical support of the Consultant. Simply, Consultant should focus technical support on strengthening of capacities of LSU and PUC / PWC in those areas for which LSU and PUC / PWC have the weakest performance.

Expected deliverables

In the following table the overview of task descriptions with expected deliverables are provided.

Task description	Expected deliverables
Specific task 1: Preparation of preliminary assessment of needs for business improvement of LSU and PUC / PWC	

Participation in initial meeting with FMAWMF	Minutes from initial meeting
Participation in the training for use of tool "Utility of Future"	List of the participants
Preparation of detailed methodology and work plan	Detailed methodology and work plan
Specific task 2: Execution of previous needs assessment for each LSU and PUC / PWC	
Support in self-assessment of current status and definition of desired business level	Reports generated by the tools "Utility of Future"
Preparation of individual reports on results of conducted needs assessment of LSUs and PUC / PWC	Individual reports on results of conducted needs assessment of LSUs and PUC / PWC
Specific task 3: Development of gap analysis, definition of improvement measures and development of action plan of implementation for each LSU and PUC / PWC	
Development of gap analysis and definition of improvement measures for each LSU and PUC / PWC	Gap analysis and improvement measures
Development of action plan of business improvement for each LSU and its PUC / PWC	Action plans of business improvement
Specific task 4: Preparation of Inception report	
Selection of 12 LSUs and their PUC / PWC	List of selected LSUs and their PUC / PWC
Proposal of distribution of number of man/days for each improvement measure for each of 17 key tasks	Distribution of number of man/days for each selected LSU and their PUC / PWC
Preparation of Inception report	Inception report

Section 2 – Strengthening of operational effectiveness and financial management of PUC / PWC

0. Support to Local Self-government Units

Consultant provides high-quality technical support with the objective of capacity strengthening of 12 LSUs and their PUC / PWC for provision of utility water services, including also the capacities of LSU Councils. The objective of this support is to improve their capacities to fulfil legal obligations for provision of quality water services to all their citizens. The other objective of this support is raising awareness of the councillors in LSU Councils on the structure of water services and necessary operational effectiveness followed by complete expenses return, which will contribute to more responsible decision-making about mentioned services. The third objective of this support is exchange of experiences related to business of LSUs and PUC / PWC, in a way to organise joint workshops and training sessions with multiple LSUs and PUC / PWC. Introduction of third objective shall enable LSUs and PUC / PWC to be able to exchange experiences and gain new knowledge and information.

Due to shortcomings in decision making, internal management and organisation it is necessary to provide consulting assistance, where needed, regarding application of already approved legal acts, i.e. to prepare special questionnaire that will specifically be related to everyday problems LSUs and PUC / PWC are facing in their work, and is related to adopted legal acts.

After that it is necessary to hold individually training with each LSU and PUC / PWC in finding legal solutions, and propose improvements for mentioned problems in the questionnaire. In the end it is necessary to deliver short reports on provided support, because that will improve managing capacities of LSUs.

It is also needed to approach to planning of larger growth of local self-government units, to cover detailed distribution of authorities between two institutional levels – entity and town/municipal. This

document shall deal with finding legal solutions that are not regulated completely between entities and LSUs or which are under the authority of LSU, and which are not enforced, and which will be in accordance with stipulations of the constitution and laws.

Objectives for this improvement area are defined, as follows:

- LSU have delegated and qualified/trained staff that can work on fulfilment of all responsibilities of LSU in provision of water services to all citizens.
- Councillors in LSU Councils have adequate capacities to overview and evaluate reports submitted by PUC / PWC on provision of water services and with it comments and suggestions can effectively contribute to improvements.
- Councillors in LSU Councils can understand all details on proposals for revision and correction of tariffs of water services with focus on separation of costs as per cost centres (functions) and in accordance with key principles of tariff determination, and especially principles of operational effectiveness, coverage of overall costs and affordability, but also the assessment whether the principles "beneficiary is paying" are respected, and ecological effectiveness and principle of rightfulness and equality.
- Public Service Agreements (hereinafter: Contract) that precisely define rights and obligations of LSUs and PUC / PWC are agreed and signed. Such Contract defines responsibilities of both parties (including for example provision of incentives for water services to socially disadvantaged categories), manners and conditions of implementation of contractual obligations and conditions for Contract termination and completion.

Expected engagement of the Consultant

During realisation of the assignment, selected consultant or more of them shall perform the following activities:

0.1 Enforcement of authorities of LSUs regarding water services

- Develop and agree with LSU, action plan for implementation of all program obligations of LSU that are coming from Task 0. Support to Local Self-government Units.
- Develop and propose appropriate guidelines related to organisation of water services provision on the LSU territory.
- Prepare work materials, organise and facilitate workshop / training related to authorities and responsibilities of LSU in relation to provision of water services. Besides water services management, this training should cover the following topics: (i) legislative-legal and institutional framework of water services provision; (ii) efficient and sustainable organisation of water services provision; (iii) employment and human resources management; (iv) ownership and asset management (fixed assets), including maintenance; (v) tariff policy, tariff methodology and calculation of water services prices; (vi) source protection, quality of water services and relations with service beneficiaries on whole territory of LSU; (vii) monitoring of key performance indicators. It is particularly necessary to process roles and responsibilities and capacities of all stakeholders involved in the process of provision of public water services on the LSU territory, communication and coordination of jobs and tasks with members of management/steering committees of PUC / PWC, and define monitoring and reporting on implementation of Public Service Agreements (Contract). Target group of the workshop is: responsible officials from authorised services / departments of LSUs and relevant representatives of LSUs responsible for supervision and organisation of water services provision (Mayor, secretary of the LSU).
- Prepare and organise training(s) for delegated LSU employees related to support to strengthening of communication and supervision of LSU over PUC / PWC. LSU shall nominate and delegate employees responsible for enforcement of LSU authority in area of water services provision, communication, coordination and implementation of plans, projects and activities with PUC / PWC, as improvement of operational and financial effect of PUC / PWC through implementation of water services modernisation project. LSU shall support and ensure full participatory inclusion of delegated employee into all activities of organisation of

water services provision on the LSU territory, in the activity of planning and supervision over implementation of plans by PUC / PWC, as well as activities of LSU related to preparation and implementation of capital infrastructure investments.

- Prepare work materials, organise, and, for representatives of authorised services of LSUs responsible for organisation and supervision of water services provision on LSU territory, facilitate workshop / training related to access to financing and preparation and implementation of capital infrastructure investments. During training it is necessary to cover the following: (i) projects cycle of development banks; (ii) access to financing of international financing institutions and development organisations; (iii) introduction to FIDIC contracting methods; (iv) organisation of project implementation units and steering committees for supervision of project implementation (capital investments); (v) preparation and execution of campaign of awareness raising of citizens, service beneficiaries for the purpose of increase of connections to the systems.
- Provide support to analysis of part of existing rule-books on internal organisation and systematisation of work positions and other sub-laws of LSUs related to utility assignments by analysing obligations of LSUs related to water services provision that are coming from provisions of existing laws and sub-laws of the higher levels, as well as LSU acts. With the objective of complete enforcement of all authorities of LSU in water services, and based on findings of conducted analysis, propose improvement measures, i.e. necessary changes and additions of existing rule-book on internal organisation and systematisation of work positions in LSU in draft form, and consider those and agree on them jointly so they can be adopted. If systematised work position for delegated employee does not exist in existing rule-book on organisation and systematisation of work positions of the LSU, Consultant shall propose description of work position into the one in draft form and deliver it to representatives of LSU authorised department. After joint consideration, agreement and finalisation, LSU representatives shall in cooperation with the LSU Mayor initiate process of change and additions to the existing rule-book on internal organisation and systematisation of work positions of the LSU.

0.2 Training of selected officials of the LSU related to organisation of water services provision

- Prepare work materials, and in cooperation with representatives of authorised services of LSUs responsible for organisation and supervision of water services provision on the territory of LSU, organise and facilitate workshop / training related to authorities and responsibilities of LSU in relation to provision of water services. This training should cover the following topics: (i) legislative-legal and institutional framework of water services provision; (ii) efficient and sustainable organisation of water services provision; (iii) employment and human resources management; (iv) ownership and asset management (fixed assets), including maintenance; (v) tariff policy, tariff methodology and calculation of water services prices; (vi) source protection, quality of water services and relations with service beneficiaries on whole territory of LSU; (vii) monitoring of key performance indicators. It is particularly necessary to process roles and responsibilities and capacities of all stakeholders involved in the process of provision of public water services on the LSU territory, and define monitoring and reporting on implementation of Public Service Agreements (Contract). Target group of the workshop is: responsible officials from authorised services / departments of LSUs, members of management/steering committees of PWC/PUC and relevant representatives of LSUs responsible for supervision and organisation of water services provision (Mayor, secretary of the LSU), managers of PUC/PWC.

0.3 Analysis of existing legal / regulatory framework

- Provide support to representatives of LSU responsible for organisation and supervision of water services provision on the territory of LSU in conducting analysis of existing legal framework (environment) which regulates water services provision and the way of establishment, organisation and operation of PUC/PWC. Analysis should cover laws and sub-laws of higher levels and LSU acts related to water services provision. Based on conducted analysis it is necessary to assess does existing legal framework adequately permits and

encourages certain level of autonomy of PUC/PWC in relation to LSU in order to ensure long-term effective and sustainable business of PUC/PWC. In case that conducted analysis shows that legal framework does not allow and does not encourage certain level of autonomy of PUC/PWC in relation to LSU, consultant shall advise on necessary changes and additions to existing regulations. Findings, recommendations and final report shall be presented and discussed with responsible representatives of LSU and PUC/PWC including decision-makers from LSU and management of PUC/PWC.

- Provide support to authorised departments of LSU on the basis of existing regulations to prepare new or improve existing sub-laws, decisions, rule-books, procedures and other documents whose need will come from adopted contract on provision of public water services. Based on improvement of sub-law documents, LSU shall provide support to the management of PUC/PWC to change and supplement existing internal acts or develop and adopt new ones.
- Provide support to LSU in analysis of work of bodies of PUC/PWC (assembly, steering committee, management) and establishment of regular and continuous monitoring and supervision of PUC/PWC work by LSU, including development and application of new tools and procedures. Support covers analysis of Rules of Procedure (rule book) on the work of assembly and steering committee of PUC/PWC, and proposing of necessary changes and supplements to Rules of Procedure (rule book) on the work in form of draft and its revisions, agreeing upon and adoption.

0.4 Contract on provision of public water services

- Consultant shall prepare draft contract on public services (hereinafter "Contract") that has the objective to precisely define rights and obligations of LSU and PUC/PWC, and will support its adjustments according to the requests and advices from both sides. Contract between LSU and PUC/PWC shall define roles and responsibilities of both sides, manners and deadlines of execution of contractual obligations and conditions for termination and completion of the Contract. Contracts should support provision of public water services to end users in accordance with valid quality standards for these services.
- Draft Contract must be prepared and presented to LSU and PUC/PWC before the end of year 2025. Consultant shall raise awareness of LSU Council, Mayors, relevant departments, management of PUC/PWC on importance and full application of the Contract. Consultant shall provide support with necessary discussions and revisions of draft Contract, which should lead to its final signing before the completion of this assignment. Contract should:
    - ✓ Clearly regulate responsibility of bookkeeping of long-term assets, including recording of overall existing long-term assets with revalorisation of value of recorded long-term assets and repeated revalorisation of long-term assets that are not recorded anywhere;
    - ✓ Clearly regulate financing of ongoing and investment maintenance of overall utility infrastructure (including sources of funds and processes of their use);
    - ✓ Clearly organise authority and funding of capital investments;
    - ✓ Clearly regulate procedure for determination of tariffs based on key principles of "cost return", "economic effectiveness", "consumer pays", "rightfulness and equality", "affordability", but also the principles of "preservation of natural resources". Define responsibility of LSU for evaluation of level of fulfilment of all defined principles, emphasising principle of economic effectiveness, and, if it is fulfilled in satisfactory manner, ensure full return of costs (if possible as per approved tariff, if not, then with own financial means);
    - ✓ Clearly regulate responsibility of LSU for development of policy and plan for subsidizing vulnerable categories, including responsibility to conduct periodic research of affordability; strategy of subsidizing will be developed in accordance with the standard that the invoice for water supply, drainage and purification of waste water services does not exceed 4% of average monthly household income (level of affordability);
    - ✓ Clearly regulate responsibility of LSU for preparation of debt payment plan for those public companies owned by LSU that have large debts toward PUC/PWC for

provided water services (those large debts have to be paid in a reasonable time/deadline);

- ✓ Clearly define employment policy in LSU, that will lead to long-term objective of optimum number of persons employed in (approximately 1 employee on 1,000 citizens service beneficiaries);
- ✓ All these annexes to the Contract should define direct responsibilities (per functions: Mayor, director, executive director, department chief, work unit manager and similar) as well as time frames / deadlines.
- ✓ LSU and PUC/PWC should define implementation plan for Contract on provision of public water services, implementations, bearers of implementation of all Contract provisions, deadlines for implementation and supervision over Contract implementation.

- Consultant shall, for representatives of LSU and PUC/PWC, propose template for preparation of report on implementation of the Contract on provision of public water services by the committee for monitoring of implementation of mentioned Contract. Consultant shall provide support to representatives of LSU and PUC/PWC during implementation of Contract and provide them with counselling support during preparation of report on Contract implementation. According to mentioned report, Consultant will prepare brief report on implementation of all obligations defined by the Contract by LSU and PUC/PWC.

0.5 Subsidizing socially disadvantaged categories of population

- Provide support in regulation of responsibilities of LSU for development of policy and program of subsidizing socially disadvantaged (vulnerable) categories of population, including preparation of draft program / decision on subsidizing portion of costs of utility water services for water supply, drainage and purification of waste water for socially disadvantaged categories of population.
- Provide support to authorised services / departments of LSU in consultations with social services Centres and PUC/PWC regarding definition of users of social services whose water services will be subsidized.
- Provide support in preparation and adoption of transparent procedures for subsidizing payments for water services for socially disadvantaged categories of population, follow their initial implementation, with provision of adequate advices and proposal of improvement measures, as needed.
- Provide advisory support in preparation of reports by LSU on achieved progress in enforcement of the policy and program of subsidizing socially disadvantaged categories of population and its presentation on the LSU Council.

0.6 Decisions on measures of collection of due, and not collected receivables from legal entities owned by LSU

- Provide support to joint analysis of LSU and PUC/PWC regarding due, and not collected receivables from legal entities owned by LSU and based on findings prepare and propose draft Decision on measures of collection of due, and not collected receivables from legal entities owned by LSU. Based on conducted consultations with all relevant stakeholders proposed Decision shall be additionally revised, improved and adopted by LSU.
- Provide support in enforcement of Decision on measures of collection of due, and not collected receivables from legal entities owned by LSU. Prepare overview of what has been done up to now regarding not collected receivables, problems they are facing, why is there in most PUC/PWC small percentage of collected receivables (fees), what is the obstacle and problems that appear in that process.

0.7 Asset management (fixed assets) owned by LSU

- Provide support to representatives of LSU responsible for organisation and supervision over water services provision on the territory of LSU to clearly regulate responsibility of bookkeeping fixed assets, including procedures of recording all existing fixed assets (assets) with repeated revalorization of not recorded assets and revalorization of value of fixed assets recorded in LSU and PUC/PWC.

- Provide support to representatives of LSU responsible for organisation and supervision over water services provision on the territory of LSU to clearly regulate funding of ongoing and investment maintenance of existing utility infrastructure owned by LSU that serves for everyday provision of water services, including determination of sources of funds and procedures to use those financial means.
- For the purpose of reaching long-term quality of water services and sustainability of constructed utility infrastructure it is necessary to provide support in preparation of procedures of joint planning of LSU and PUC/PWC so the development plans and investment maintenance plans of PUC/PWC would connect and harmonise with plans of capital investments of LSU. Support should cover preparation and implementation of capital investments, regulation of responsibilities for transfer of fixed assets (assets) onto operation and maintenance, record keeping of assets in use, calculation of depreciation and funding of investment maintenance from the process of water services and similar.

0.8 Tariff policy and application of tariff methodology

- Provide support to representatives of LSU responsible for organisation and supervision over water services provision on the territory of LSU to develop and adopt procedures for calculation, proposing and adoption of tariffs (prices) of water services based on key principles.
- Provide support to representatives of LSU responsible for organisation and supervision over water services provision on the territory of LSU in process of calculation, consideration and adoption of tariffs (prices) of water services in accordance with adopted tariff methodology, including support in presentation of calculation and structure of tariffs (prices) of water services with multi-year plans of adjustments of those on the LSU Council.

1. Level of operational autonomy of PUCs/PWCs

In most local governments, the efficiency and sustainability of PUCs/PWCs largely depends on the institutional, organizational and human resource capacities of the local government. If the local government organizes the provision of water services on its territory, in accordance with applicable regulations and standards of responsible governance, with clearly defined roles and responsibilities of all participants in the process of providing public water services (mayor, local government council, competent services or departments for municipal services, members of the supervisory boards and assemblies of the PUCs/PWCs, management and competent services/departments of the PUCs/PWCs), the performance of the PUCs/PWCs, in most cases, can be assessed as above average, demonstrating a very high level of operational and financial efficiency and sustainability.

However, if the local government bases the organization of water service provision largely on political decisions and political influence on the PUC/PWC, while also implementing social policy through water service prices, while ignoring the fact that the PUC/PWC are in fact companies established under the Law on Public Enterprises and the Law on Business Companies, the efficiency and sustainability of the PUC/PWC in the long term becomes very questionable, and very often in such cases the PUC/PWC ends up in bankruptcy.

In addition, the efficiency and sustainability of the PUC/PWC's operations may be additionally burdened in the event that the PUC/PWC does not have established appropriate mechanisms for business cooperation with the buyers of its services (service users), i.e. if there is no precise database on all service users and if the PUC/PWC does not have signed individual service contracts with all service users, legal and natural persons. In such cases, efficient and sustainable collection of delivered services becomes more than questionable.

The objectives for this improvement area are defined as follows:

- The contract on the provision of public water services, which clearly defines the rights and obligations of the local government and the PUC/PWC, is fully implemented, regularly monitored and updated, and its implementation is regularly reported to the Local Government Council.

- The PUC/PWC has signed individual service contracts with all service users (legal and natural persons).
- There is an established and regularly updated precise database of all service users.
- Procedures for including priority investment and maintenance plans for the PUC/PWC in the local government capital investment plans have been developed, adopted, and are being implemented in practice.
- Representatives of the local government and PUC/PWC have been trained in the preparation of a project summary (*project fiche*).

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Collect and analyse existing individual service contracts with all service users, legal and natural persons, and propose possible changes and amendments to these contracts. In the event that the PUC/PWCs do not have an established contractual relationship with their service users, the Consultant will draft such a contract and propose it to the PUC/PWC management for consideration and approval. The Consultant will support the consideration of the proposed documents in draft form, provide the necessary clarifications and, with his advice, help the PUC/PWC management to adopt the mentioned contracts.
- The Consultant will draft the procedures for including the priority investment and maintenance plans of PUC/PWC, which are defined by the business plan of PUC/PWC, in the capital investment plans of LSU and propose the same to the management of PUC/PWC and the competent department of LSU for consideration and adoption. The consultant will support the consideration of the proposed documents in draft form, provide the necessary clarifications and, with his advice, help the competent LSU department and the PUC/PWC administration to adopt the mentioned procedures.
- The Consultant will develop a training concept for the employees of LSU and PUC/PWC and conduct practical training on creating project summaries (project fiche). For this purpose, the Consultant will create a special template for creating a project summary and give recommendations related to access to financing from domestic and international financial institutions and donors. Based on the conducted training and the created template, the representatives of LSU and PUC/PWC will jointly draft the project summary and submit it to the Consultant for consideration and comment. After receiving comments from the Consultant, the representatives of LSU and PUC/PWC will jointly finalize the project summary.

2. Organizational structure of PUC/PWC

The effectiveness of the existing organizational structures of PUCs/PWCs, most often defined by the rulebook on internal organization and job classification, was analysed during the implementation of several previous similar projects and measures were provided to enable monitoring of financial results, eliminate potential cross-subsidies between different services or categories of service users. The current levels of the number of employees in PUCs/PWCs were analysed and steps were proposed to align this number with internationally accepted ones, as well as to introduce employee performance evaluations.

Most PUCs/PWCs did not pay special attention to establishing an organizational structure, and in particular not to an organizational structure that would improve management. This refers to the division of organizational units and specific responsibilities of employees through duties and job descriptions. Job classifications were often not updated and therefore did not correspond to the actual state of the PUC/PWC organization or the actual responsibilities of employees. Furthermore, PUCs/PWCs do not monitor the effectiveness of the established organizational structure, and therefore do not take any steps to improve it. Very often, various jobs are left insufficiently defined in internal organizational

documents or a larger number of employees than necessary is predicted, which all opened up employment opportunities through political influence and nepotism.

Given the application of the full-time employee employment approach, there are positions that can be merged or combined with other jobs and tasks (activities), while at the same time the PUC/PWC lacks several necessary expertise (for example: relations with service users, effective management of non-revenue water, mapping and GIS). The majority of PUCs/PWCs are not organized in accordance with the services they provide, which also makes it difficult to allocate costs by cost centres (by applying the distribution, that is, recording costs by services provided by PUCs/PWCs). Lines of responsibility and reporting are often unclear, overlapping, or not defined at all.

The objectives for this improvement area are defined as follows:

- An efficient and simple organizational structure has been established that enables the successful operation of all services / departments and ensures high-quality service provision to service users.
- Duties that are important for effective operation have been formally defined, including those related to relations with service users, effective management of non-revenue water, etc., all in accordance with the principle of full-time employee equivalence.
- Job classification is regularly updated to ensure continuous improvement of efficiency.
- An appropriate organizational structure (including employees) has been established that enables effective provision of water services. The responsibility of the organizational structure is to ensure the following:
    - ✓ Provision of quality drinking water to the population in an efficient and reliable manner;
    - ✓ Delivery of a high level of service to service users, transparency and quality of reporting and monitoring of performance management.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Develop (upgrade, if it already exists) the work regulations and/or internal organization regulations and job classification in the PUC/PWC, including defining the needs for optimizing the organizational structure of the PUC/PWC.
- Support the adoption and implementation of newly established regulations (interim if necessary, when the targeted regulations differ significantly from the existing ones).
- Support the assessment of the effectiveness of the implemented changes, using selected key performance indicators (KPIs).
- Assess and report on the implementation of the established organizational structure, emphasizing the implementation of all job positions important for effective operation, such as user service relations, effective management of non-revenue water, energy management, etc.
- Provide support for the establishment and implementation of monitoring and evaluation of the effectiveness of the established organizational structure and, based on such evaluation, provide recommendations on necessary adjustments in accordance with the results. The above activity will be carried out in close coordination with the competent person appointed by the PUC/PWC, in order to ensure a clear definition of responsibilities and capacities in the PUC/PWC for the continued implementation of these tasks after the completion of the water services modernization program.

The Consultant will treat all positions as requiring 'full-time equivalent' employment (40 hours of work per week), which allows any employee to be engaged in several tasks or multiple positions, allowing employees to be more flexible and efficient in their work (e.g. plumbers also work on acoustic leak detection, flow and pressure measurements, leak repairs, construction of new connections, etc., depending on what is needed at the time).

3. Employees/Personnel

During the implementation of previous similar programs, in the majority of evaluated PUC/PWC, an excessive number of employees was determined, i.e. an unnecessary surplus of a certain number of employees. The adopted reference value for the number of employees in effective PUC/PWC is 1.0 to 1.2 employees per 1,000 residents- service users or 4 employees per 1,000 connections of service users, depending on the complexity of the system. The size of the PUC/PWC was also taken into account. A check was made as to whether the existing jobs justify full-time engagement.

In addition, during the implementation of previous similar programs, it was also determined that the Work Rulebook establishes sanctions (punitive measures) in case of non-fulfilment of duties, i.e. non-performance of delegated duties and tasks, however, these measures are used quite rarely. Examples have shown that these measures are not implemented when employment is done under political pressure or in cases of nepotism. Performance evaluation at all levels of PUC/PWC, measures to reward or punish employees based on their results usually do not exist or, if they do exist, depend solely on the direct superior.

The objectives for this improvement area are defined as follows:

- A legally compliant policy for rationalizing the number of employees has been prepared, adopted and implemented. The number of employees is in line with the adopted standard of 1.0 to 1.2 employees per 1,000 residents- service users, and is achieved by applying the adopted and implemented legally compliant policy for rationalizing the number of employees.
- Temporary suspension of further employment, with a defined goal of the optimal number of employees and a deadline within which it can be achieved.
- Descriptions of all job positions have been established, with the aim of ensuring a weekly engagement of 40 hours of working time and optimization of the required number of employees.
- Evaluation of employee performance is carried out at all levels of the PUC/PWC, including measures for rewarding or punishing employees for good or poor performance or even non-performance.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Establish baseline (initial) values at the beginning of the implementation of the water services modernization program and conduct an analysis of the current number of employees and their actual engagement.
- Create a draft proposal for long-term rationalization of job positions, aligned with applicable legislation.
- Support the discussion and revision of the draft proposal for long-term rationalization of job positions towards its finalization and final adoption with relevant internal documents of the PUC/PWC, after raising the awareness of local government decision-makers about the need to implement optimization of human resource management.
- Provide support for the implementation of the adopted long-term rationalization of job positions.
- Provide support for the development of an internal act on the temporary suspension of further employment until the adoption of a rationalization plan and the start of its implementation (in the case of natural departure of employees (retirement, departure to another employer, etc.; for key positions, new employees will be hired).
- In order to optimize employment in the long term, propose a draft document with detailed descriptions of all jobs, or job classification (while simultaneously optimizing the required number of employees and applying the "full-time" principle). Update the existing job classification for new positions required to manage new work units, for example: a wastewater treatment plant (WWTP).

- Provide support for the discussion and revision of the draft document with detailed descriptions of all positions, until final adoption with relevant internal documents.
- Assess and report on the implementation of the adopted document on long-term rationalization of job positions, in order to apply the principle of full-time employment, as defined in the adopted document with detailed descriptions of all job positions.
- Provide support for the development of a draft rulebook that will enable the introduction of employee performance appraisal at all levels in PUCs/PWCs, starting with setting goals for each job position, selecting criteria for employee performance appraisal, and monitoring and reporting on related incentives (rewards) and disincentives (sanctions).
- Provide support for the discussion and revision of the draft rulebook that will enable the introduction of employee performance evaluation at all levels in PUCs/PWCs and the proposal of goals for each job position, the selection of criteria for employee performance evaluation and related incentives/disincentives, until final adoption with relevant internal documents.
- Provide support to PUC/PWC managers in evaluating the performance of all employees.
- Provide support for the development of draft procedures for the education, training and development of employees in the operations of PUCs/PWCs in order to improve the performance of employees who are found to be ineffective.
- Provide support for monitoring the implementation of adopted reward and sanction measures for employees of PUCs/PWCs.

4. Relations with service users (consumers)

Most PUCs/PWCs do not have a separate department and/or adopted procedures for relations with service users, nor have they formally delegated these tasks through their own regulations on internal organization and job classification. The most common cases are that service users' complaints are taken over by the secretary of PUC/PWC who would simply forward the call to other departments based on the nature of the complaint. The entire process is thus fragmented into multiple departments, and problem solving depends on the goodwill of the staff. In most PUCs/PWCs, complaints are recorded manually (if they are recorded at all) and without an electronic database. Also, most PUCs/PWCs do not actively collect feedback from service users on satisfaction with the services provided, while some PUCs/PWCs do not collect feedback at all.

The objectives for this improvement area are defined as follows:

- An employee responsible for relations with service users has been delegated and trained.
- Procedures for relations with service users and regular monitoring of their implementation have been defined.
- Procedures for collecting feedback on satisfaction with the services provided have been defined and are regularly implemented.
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- An Operational Plan for communication with service users in the event of a need to increase tariffs has been developed and is being implemented, in order to ensure that service users are informed about the reasons for tariff changes and to ensure an appropriate collection rate.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities for each PUC/PWC:

- Provide support to PUC/PWC to delegate responsibilities for relations with service users to employees through internal redistribution of jobs and tasks (if possible through a systematized job position or specific working hours for relations with service users (for example, 4 out of 8 working hours) and provide appropriate training to the delegated employee (prepare a suitable training program).

- Create draft procedures for relations with service users, which regulates the communication procedure of PUC/PWC with users of water services, the method of solving their requests, complaints, remarks and inquiries, and evaluation of their satisfaction with the services provided by PUC/PWC, which, among other things, will include and a short operational plan for relations with service users and analysis of selected performance indicators (performance, success). Support consideration of procedures in draft form and possible amendments and their adoption.
- Develop a simple software module/application for collecting complaints, requests or improvement suggestions from service users and train a delegated employee for customer relations to implement it.
- Create a draft of a minimum set of information (e.g. on water quality) that needs to be regularly updated and presented to the public, define update periods and presentation methods (website, local media...).
- Create a draft operational communication plan in the event of an increase/correction of water service tariffs and review it with PUC/PWC and LSUs and improve it according to comments. Support the implementation of the operational plan, evaluate and report whether the tariff change has affected the rate of revenue collection.
- Support the implementation of procedures and operational plan for customer relations.
- Assess and report on the implementation of the adopted procedures ensuring also relevant support on request; propose improvements to the adopted procedures where necessary and monitor implementation.

5. Network mapping and GIS

The baseline assessment during the implementation of several previous similar projects in B&H considered mapping the existing water supply and sewerage system in electronic format, which is crucial for establishing appropriate zoning of the water supply network, as well as for effective management of non-revenue water. In addition, the assessments examined the mapping capacities of PUCs/PWCs (human resources and available equipment) and the existence of base maps (cadastral, topographic or orthophoto). The findings show that many of the PUCs/PWCs have the capacities (human resources) to develop a digital cadastre of the water supply and sewerage network, but are quite limited in implementing a full Geographic Information System (GIS) (where water supply and sewerage network mapping is developed at some level within the PUC/PWC). PUCs/PWCs should be supported in developing a digital GIS cadastral plan of the water supply and sewerage systems and linking the database of service users with the database of the business information system, so that at a later stage, based on the prepared maps, a hydraulic model could also potentially be developed. PUCs/PWCs generally do not have licensed software, so it is necessary to purchase such licensed software or use free software. Some PUCs/PWCs lack basic maps and limited research is needed to find and acquire them. The aforementioned assessments also showed that all PUCs/PWCs need additional training to strengthen their capacity to use certain software (mapping and GIS, but also hydraulic modelling).

The objectives for this improvement area are defined as follows:

- Appropriate background maps are available (e.g. digital cadastre of land and terrain, digital address model, scanned and georeferenced cadastral maps, scanned and georeferenced ortho-photo maps, satellite images, etc.).
- The water supply and sewage network has been mapped, as well as all infrastructure facilities (such as house connections, equipment, facilities (pumping stations and reservoirs)) with the main characteristics recorded in GIS and clearly defined layers, coordinated with the service/department for geodetic affairs of the LSU, graphical data and descriptive attribute data.
- PUC/PWC employees are qualified and trained for the effective use of created maps and the entire GIS as support in the decision-making system for performance quality management.
- The network map is practically used for effective zoning (DMA and PMA) and/or hydraulic modelling, but it is also connected to service user databases (part of the business information system (BIS)) that enables composite queries on entries from both databases.
- GIS is linked to telemetry where appropriate.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shell perform the following activities:

- Provide basic maps that should be used for mapping the network.
- Prepare a draft of the primary and secondary water supply and sewage network where it has not been drawn, including drawing of water supply and sewage system facilities (reservoirs, pumping stations, etc.). If there are no drawings of the water supply and sewage network at all or only a small part exists, the Consultant will prepare drawings of the part of the water supply networks necessary to define a minimum of 4 measurement (DMA) areas in order to initiate the non-revenue water management process. The remaining parts of the water supply and sewage network need to be done independently by the PUC/PWC after the activities carried out by the Consultant. (with a file format that can be used by different software).
- Prepare symbols for infrastructure elements of the water supply and sewerage system; propose layers for drawings, graphical data and descriptive attribute data.
- Train and support PUC/PWC employees in mapping and GIS development, in cases where this responsibility has been delegated.
- Prepare and conduct training for delegated PUC/PWC employees on the topic of connecting GIS with business information systems (BIS) and management information systems (MIS) and prepare the basis for hydraulic modelling of water supply and sewage systems, modelling and modelling results, and the use of modelling results.
- Provide support to trained employees for further development of GIS, which will be agreed with the PUC/PWC. Support should be primarily focused on the development of house connections and the development of individually agreed tables of characteristics and their initial filling with data, where such data would be used for the purposes of spatial analysis and relevant decision-making (e.g. table of pipeline characteristics with materials, age, diameters, etc., tables of recorded interruptions, etc.). The Consultant considers the development of the above individually with the PUC/PWC. The Consultant reports in advance on the mapping by the PUC/PWC employees and suggest improvements, as necessary

6. Effective zoning

Appropriate zoning of the entire water supply system is necessary for the operation and maintenance of the entire water supply system, and in order to enable the most efficient management of non-revenue water. Of particular relevance is the establishment of district metering areas (DMA), which are considered a smaller and separable part of the water supply system, where the inflow and outflow of water are separately monitored and analysed (with the aim of assessing the level of non-revenue water quantities specifically for such a metered (DMA) area). Without the establishment of district metering

sections, it is impossible to determine the narrower zone of large water losses, and thus to define and take actions to eliminate them.

Defined areas are also used as a tool for proper pressure management in the water supply network. The water pressure in each area should be regulated in such a way that it is not too high to endanger the water supply system. Optimized pressure, which is still at a sufficient level for adequate water supply to all service users, also allows for a reduction in the level of leakage values in the water supply system. In addition to measuring the inflow and outflow of water in the metering area (DMA), it is necessary to establish pressure monitoring at least at characteristic locations within the metering area (DMA). During the implementation of previous similar programs, it was determined that the water supply network in most PUCs/PWCs was not yet (adequately or at all) divided into metering areas (DMA) and that regular flow and pressure measurements existed only in a few basic facilities. In addition, there was no regular monitoring of the pressure in the water supply network by zones/areas, although locations with excessively high pressure were recorded.

The objectives for this improvement area are defined as follows:

- Special metering (DMA) areas are established for the entire water supply system for each PUC/PCW. The exact number of metering (DMA) areas is determined depending on the size, configuration of the water supply network, water sources, pressures in the water supply network, age of the water supply network, type of service users, etc., and is in accordance with specific recommendations of IWA methodology on the size of metering (DMA) areas.
- Continuous (or possibly periodic in some locations) flow and pressure monitoring is established within each of the defined measurement (DMA) areas, and the measurement data is recorded and analysed and used to assess the water balance. In the case of long-term installation of measurement shafts with large water meters and pressure gauges, signal transmissions are set to enable data recording in the entire database.
- The pressure is optimized in each of the measuring (DMA) zones / areas.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Define all measuring (DMA) areas, using prepared electronic maps.
- Conduct training on defining and establishing metered (DMA) areas and their separation from other individual metered (DMA) areas, including training on preparing a list of all service users for each metered (DMA) area.

7. Measurement program

Flow and pressure measurement is not only a tool needed for volumetric billing services, but also a water supply system management tool used to estimate the water balance by metering (DMA) areas, based on the locations of the highest water losses, where repairs of faults (leakage) are primarily required.

Monitoring the functionality (operation) of water meters is the basis for billing for water supply services (and drainage and wastewater treatment, where applicable). According to the current legal framework, PUCs/PWCs are obliged to calibrate/replace water meters up to 40 mm in diameter every five years and water meters with a diameter of over 40 mm every three years. It is in the interest of each PUC/PWC that calibration/replacement is carried out in accordance with the deadlines prescribed by law, thus avoiding situations in which the water meter displays lower amounts than the actual consumption, which represents a direct loss for the PUC/PWC. In the case of large water meters, their measurement tolerance may be such that low flow is not recorded at all.

During the implementation of several previous projects in B&H, water quantity measurement in all PUCs/PWCs was characterized as weak and/or unsatisfactory, and is mainly carried out at water supply system facilities such as at water source intake (very often they are not measured at all, but the delivered water quantities are estimated using the characteristics of the pump and the number of operating hours), pumping stations and reservoirs, and databases with records of measurements are mostly non-existent. Measurement using metering (DMA) areas is very rarely present and therefore information on flow changes (especially at night) that indicate new leaks is not available; and individual household consumption measurements in residential buildings are rarely conducted. Calibration and legally prescribed replacement of water meters for service users are not carried out regularly (on average only 30% of the required); therefore, existing water meters in most cases show a smaller amount of water consumption than the actual one. There are households without functional water meters where the service is charged at a flat rate. All this significantly affects the financial indicators of PUCs/PWCs and can lead to poor business performance of such PUCs/PWCs.

The objectives for this improvement area are defined as follows:

- Continuous measurement of water production (intake) at the water source has been established and is functioning;
- Continuous functional measurement of water inflow and outflow from reservoirs, relief chambers, pumping stations has been established (hourly, so that night flow can be recorded separately);
- Pressure measurement, inflow and outflow of water quantities is carried out for each of the defined measuring (DMA) areas;
- Water consumption is continuously measured on the service user's water meter for all individual service users;
- All measured data (flow and pressure measurements) are stored in a database connected to GIS;
- All water meters are regularly calibrated and replaced, as prescribed by relevant regulations.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Create a simple database for storing measured data after measuring flow and pressure, and revise, adopt the same, and support PUC/PWC employees to start using it immediately.
- Conduct theoretical and practical training on flow and pressure measurements with recorded real measurement data (practical training with real measurement of flow and pressure in some of the defined metering (DMA) areas, using the Consultant's equipment if it is not available to PUC/PWC. The training includes recording data on flow and pressure measurements in a prepared database.
- Provide support in measuring flow and pressure for at least 4 metering areas (DMA) suspected of having large actual losses. These 4 metering areas (DMA) will be selected by the PUC/PWC, but with the support of the Consultant, with the aim of finding the largest leaks in the water supply system. Support includes providing the necessary measuring devices, if the PUC/PWC does not have them, as well as working together on measurements for two metered areas (DMA), and only monitoring for the other two.
- Create a document on the necessary installation of missing measuring devices within the water supply system, as well as the construction of the necessary measuring shafts (with flow meters, pressure loggers and signal transmission to the PUC/PWC database), if needed.
- Provide support and report on the implementation of recommendations from the previously submitted document on the installation of missing measuring devices (water meters) for measuring water input (inflow) and water output (outflow) from district metered areas (DMA).
- Develop a document on the installation and regular calibration of water meters for all service users (including timelines and budget projections), with the aim of achieving accurate

consumption measurement for all within a reasonable timeframe (taking into account available resources, both financial and human). This document should also include recommendations on the gradual introduction of electronic water meters with remote control and metering for all individual service users.

- Assess and report on the implementation of recommendations from the previously submitted document on the installation and regular calibration and replacement of water meters for all service users.

8. Management of non-revenue water

High values of non-revenue water are one of the most important issues in the management of PUCs/PWCs throughout the Western Balkans. Unclear responsibilities for regular maintenance of fixed assets, coupled with low prices and therefore a lack of financial resources for these activities, directly lead to the deterioration of the condition of water supply systems and the occurrence of increasing leakages (breakdowns). Investment maintenance often remains without a source of funds for regular renovation and reconstruction of water supply and sewage systems. Due to poor maintenance, the water supply network becomes obsolete and increasingly leaky, which causes real losses in the water supply network year after year and disrupts regular functioning. The value of real losses is often not even known, but only roughly estimated. It is necessary to develop a comprehensive water balance for all district metered areas (DMA) and the water supply system as a whole, in order to assess both real and apparent losses and thus identify the magnitude of this problem.

During the implementation of previous similar programs, it was concluded that most of the analysed PUCs/PWCs did not have a non-revenue water management strategy. Assessment of the water balance or detection of actual losses is not carried out regularly or periodically. PUCs/PWCs do not carry out preventive pipe replacement; pipes are replaced depending on available resources and after detection of visible leaks. Systematic practice of periodic assessment of performance indicators that would be used to improve non-revenue water management does not exist in most of these PUCs/PWCs. The registered percentage of non-revenue water ranged from 22 to 75% (in the majority of PUCs/PWCs it is greater than 50%), but even these indicators are only indicative; because they are based on estimates (e.g. one part of PUCs/PWCs does not measure the amount of produced water).

Less than half of the selected PUCs/PWCs have their own equipment for flow and pressure measurement and leak detection (flow meter, pressure logger, correlator, geophone, etc.) or trained employees to work with this equipment.

The objectives for this improvement area are defined as follows:

- The PUC/PWC management understands the benefits of regular and continuous management of non-revenue water, plans, monitors and supervises activities related to improving key performance indicators (KPIs) regarding non-revenue water management.
- The PUC/PWC has an operational plan for managing non-revenue water (which includes preventive replacement of old and deteriorated pipes, periodic water balance and evaluation of KPIs).
- PUC/PWC carries out preventive replacement of old and worn pipes.
- The water supply system is regularly monitored and reported by separate district metered areas (DMAs) (flow and pressure measurement), leak detection (faults) is carried out, and repairs are made immediately upon their discovery.
- The water balance is periodically assessed, as are selected performance indicators (KPIs) related to non-revenue water management.
- The value of the coefficient (factor) ILI is up to 4.0 for the entire water supply system (based on the implementation of non-revenue water management measures).
- The value of non-revenue water quantities for the entire water supply system amounts to 25% (achieved based on the implementation of non-revenue water management measures).

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Prepare and conduct training for representatives of the management (administration) of PUC/PWC for non-revenue water management that deals with several topics: (i) mapping; (ii) effective zoning; (iii) measurement; and (iv) detection of leaks (breakdowns); and includes (v) organization of reporting of the team/employees in charge of non-revenue water management in PUC/PWC.
- Prepare and conduct training for teams/employees on non-revenue water management covering several topics: (i) mapping; (ii) effective zoning; (iii) flow and pressure measurement; (iv) water balance assessment; (v) physical loss reduction; (vi) reduction of apparent losses; etc.
- Provide support for the development and adoption of an operational plan for the management of non-revenue water and support its implementation. The consultant will develop and propose a template that will be created by PUC/PWC. This operational plan should contain all activities that will achieve the target value of the ILI coefficient of 4.0 for the entire water system and/or the percentage of water losses in the amount of 25% in a realistic time frame for such activities. In the operational plan for each activity, their executors and possible financial resources necessary for their implementation should be determined. Monitor and verify and report on the implementation of activities from the operational plan for managing non-revenue water.
- Create and propose for use a simple database/register of data on leaks (breakdowns).
- Conduct theoretical and practical training of the delegated PUC/PWC team for non-revenue water management on water balance assessment using a simple application/software for this purpose. The practical training should be conducted with actual (real) measured flow and pressure obtained within one of the district metered areas (DMA), as well as for the entire water supply system on an annual basis. The training should include an evaluation of all key performance indicators (KPIs) related to this area, and will result in an evaluation of the water balance for all metered areas (DMAs) with the collected data.
- Conduct theoretical and practical training on acoustic leak detection (breakdowns). Practical training should be conducted on pipelines in district metered areas (DMAs), the same ones where the flow and pressure measurement program was jointly conducted by the non-revenue water management team and the Consultant. Based on the results achieved, provide brief recommendations for the most effective repairs. If the PUC/PWC does not have all the necessary equipment to carry out the task, the Consultant will temporarily provide its own equipment.
- Prepare a draft procedure for regular reporting of the non-revenue water management team on a monthly basis to management and the Consultant about the measurements and detection of breakdowns, the number of detected (and repaired) breakdowns, all according to the adopted operational plan for the management of non-revenue water. The Consultant will prepare a short report template according to which the non-revenue water management team will prepare monthly reports and report to management and the Consultant.
- Provide support in the assessment of the water balance for the entire water supply system on an annual basis, as well as for individual metered areas (DMA), using the flow and pressure measurement data collected by the previous task, for all selected metered areas, where such an assessment of the water balance can still be considered valid. If the PUC/PWC still does not have qualified personnel for such a task, the Consultant will take the lead on this task.
- Create and propose for adoption short, but individually adapted, guidelines on reducing apparent losses in the water supply system, and incorporate the planned activities into the PUC/PWC operational plan for non-revenue water management. Monitor and verify and report on the implementation of recommendations/activities from the guidelines for reducing apparent losses in the water supply system.
- Provide support to the loss detection team in acoustic leak detection (breakdowns). This support should be provided on pipelines in the district metered areas (DMAs), the same as

those where the flow and pressure measurement program was jointly conducted by the NRW management team and the Consultant. On Based on the results achieved, provide brief recommendations for the most effective repairs. If the PUC/PWC does not have all the necessary equipment to carry out the task, the Consultant will temporarily provide its own equipment.

- Prepare an individually tailored rulebook on daily/weekly water system monitoring procedures, with the aim of providing a basis for the most efficient asset management (investment maintenance), including procedures for detecting and eliminating physical and apparent water losses in the water system.

9. Tariff policy

During the implementation of previous similar programs, it was found that there are "complex" relationships between PUCs/PWCs and LSUs, which sometimes limit the effective operation of PUCs/PWCs. PUCs/PWCs often find themselves in a situation where they deliver water services and maintain water supply, drainage and wastewater treatment systems without adequate and comprehensive support from LSUs. The lack of LSU support is particularly evident in the process of adopting economic water service prices that should ensure full coverage of PUCs/PWCs' costs, which is their obligation under the provisions of the Law on Communal Activities of the FB&H and cantons. In many LSUs, water service tariffs are not reviewed and adopted frequently enough (sometimes for several years) due to the political decision to keep water service prices low. As a result, PUCs/PWCs are increasingly making financial losses, which increases the need for LSU subsidies to cover the operating costs of PUCs/PWCs. In addition, there is often an excessive number of employees in PUC/PWC, which causes a high share of employee costs in the operating costs of PUCs/PWCs, the inability to increase employee wages, which leads to an increase in employee dissatisfaction. On the other hand, it is still assumed that PUCs/PWCs need to increase tariffs for water services in order to be financially sustainable. This is not necessarily justified, if cost optimization measures have not been initiated beforehand (for example, reducing the excessive number of employees, reducing non-revenue water, increasing energy efficiency, etc.). For example, some of the existing municipal water service tariffs would be sufficient to cover operational costs if physical and administrative water losses were reduced or if the organizational structure and number of employees were adapted to the actual needs of PUC/PWC.

During the preparatory phase of the project, it was generally established as follows:

- Most PUCs/PWCs do not record costs by cost centres (according to the different types of services they provide), which makes it impossible to separate costs by type of service and explain individual types of costs in the price structure of water services.
- Most PUCs/PWCs do not have a detailed documented method of evaluation / calculation of tariffs.
- Most PUCs/PWCs do not conduct periodic checks on the affordability of water service prices according to average household/service user income/costs, nor do local governments have a subsidy strategy and databases of socially vulnerable categories of the population (vulnerable groups) who should be subsidized for part of the costs of water services.
- Most PUCs/PWCs apply internal cross-subsidization between different categories of service users (different tariffs for the same service: individuals, legal entities, industry, etc.), and do not apply the "user pays" principle.
- Most PUCs/PWCs do not ensure that the depreciation costs of all fixed assets used by the PUC/PWC in the delivery of water services are fully reflected in the structure of the water service tariff. The reason for this is that there are fixed assets in use that are registered with the local government or are not registered anywhere and depreciation is not calculated on them in the PUC/PWC. Therefore, a significant part of the depreciation costs of fixed assets is not reflected in the prices of water services, so the inflow provided from the prices of water services cannot fully finance the costs of regular investment maintenance of the entire municipal water infrastructure.

- Most PUCs/PWCs did not take into account the principle of environmental efficiency in accordance with the principles of preserving natural resources with tariff additions whose function would be to influence the reduction of consumption, and thus the reduction of water withdrawal from the environment.
- There is no consistent mechanism to ensure the application of the principle of "full cost recovery", as prescribed by the EU Framework Directive on Water Policy and the Laws on Communal Services of the FB&H and the cantons. At the same time, most PUCs/PSUs cannot confirm (explain) that all costs incurred are actually justified and optimized.

The objectives for this improvement area are defined as follows:

In accordance with the provisions of the Law on Principles of Local Self-Government in the FB&H, the Law on Communal Services of the Canton of the FB&H, the Law on Accounting and Auditing of the FB&H, the Law on Business Companies of the FB&H, the Law on Accounting and Auditing of the FB&H, International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), the Decision of the Government of the FB&H on the Adoption of the Methodology for Calculating Water Service Prices in the FB&H, the Water Services Modernization Program has defined the following goals for this area of improvement:

- The tariff policy ensures the implementation of the principle of full coverage of costs, including the principles of "economic efficiency" and "user pays".
- Costs are recorded by cost centres, separately for each of the services provided. All operational and investment maintenance costs are included in the tariff model, and environmental protection costs are also taken into account. The tariff model is fully based on an adequately established accounting system and cost accounting data.
- Gradual equalization of prices for all categories of service users, with the aim of avoiding cross-subsidization between different categories of service users.
- Setting an affordability limit of 4% of total household income for delivered water services (water supply, drainage and wastewater treatment). Regular surveys on the affordability of water services are conducted.
- The tariff adjustment mechanism is coordinated with the local government through an adjustment plan and the definition of a deadline for equalizing water service tariffs. LSU (mayor, council, relevant administrative bodies) are fully aware of the importance of appropriate tariff setting.
- Local governments have adopted and are implementing a policy of subsidizing socially disadvantaged categories of the population (vulnerable groups) and regularly update the database of subsidized service users.

Expected Engagement of the Consultant

During the implementation of the project assignment, the Consultant shall perform the following activities:

- Provide support for the consideration and adoption of a tariff methodology, based on the key principles set out in the document "Methodology for Determining the Minimum Basic Price of Water Services in the Federation of B&H" (water supply, drainage and wastewater treatment) and in accordance with applicable laws at the FB&H and cantonal levels.
- Prepare and conduct training for delegated employees of PUC/PWC and LSUs for application of tariff methodology and calculation of water service prices.
- Provide support to trained PUC/PWC employees in the process of calculating water service prices, individually for different water services in accordance with the tariff methodology. Cost projections for the upcoming period should be based on costs separated by cost centres, which include the costs of water meter depreciation and depreciation of municipal water infrastructure. PUCs/PWCs and LSUs will compare the calculated prices with the affordability level (4% of average household costs/income). In cases where the affordability level is exceeded, it will be necessary to propose potential cost optimization measures. The price change can be proposed as a gradual one if the difference between the existing and the

price calculated using the tariff methodology is high. The Consultant will prepare a report on the calculation of water service prices, indicating the year in which full cost recovery will be achieved, covering the depreciation costs of the entire municipal water infrastructure, i.e. equalization of water service prices for all categories of service users (elimination of cross-subsidization between different categories of service users).
- Provide support to representatives of LSUs and PUCs/PWC in preparing and presenting calculated prices for water services at local government council meetings.

10. Revenue collection and administration, billing cycle

Effective collection is directly linked to the adoption and implementation of revenue collection procedures. Billing management is also of great importance for proper revenue management, as payment entries should be completely separated by invoiced services and linked to the issued invoices.

During the implementation of several previous projects, it was determined that many of the selected public utility companies (PUC/PWC) do not have or do not apply the above-mentioned account receivables collection procedures, o payments were unposted in the total amount without being separated into amounts directly linked to each provided service or connected to any specific invoice. This has prevented analytical analysis of the collection by due date and by services in public utility companies (PUC/PWC), that issue invoices for multiple different services on a single invoice (e.g., water supply, wastewater drainage, waste collection, municipal fees, etc.). As a result, the total debt of the service beneficiaries is known, but it is not clear which services and/or periods the outstanding debts relate to. The usual practice of public utility companies (PUC/PWC) is that the most recent payment covers the oldest debt of the service beneficiary, unless it is clearly indicated which service delivery period the payment relates to. This situation also prevents an accurate assessment of the collection coefficient for specific periods, so it is mostly calculated as the ratio of invoiced revenue to outstanding receivables from customers in any given time period. This allows the collection rate indicator to exceed 100% in certain periods, particularly during periods of intensive collection campaigns. However, the end result is that public utility companies (PUC/PWC) on average have a lower collection rate than required, that is they have a collection period for receivables significantly longer than the recommended number of days (60-90 days). As a result, the performance indicator 'average collection period' remains high in a significant number of PUC/PWC. Most PUC/PWC do not regularly apply disconnection measures for non-payers or initiate legal proceedings for outstanding debts, and it often happens that overdue receivables become time-barred, making them impossible to collect, while still being reported as expected revenue in financial statements. In this way, the revenue in the financial statements is overstated. Since receivables are considered a form of cash equivalent, this is completely contrary to the actual situation, where it is not expected that such receivables will be collected, leading to the presentation of an unrealistic financial position of the public utility companies (PUC/PWC).

Most of the selected public utility companies (PUC/PWC) do not have clearly defined procedures that would be regularly implemented in the case of identifying illegal service beneficiaries or collecting from larger debtors. It is rare for PUC/PWC to have specific measures in place to encourage increased collection.

The service billing cycle is on monthly basis according to the law, although there are public utility companies (PWC/PUC) that issue invoices every 2, 3, or sometimes even 6 months, including service beneficiaries (customers) that most of the year live abroad.

The objectives for this area of improvement are defined as follows:

- Defined and adopted procedures for increasing service collection are applied.
- The collection rate for each service individually is more than 95%
- Collection is recorded separately for different services and is linked to the issued invoices.
- The public utility companies (PUC/PWC) have clearly defined and regularly implement procedures related to the detection and sanctioning of illegal service beneficiaries and debtors, which include (i) identifying illegal connections and disconnecting them, (ii) warning debtors and potential disconnections from the water supply network due to unpaid bills, (iii) applying legal instruments such as legal actions against debtors, (v) calculating interest in case of

payment delays, (vi) conducting awareness campaigns on the importance of paying for services, etc.
- The number of days for receivable collection within the range of 60 - 90 days.
- The collection cycle is optimized, taking into account the necessary periodic meter readings.

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Analyse all debts and revenues by type of service provided and due date, and provide advice (on accelerating collection or even writing off debts where unavoidable).
- Analyse the possibilities and, based on that, provide adjusted recommendations for writing off receivables older than one year for which collection cannot be expected (in accordance with all legal regulations).
- Organize training for receivables management in public utility companies (PUC/PWC) in accordance with international financial reporting standards (IFRS) and international accounting standards (IAS).
- Develop and adjust internal procedures for increasing collection, review their draft versions with public utility companies (PUC/PWC), and finalize them. After that, provide support for their implementation and monitor the achieved results.
- Prepare and deliver a report on the booking of revenues and expenses by service types, as well as a report on the measures taken for receivable collection, including providing advice and recommendations.
- Assess the potential for further optimization of the water meter reading and collection cycle, while still considering the necessary periodic meter readings (the meter reading and the billing period do not have to coincide). This activity should be aligned with the optimization of staff (considering the number of meter readers/collectors).

11. Accounting procedures and IMS (Information Management System)

The accounting systems of public utility companies (PUC/PWC) should comply with the requirements of the International Financial Reporting Standards (IFRS), as well as in accordance with the Accounting and Auditing Law of the Federation of Bosnia and Herzegovina (FBIH). The Accounting Information System (AIS) or Business Information System (BIS) primarily refers to the management of financial data (and directly related data, such as the client database, fixed assets database, employee database, etc.). The Information Management System (IMS) is often based on the AIS, adding key technical data and decision support systems, with the goal of enabling quick and effective decision-making by management in all situations. It should be monitored by evaluating relevant key performance indicators, which enables tracking progress in specific related areas.

During the preparatory phase of the water services modernization program, it was found that many of the selected public utility companies (PUC/PWC) either did not develop or did not update Rulebooks related to financial accounting, such as the Rulebook on Accounting Policies, the Rulebook on Financial Operations, the Rulebook on Cash Management, the Rulebook on Data Archiving, or the particularly important Rulebook on Cost and Revenue Accounting by Cost Centres. Costs and revenues are not recorded separately by defined cost centres in most public utility companies (PUC/PWC); all costs are posted and calculated at the highest level (the PUC/PWC level). The computer (hardware) and network infrastructure of public utility companies (PUC/PWC) has not been regularly maintained, with computers averaging more than six years, and sometimes quite outdated. Data storage and data backup are rare and unsystematic practices. Most public utility companies (PUC/PWC) do not have or do not use any Information Management System (IMS).

The objectives for this area of improvement are defined as follows:

- Adoption, updating, and implementation of accounting Rulebooks: Rulebook on Accounting Policies, Rulebook on Financial Operations, Rulebook on Cash Management, Rulebook on Data Archiving, Rulebook on Cost and Revenue Accounting by Cost Centres.

- Bookkeeping of costs and revenues is done by cost and revenue centres, with reports regularly prepared separately for each cost centre, and cost optimization is carried out.
- Documented accounting policies have been established and are followed, such as the policy for the evaluation and disclosure of intangible assets; the policy for the assessment and disclosure of real estate, buildings, equipment, and investment properties; the policy for the evaluation and presentation of inventory; employee salaries; government grants/incentives; the effects of foreign currency exchange rate changes; borrowing costs; asset impairment; calculation reserves; financial instruments; recognition of liabilities and receivables; construction works contracts; the evaluation policy and reporting costs; correction of errors from previous periods; changes in accounting policies.
- The hardware and (security) network infrastructure is regularly maintained, data stored on servers is protected from misuse, and regular data backup procedures are carried out. All accounting software modules are integrated, enabling the bookkeeping of revenues and expenses by cost centres. The software allows for the (automatic) preparation of required reports (separately for each service, types of service users, cost centres, specific periods, etc.).
- The chart of accounts is aligned with the provisions of the Rulebook on the Chart of Accounts and Account Content of the Federation of Bosnia and Herzegovina (FB&H), with analytical accounts classified according to the needs of public utility companies (PUC/PWC).
- A basic Information Management System (IMS) has been established, which is regularly used, and the selection of key performance indicators is evaluated and regularly monitored.

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Provide support in the development or modification and supplement, that is improvement of internal accounting Rulebooks, procedures and policies:
  - ✓ Rulebook on Accounting Policies;
  - ✓ Rulebook on Financial Operations;
  - ✓ Rulebook on Cash Management;
  - ✓ Rulebook on Data Archiving;
  - ✓ Rulebook on Cost and Revenue Accounting by Cost Centres.
- Prepare a proposal for establishing cost accounting and cost centres (at least three levels) that will not only enable the separation of costs and revenues for each provided service, but will also allow for cost optimization. Conduct training for representatives of public utility companies (PUC/PWC) on the establishment and implementation of cost accounting, and support practical improvements to existing accounting practices to enable continuous bookkeeping of costs and revenues by the introduced cost and revenue centres, thereby allowing for full analytical monitoring and separation of costs by cost centres and revenues by revenue centres.
- Provide support for the enhancement of the existing accounting software to enable complete analytical tracking and posting of costs by cost centres; if such software development is not feasible, plan for the replacement of the accounting software.
- Provide support for the continuous bookkeeping of costs and revenues by the established cost and revenue centres.
- Propose and, together with the representatives of FMAWMF, define a list of key performance/business indicators (KBI), and develop a tool for the periodic evaluation of the performance/business progress of PWC/PUC with automatic calculation of the key performance/business indicators.
- Organize training for representatives of local self-government units (LSU) and public utility companies (PWC/PUC) on the topic of regular monitoring of key business performance indicators, including the use of tools for periodic evaluation of the progress of PWC/PUC operations and the application of their evaluation methodology.
- Assess and report on the values of key performance indicators (KPI) that need to be regularly monitored, based on a very basic IMS that will be proposed by the Consultant.

- Provide support, assess, and report on the implementation and recording of all costs and revenues by the defined cost and revenue centres, ensuring that reporting is consolidated not only for the entire company but also separately by types of services provided.

The activities need to be implemented individually with the public utility companies PUC/PWC that require improvements in accounting policies, while the development of draft accounting regulations, chart of accounts, and training activities can be combined through the implementation of joint activities for multiple public utility companies. The activities should be carried out during the duration of this assignment, with the expectation that the implementation of the recommended activities and measures will continue by the public utility companies (PUC/PWC) after the completion of this assignment.

12. Budgeting and Business Planning

It often happens that public utility companies (PUC/PWC, such as water utilities) consider financial and business planning to be an imposed and inherited activity that should be carried out by someone else ("the state," i.e., the public administration to which the plan is submitted), rather than by the public utility companies themselves. According to the Law on Public Enterprises in the Federation of Bosnia and Herzegovina (FB&H), the management of the public enterprise prepares, implements, and monitors the implementation of the three-year business plan of the public utility company (PUC) / public water management company (PWC) (PWC/PUC).

The business plan is expected to include: a plan for expected revenues and expenses, anticipated capital expenditures for the period covered by the business plan, proposed sources of financing for capital expenditures and other business objectives, and all planned borrowings during the period covered by the business plan, proposal for the establishment or acquisition of new business units or entities (either partially or entirely), as well as the hiring of new staff, and the expenditures required for such activities, proposals for the sale of real estate, proposals for the use of surplus profits during the period covered by the business plan, planned financial statements, projected budget with semi-annual analyses (variants), and the budget for operating capital, which must reflect the planned activities of the company, as well as the revenues and expenses resulting from those activities.

During the period it covers, the business plan should serve as the basis for all business activities of the public utility company (PUC) / public water management company (PWC) (PWC/PUC) in relation to the elements it contains. The management monitors and periodically reviews the business plan, and if necessary, revises and adjusts the business plan to align with market developments.

It is clear that business plans defined in such way do not clearly and unambiguously demonstrate the goal of improving operational, financial, and economic efficiency. A good business plan also includes detailed plans for improving operational and financial performance. Key performance indicators selected for one business period must have projections for the entire planning period, as well as values achieved in the previous period compared to earlier projections, with a clear explanation for any discrepancies in case of significant deviations.

The main purpose of creating a business plan is to improve all aspects of operational and financial performance within the public utility companies (PUC/PWC). The business plan establishes policies and objectives, while the operational plan is used as a tool for monitoring in the process of assessment of objectives being set.

The business plan should be prepared directly or in collaboration with the finance department or the person responsible for budgeting. The budgeting process involves determining and adopting the budget, as well as controlling and analysing deviations during its implementation by approving the budget and allocating funds for its implementation, the budget itself becomes a goal to be achieved, while the implementation of its individual components becomes efficiency indicator for decision-makers.

The process of budget implementation control begins with the actual execution of the budget. Control highlights deviations between the realized and original values, but it is also a very important source of information for decisions correction. In short, the purpose of the budget is as follows:

- Ensure projections of revenues and expenses;

- Enable the monitoring of actual financial results compared to the planned and direct reaction caused by implementation on needed corrective measures.

During the implementation of several previous similar projects, it was found that most public utility companies (PUC/PWC) approached financial management and planning in a traditional manner, which implies that this function within PUC/PWC is considered one of the legally prescribed activities, primarily supporting other activities. Planning is often carried out based on the principle of proportional increase in financial results (increasing amounts from previous years by a selected percentage), without specific additional assessments of activities or performance projections. Rarely do they address key issues such as reducing the high percentage of non-revenue water, decreasing costs related to surplus staff in contrast to the absence of staff in some key positions, lack of funds for investment maintenance or other issues. Given the legal obligations, midterm three-year plans are prepared, mostly automatically and based on the aforementioned principle (based on data from previous years, with slightly increased projections), for the entire company. Budgeting is often not carried out based on detailed analyses and actual plan execution. Reports on execution are often merely extracts from the balance sheet and profit and loss statement, and as such, they are just bookkeeping figures, without specific analyses or real performance indicators This practice does not involve the creation of operational plans by centres (departments, units) and their consolidation or comparing the plan with actual costs through the departments/units. Therefore, most public utility companies (PUC/PWC) have not developed procedures for preparing plans for operational activities. In addition to preparing the annual operational plan, reports on the implementation of the operational plan should also be created, which was not previously a common practice, for the purpose of monitoring the actual realization of revenues and expenses compared to the projections.

The business plan must become a formal document that reflects actual performance and should outline future actions. In addition to describing the public utility company (PUC) / public water management company (PWC) (PUC/PWC), it should cover an assessment of the actual situation in the areas of legal, institutional, technical, financial, and environmental aspects of operations, include a SWOT analysis identifying challenges, risks, and obstacles, and set priorities upon which the vision, mission, and strategic business objectives of the local utility company PUC/PWC will be defined. The business plan should include both long-term and short-term (specific) goals, a detailed action plan for each area of operation to achieve the set objectives, i.e., to reach the desired level of performance, with clearly defined responsibilities and financial resources or other necessary resources for their implementation (own funds, participation of external actors, external funding sources, etc.).

The goals for this area of improvement are defined as follows:

- Increased knowledge and awareness of municipal councillors regarding their own responsibility for the functioning of communal activities.
- The management of public utility company (PUC) / public water management company (PWC) PUC/PWC, together with the heads of each sector, have been trained for the implementation of the budgeting and business planning process, as well as the process of developing the three-year business plans.
- Regular preparation and development of three-year business plans, consolidated operational budgets, and cost centre budgets, along with the establishment of a system for regular monitoring on 1/2/3/6- month basis that is used for improvement of the public utility company (PUC) / public water management company (PWC) business/operation improvement.
- The three-year business plan, annual operational plans, and budget implementation Plan are regularly analysed, and the management of the public utility company (PUC) / public water management company (PWC) (PUC) / public water management company (PWC) makes decisions on the necessary corrective measures.
- Basic module for the capital budget has been set up, which is also used in the tariff calculation process.
- Regular monitoring and analysis of the realization of selected key efficiency indicators in the business plan.

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Conduct training for management and sector leaders on the basics of budgeting and business planning (including training on preparing the budget for individual cost centres and the consolidated budget for the entire public utility company (PUC) / public water management company (PWC), as well as developing procedures for the consolidated budget).
- Provide support in the preparation of the consolidated operational budget and budget by cost centres for each year of program implementation (including investment maintenance costs), as well as the preparation of the capital investment budget; these calculations are used with the established tariff model and must also be discussed with local Self Government Units LSU (city/municipality majors, Council representatives, relevant Management, Services).
- Conduct training for management and every sector leader on the methodology for preparing the three-year business plan for the public utility company (PUC) / public water management company (PWC);
- Provide support in preparing the three-year business plan, which includes all necessary activities to improve financial and operational efficiency, service coverage for the population, asset management, internal organization and employees, and other important aspects that will contribute to cost optimization (emphasizing the optimization of electricity costs and related management of non-revenue water, as well as employee cost optimization), as well as the assessments and projections of selected key efficiency indicators.
- Provide support in the regular preparation or improvement of operational budgets by cost centres and on a consolidated basis. Operational budgets must include budgets for investment maintenance. The operational budgets will serve as the basis for tariff assessments.
- Provide support in the regular preparation of the business plan and its eventual updating. The business plan is prepared/updated using a form/template that should be proposed by the Consultant.
- Provide support in monitoring and analysing the implementation of the prepared budgets and business plan based on key efficiency indicators (performance, efficiency) on a semi-annual basis, comparing previous projections with actual values, and providing written advice on any necessary corrective measures.

In order to achieve the set goals, the Consultant will need to carry out specific activities individually for each public utility company (PUC) / public water management company (PWC), except for the training sessions, which can be combined for several public utility company (PUC) / public water management company (PWC where appropriate. Training sessions represent activities of the utmost importance, as the further steps toward achieving the expected changes will depend on them. It is necessary to develop strong capacities and a high level of commitment within the public utility companies (PUC) / public water management companies (PWC) for significant changes in planning processes, plan execution, and monitoring the implementation of such plans, with the application of corrective measures as needed.

13. Financial management

The previous areas of necessary improvements have already addressed numerous issues related to financial management, primarily concerning the implementation of public procurement procedures or procedures for internal work orders (which also have financial implications). Improved financial management leads to increased accountability towards local self-government units (LSU) as the owner of the water supply, drainage, and wastewater treatment systems, as well as towards service users.

During the implementation of previous similar programs, it was found that most public utility companies (PUC) / public water management companies (PWC) have the capacity to implement procedures prescribed by the Public Procurement Law. However, there are differences in the way the Public Procurement Law is applied. Specifically, some PUC/PWCs have established permanent working groups, while in other PUC/PWCs, these groups were formed on an ad hoc basis.

Procedures for issuing and using work orders are defined in most public utility companies (PUC) / public water management companies (PWC), but there is room for practical improvements, including the possibility of introducing the use of work orders in public utility companies (PUC) / public water management companies (PWC) that still do not have a practice of keeping the work orders.

The goals for this area of improvement are defined as follows:

- The procedures for the implementation of the Public Procurement Law have been adopted and applied.
- The procedures for internal work orders are documented and implemented in daily operations.
- The capacities of local self-government units (LSU) and most public utility companies (PUC) / public water management companies (PWC) for the application of financial management tools have been strengthened.

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Prepare a draft procedure for the implementation of the Public Procurement Law, support the discussion, revision, and final adoption and implementation of the aforementioned procedures.
- Develop or propose updates to the procedures for keeping the internal work orders, discuss them with public utility companies (PUC) / public water management companies (PWC), prepare them for adoption, and provide support for their implementation in daily operations.
- Evaluate and report on the implementation of the adopted procedures for the implementation of the Public Procurement Law.
- Evaluate and report on the implementation of the procedures for keeping the internal work orders.
- Prepare and conduct a one-day training session and provide support for the introduction of financial management tools and options, such as long-term framework agreements, financial leasing, program and project co-financing options, contracting services from external providers (outsourcing), and similar practices.

14. Inventory and fixed asset cycle, including ownership and depreciation of infrastructure

In principle, a legal entity that owns fixed assets is legally obligated to maintain records of its own fixed assets and resources, calculate and allocate depreciation, and manage the allocated assets in a way that keeps them functional and ensures the renewal of its fixed assets. Since local self-government units (LSU), in accordance with the Local Self-Government Principles Law, are the owners of all public infrastructure within their territory, this means that local self-government units LSU are responsible for managing//keeping the accounts of all fixed assets and calculating depreciation. However, in practice, this responsibility is often not properly adhered to.

Local self-government units (LSU) and public utility companies (PUC) are legal entities, and as such, they are subject to the accounting laws of Bosnia and Herzegovina, as well as the International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS). They are obligated to operate in accordance with the regulations that apply to legal entities.

LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies) have a legal obligation to maintain records of the assets that are in their ownership. They are also required to apply the depreciation rates prescribed by law to all assets that are in use, in order to ensure accuracy in the representation of their value in accounting records, they are required to perform revaluation of asset values in accordance with legal requirements, thereby enabling transparent and accurate asset management and ensuring their functionality and renewal. In this way, LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies), as owners of public infrastructure within their territory, bear the responsibility for recording fixed assets, calculating and allocating depreciation, financing the coverage of depreciation

costs through water service prices, as well as for the overall management of assets in accordance with the law.

During the implementation of previous similar programs and projects, it was found that most LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies) did not have a complete and updated General Ledger of fixed assets (property) with revalued asset values. As a result, some parts of the public infrastructure were recorded in the accounting records of fixed assets of PUC/PWC (public utility companies / public water management companies), while other parts were recorded in the books of LSU (local self-government units. Additionally, it was found that a significant portion of the public water infrastructure was not recorded in either the General Ledger of LSU (local self-government units) or the General Ledger of PUC/PWC (public utility companies / public water management companies.

Therefore, as a direct consequence of the failure to record fixed assets, there is an inability to calculate depreciation costs, which should be financed from the water service fees. The depreciation cost of fixed assets (property) is often considered too high for the operations of PUC/PWC (public utility companies / public water management companies) due to the impact of this cost on water service fees, and as a result, the posting of all fixed assets is often avoided. As a result, a significant portion of the public water infrastructure still in use by PUC/PWC (public utility companies / public water management companies) has not been recorded in the General Ledger, so there is no possibility to calculate depreciation costs in the water service fees. Revenues from depreciation costs included in water service fees are crucial for financing investment maintenance and ensuring the long-term sustainability of the systems functionality that provide water services (water supply and sewage systems, wastewater treatment plants - WWTP)). The consequence of insufficient revenues for investment maintenance is that the public infrastructure gradually ages and deteriorates, which, due to the increasing frequency of failures, requires frequent repairs or complete replacements of parts of the public water infrastructure. The inability to calculate depreciation for all fixed assets in use, combined with poor collection and an increasing number of failures, inevitably leads to the inability to further finance the maintenance of public water infrastructure. Additionally, it should be noted that even those fixed assets (property) that are recorded in the General Ledger of fixed assets are often not properly posted or analytically classified by asset types. Their actual value is frequently very low, so there is a need for the acquisition of new assets.

The goals for this area of improvement are defined as follows:

- Conduct revaluation of recorded long-term fixed assets (property) and update the General Ledger of fixed assets.
- Inventory the unrecorded assets in the "Auxiliary" fixed assets ledger, perform a re-assessment of the acquisition value, and determine the current "fair" value of the fixed assets.
- Implement the procedure for recording all fixed assets in the General Ledger of LSU (local self-government units), or transfer the management and maintenance responsibility to PUC/PWC (public utility companies / public water management companies).
- Calculate depreciation in accordance with the legally allowed rates for all long-term fixed assets (property) in use.
- Calculate the depreciation cost (or property rental cost) and incorporate it into the tariff model.
- Funds collected from water service fees based on depreciation costs from collected revenues should be allocated to a separate sub-account and used exclusively for investment maintenance of fixed assets (property).

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Provide support in reaching an agreement between LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies) (as part of the previously mentioned Public Water Services Contract) regarding responsibilities for updating the register (inventory) of all long-term fixed assets (property) and their revaluation, as well

as responsibilities for making decisions on expenditures using the internally established "investment maintenance fund.".

- Train representatives of LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies) on the preparation of the "auxiliary" fixed assets ledger.
- Provide support to PUC/PWC (public utility companies / public water management companies) in updating the register (inventory) of all fixed assets and their revaluation, using the results of the implementation of other program tasks and activities (e.g., mapping), and prepare a draft update of the entire "auxiliary" fixed assets ledger (according to asset type and system components).
- Provide support to LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies) in the process of forming a commission for the inventory and identification of unrecorded fixed assets, and develop procedures for the inventory, identification, and recording of fixed assets.
- Supervise PUC/PWC (public utility companies / public water management companies) in the allocation of part of the revenue, proportionally in relation to depreciation within the water service tariffs, into the "investment maintenance fund" (whether a separate account or sub-account of PUC/PWC (public utility companies / public water management companies), or even LSU (local self-government units), whichever is considered the most appropriate for the specific LSU (local self-government units) and PUC/PWC (public utility companies / public water management companies). Such "investment maintenance funds" must be allocated exclusively for the costs of investment maintenance.
- Provide support in decision-making regarding the optimal use of the "investment maintenance fund" (where these funds cannot be used for any purposes other than investment maintenance, including programs for improving measurement, reducing the percentage of non-revenue water, pump replacement, repairs, and replacement of pipelines and other infrastructure components).
- During the second year of the WSSMP implementation, conduct a review of the General Ledger of fixed assets and assess progress in their completion and revaluation of asset values as needed, based on the quality of the depreciation calculations performed by PUC/PWC (public utility companies / public water management companies. It is expected that the gradual recording and revaluation of all existing fixed assets (using the prepared inventory) will take place in the "Auxiliary" fixed assets ledger. The gradual recording is based on the level of impact of new postings on the amount of depreciation costs that need to be included in the tariff, compliance with legal prerequisites for such recording, and so on.
- Provide support and report on the allocation of part of the revenue, proportionally linked to depreciation within the tariff, to the "investment maintenance fund." Business planning should use this fund as the basis for proposing investment maintenance of the built water infrastructure.
- Provide support in selecting the locally most appropriate option for transferring/recording fixed assets from the "Auxiliary" to the General Ledger of fixed assets (in accordance with legal regulations regarding ownership of these assets). Support the completion of the General Ledgers of fixed assets with the gradual introduction and revaluation of all fixed assets, report progress in their completion and revaluation, as well as calculate the level of depreciation.
- Prepare adjusted guidelines on best practices for the maintenance and management of fixed assets (property), and provide practical support for their implementation.

15. Water quantity and quality in the system

One of the basic conditions for regular water supply is the availability of sufficient quantities of drinking water at the sources, which must meet current needs as well as the needs for future population growth and industrial development.

During the implementation of previous similar programs, it was concluded that none of the PUC/PWC (public utility companies / public water management companies) provide water supply, wastewater

drainage, and treatment services to the entire population living within the territory of the LSU (local self-government units. Some have attempted to expand the provision of water services to additional service users within the territory of the LSU (local self-government units). Such expansion of the water supply system could increase the existing levels of non-revenue water. In addition to concerns about the available quantities of water, there are also significant challenges in maintaining the quality of drinking water. This refers to the protection of water quality at drinking water sources and further within the distribution system (steel pipes, asbestos-cement pipelines, infiltration of untreated groundwater through damaged pipes, etc.). Not all drinking water sources are protected by the prescribed sanitary protection measures in accordance with the applicable regulations Studies/reports on the protection of drinking water sources do not exist in a significant number of LSU (local self-government units) that are, according to the applicable regulations, responsible for the protection of these sources. The valid water law stipulates that areas where drinking water sources are located must be protected from pollution or other impacts that could contribute to changes in the water's health safety at the source. The protection of drinking water sources must be carried out by establishing sanitary protection zones and implementing protective measures in accordance with the Rulebook on the method for determining the conditions for defining sanitary protection zones and protective measures for water sources for public water supply to the population. In accordance with the mentioned Rulebook, based on the characteristics of the water source, it is necessary to prepare a Study on the protection of drinking water sources. This study defines the sanitary protection zones and the protective measures that must be implemented in each defined sanitary protection zone.

In addition to the quality of water at the source, PUC/PWC (public utility companies / public water management companies) should regularly sample water to check its quality at permanent and temporary locations within the water supply system; these samples should be analysed in accredited laboratories, which most PUC/PWC (public utility companies / public water management companies) regularly conduct.

Only a small number of selected LSU (local self-government units) collect and treat wastewater at constructed FPWW (wastewater treatment plants), and their operators (PUC/PWC - public utility companies / public water management companies) carry out the wastewater treatment. However, a larger number of LSU (local self-government units), together with their PUC/PWC (public utility companies / public water management companies), are preparing or planning to prepare capital investments for the construction of FPWW and to find an appropriate financier.

The goals for this area of improvement are defined as follows:

- Deliver sufficient quantities of good quality drinking water that meet the needs of service users.
- PUC/PWC (public utility companies / public water management companies) that have issues with water quality will provide appropriate water treatment.
- Prepare a sampling location cadastre and create a database for recording key quality parameters.
- Treat wastewater before discharging it into the recipient (design, construction, and operation of wastewater treatment plants.

Expected Consultant engagement

During the implementation of Terms of reference, the Consultant will perform the following activities:

- Provide support to the public utility companies (PUC) / public water management companies (PWC) in establishing a database on the quantities of produced water (daily, monthly, yearly) and the quality of drinking water samples (physical-chemical and microbiological characteristics of water analysis). Monitor and report in the regular updates of the database.
- Prepare a brief document (report, study) analysing alternative/additional drinking water sources only for those local self-government units (LSU) that have a shortage of certain quantities of water for regular water supply.
- Prepare an overview of existing studies/reports on the protection of drinking water sources (where they were prepared by local self-government units (LSU)) and provide advice on whether they need to be updated in accordance with changes and amendments to the existing

regulations Additionally, provide advisory support with the aim of preparing studies/reports on the protection of drinking water sources for water supply systems for which they have not been prepared (create a separate document to be incorporated into the strategic and operational plans of local self-government units (LSU).

- Prepare a brief document (report, study) on the risk assessment for the water supply system, which includes an assessment of risks related to available water quantities and the required drinking water quality. The risk analysis should cover various causes: (i) climate change (droughts, floods, pollution), (ii) infiltration of groundwater due to a large number of damages (breakdowns) in the water supply network; (iii) use of inappropriate pipe materials (both in the primary and secondary networks, as well as in household connections), etc.
- Prepare and conduct joint training for delegated employees of local self-government units (LSU) (responsible for managing the implementation of LSU responsibilities regarding water services) and delegated employees of public water management companies (PWC) / public utility companies (PUC) on the preparation of a database on pollutants (legal entities – polluters connected to the public sewerage system), provide advisory support in the post-training work, and report on the completion of the database.
- Provide advisory support to local self-government units (LSU) regarding the preparation, construction, and management of drinking water treatment plants (PWPP) and wastewater treatment plants (FPWW), if the LSU decides to initiate this process during the Consultant's contract period.
- Prepare and conduct training for the purpose of developing a concept for the water supply system management plan and proposing measures and recommendations for optimizing its operation and further development.
- Prepare and conduct training for the purpose of developing a concept for the sewage system management plan and proposing measures and recommendations for optimizing its operation and further development. The training includes the collection and drainage of wastewater and precipitation water.
- Prepare and conduct a full-day training for delegated employees of public water management companies (PWC) / public utility companies (PUC) on the operation of wastewater treatment plants. The training should focus on organizational and institutional topics related to the sustainable operation of wastewater treatment plants (FPWW), such as the number of employees, job position classification, establishment of cost centres, and application of tariff methodology, keeping record on the number of service users (polluter register), informing service users about the use of the sewage network and FPWW, etc. After the training, representatives of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC) will develop a joint action plan to improve the operation of the FPWW.

16. Energy efficiency in public utility companies (PUC) / public water management companies (PWC)

Energy consumption in public utility companies (PUC) / public water management companies (PWC) in public water supply and sewage systems can represent 30% - 40% of energy costs. Pumps in water supply systems pump groundwater from wells, transport water to higher zones, and finally distribute water to service users, and for these reasons, they are significant energy consumers. In a similar way, pumps consume energy in sewage systems, although the lifting heights of water are lower, but the quantities of water being pumped are greater. In local self-government units (LSU) where there are areas with large differences in altitude, energy consumption for pumping groundwater from great depths, transporting water to higher areas multiple times, and distributing water to service users can be a significant energy cost, which sums up to 40% of total operational costs. In drinking water treatment plants (PWPP), the largest energy consumption (around 80%) is used for pumping, filtration, and disinfection. In wastewater treatment plants (FPWW), the majority of energy is used for aeration, pumping, and treatment of solid matter. After labour costs, energy is the second largest expense in the budget of public utility companies (PUC) / public water management companies (PWC), making the issues of increasing energy efficiency and reducing energy consumption of utmost importance for many

public utility companies (PUC) / public water management companies (PWC).

Opportunities for increasing in energy efficiency most commonly arise in the following cases: installation of more efficient equipment, improvement of energy management, production of energy for internal needs (renewable energy sources), installation of devices for reactive energy compensation, installation of frequency regulators on pumps that pump water into the water supply network, etc.

However, the main obstacles to improving energy efficiency in the treatment and delivery of drinking water, as well as the treatment and drainage of wastewater in public utility companies (PUC) / public water management companies (PWC), are significant capital investments in equipment modernization and system optimization, as well as the reluctance of management and employees in PUC/PWC to change practices or implement new technologies.
By incorporating energy efficiency practices into water service provision processes, such as optimizing pressure management in the water supply system and replacing outdated pumping stations with new and energy-efficient ones, public utility companies (PUC) / public water management companies (PWC) can achieve significant energy savings, thereby reducing operational costs and contributing to climate change mitigation measures and the reduction of CO2 emissions.

The goals for this area of improvement are defined as follows:

- The management of public utility companies (PUC) / public water management companies (PWC) is aware of the potential for energy efficiency, and energy efficiency practices are integrated into the existing plants (PWPP and FPWW) they manage.
- The capacities of public utility companies (PUC) / public water management companies (PWC) for the development and implementation of energy efficiency projects have been strengthened through the encouragement of participatory planning and partnerships among all stakeholders involved in PUC/PWC.
- Decisions about planned plants (PWPP and FPWW) are made based on criteria that include energy efficiency, resulting in the greatest financial savings.
- Identify a range of cost-effective measures available to public utility companies (PUC) / public water management companies (PWC) for achieving better energy efficiency results;
- An appropriate analysis has been conducted, and optimization of zoning and pressure management in the water supply system has been proposed.
- The established water pumping system is energy-efficient.

Expected Consultant engagement

During the implementation of Terms of Reference, the Consultant will perform the following activities:

- Preparation and conduct of training for energy management in public utility companies (PUC) / public water management companies (PWC) with following topics:
  - ✓ Organization of the function and job positions for energy management;
  - ✓ Establishment of a system for monitoring, supervision, and control of energy consumption;
  - ✓ Preparation of general and detailed energy audits;
  - ✓ Implementation of measures and recommendations from energy audits;
  - ✓ Operation and maintenance of pumping stations; (vi) optimization of energy management in public utility companies (PUC) / public water management companies (PWC).
- Support in assessing energy use in public utility companies (PUC) / public water management companies (PWC) and, based on that assessment, preparing a short report on the energy audit for one pumping station, which includes specific recommendations for reducing electricity consumption and increasing energy efficiency, including projections of financial savings compared to the required investment costs.
- Preparation of technical specifications for equipment that should be replaced or installed based on the completed energy audit.

- Provide support for the launch of an energy management program in public utility companies (PUC) / public water management companies (PWC) with the goal of implementing the recommendations outlined in the energy audit.
- Support in prioritizing energy efficiency measures to be applied by public water management companies (PWC) / public utility companies (PUC). Development of a draft action plan for achieving advanced energy efficiency for all energy facilities in PUC/PWC, including the establishment of full automation of the operation of all pumping stations and their integration into a unified management system (SCADA).
- Support in analysing the potential of local self-government units (LSU) and public water management companies (PWC) / public utility companies (PUC) (water sources, sanitary protection zones, reservoirs, PWPP and FPWW, undeveloped land owned by LSU, etc.) for energy production from renewable energy sources for internal consumption, using the following opportunities:
    - ✓ Installation of an integrated hydro-energy system (turbine) in the water supply system, if pressure and water flow allow;
    - ✓ Using gas from anaerobic digestion for energy production at wastewater treatment plants (FPWW);
    - ✓ Construction of solar / photovoltaic power plants;
    - ✓ Construction of wind power plants.

  Prepare a report on key findings, including specific investment recommendations with an estimated investment level and refund deadline.

17. Monitoring performance indicators of the utilities

The Consultant will regularly monitor and evaluate water utilities against the selected performance indicators (PIs). These PIs are assessed utilizing a simple XLS database created for each utility and regularly updated. **Recording frequency is every three months**. These individual databases will be given to the Consultant to continue recording input data and evaluating PIs and to establish a link with ongoing establishment of the benchmarking system**. The consultant is responsible for maintaining the file to accommodate additional data**.

All PIs will be presented in a table format, with a separate table for the input data, allowing input of values, descriptions, sources, etc. In case the input data for PIs evaluation is not available, the best estimate has to be secured by the consultant, together with an explanation (e.g., if water abstraction data is not available, it may be estimated with pump power and hours of use, and such estimated value needs to be elaborated; if some data is not separately recorded, the service provider will make a best available estimate).

The Consultant is also required to **collect or provide, analyze and validate input values** (at the best possible validation level) to evaluate the selected key PIs within the given XLS file.

Part 3 – Institutionalization of business performance and success monitoring for local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)

The Consultant will propose 10 to 20 key performance indicators for LSU and PUC/PWC with the purpose of institutionalizing the monitoring of business performance and success of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC) in the water management sector in the Federation of Bosnia and Herzegovina (FB&H) by FMAWMF. Key performance indicators will include operational and financial business indicators, including but not limited to indicators of water service coverage, service quality, service reliability, affordability of water services, operational efficiency, non-revenue water, labour productivity, billing efficiency, liquidity indicators, and profitability, As well as indicators of the organization of water service provision at the local self-government unit (LSU) level, such as the establishment of an appropriate legal and business framework, contracts for water service provision between local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC), job classification for water service management, supervision of the operations of public utility

companies (PUC) / public water management companies (PWC), etc.

The Consultant will consult with representatives of the FMAWMF to agree on a proposal for key performance indicators, and based on the final list of indicators, will develop a simple database and/or tool for FMAWMF, which will enable the FMAWMF to:

(1) Importing / connecting selected data from the future "benchmarking" system into the database and/or tool of the FMAWMF;
(2) An insight into the current state of operations and performance of the water management sector in the Federation of Bosnia and Herzegovina (FB&H) as a whole, with the aim of monitoring, making informed decisions, and proposing improvement measures, as well as reporting based on the collected data;
(3) Assessment of the operational and financial performance of individual local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC), and providing recommendations on the need for a detailed analysis in cases where the respective LSU and PUC/PWC are considering taking on credit obligations;

In addition to institutionalizing the method of monitoring sector performance, the mentioned tool will contribute to strengthening the administrative and technical capacities of the FMAWMF, as well as to the professionalization of the FMAWMF's approach to the water services sector in the Federation of Bosnia and Herzegovina (FB&H).

Part 4 – Organisation of workshops with local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)

Workshops with Project LSU and PUC /PWC

- **Introductory workshop**

The goal of the one-day introductory workshop is to ensure a shared understanding among the participants regarding the objectives, expectations, and key tasks of the Project. Specifically, the workshop will focus on presenting the Project and its goals and activities, introducing the project partners, defining roles and responsibilities, presenting the timeline, discussing potential challenges and risks, and agreeing on communication and collaboration.

The consultant is required to prepare, and in consultation with the representatives of FMAWF, finalize the draft of the invitation and the workshop agenda, which FMAWF will send to the participants. The participation of three representatives from each of the 20 project partners is planned, as well as two representatives from the project's local self-government unit (JLS) and one representative from its public utility company (PUC) or public water management company (PWC) in addition, the consultant is required to support FMAWF in preparing materials and presenting them during the workshop, as well as moderating the entire event. The consultant must ensure the logistical preparation and organisation of the workshop (venue for the workshop, refreshments during breaks, lunch, and equipment). After the workshop, the consultant must prepare a report on the introductory workshop and submit it to FMVPŠ.

Introductory workshop will be organised 1 month upon commencement of Project implementation.

- **Evaluation and further planning workshop**

After the completion of project activities related to the preliminary assessment of the needs of

the local self-government unit (JLS) and and one representative from its public utility company (PUC) or public water management company (PWC) (Part 1), the consultant is required to support FMAWF in preparing and conducting a one-day workshop for evaluation and further planning. The goal of the workshop will be to review the implementation of the Project so far, evaluate the results, identify challenges and obstacles, propose improvements, plan future activities, and agree on upcoming tasks, deadlines, and responsibilities, as well as strengthen cooperation among the project's JLS and PUC/PWC.

The consultant is required to prepare, and in consultation with the representatives of FMAWF, finalize the draft of the invitation and the workshop agenda, which FMAWF will send to the participants. The participation of three representatives from each of the selected 12 project partners is expected, that is, two representatives from the project's local self-government unit (JLS) and one representative from its PUC/PWC. In addition, the consultant must support FMAWF in preparing materials for the workshop, presenting them during the workshop, and moderating the entire event. The consultant is required to ensure the logistical preparation and organisation of the workshop (venue for the workshop, refreshments during breaks, lunch, and equipment). After the workshop, the consultant must prepare a report on the workshop for evaluation and further planning and submit it to FMAWF.

- **Workshop on Conclusions and Lessons Learned**

The objective of the final evaluation workshop is to review and analyze the activities and results of the Project, present achievements, exchange experiences and lessons learned: presenting good practices from the project's JLS and PUC/PWC, and evaluate the impacts and effects of the Project.

The consultant is required to prepare, and in consultation with the representatives of FMAWF, finalize the draft of the invitation and the workshop agenda, which FMAWF will send to the participants. The participation of three representatives from each of the selected 12 project partners is expected, that is, two representatives from the project's local self-government unit (JLS) and one representative from its PUC/PWC. In addition, the consultant must support FMAWF in preparing materials for the workshop, presenting them during the workshop, and moderating the entire event. The consultant is required to ensure the logistical preparation and organisation of the workshop (venue for the workshop, refreshments during breaks, lunch, and equipment). After the workshop, the consultant must prepare a report on Final workshop and submit it to FMAWF.

The workshop should be organized during the last month of the project's duration or immediately before its formal completion, but within a period that allows sufficient time for the analysis of the workshop results and the final reports.

Workshops with small JLS and PUC/PWCs that, due to insufficient capacity, could not be directly included in the project

A certain number of JLS and their JKP/JVPs are noticed, which do not participate or have not participated so far in projects aimed at improving the organization, provision, and development of water services. In order to contribute to strengthening the capacities of these JLS and their PUC/PWCs, FMAWF, with the support of the Consultant, will organize a two-day workshop aimed at providing information on current trends and processes in the water services sector, best practices, and financing opportunities. For this purpose, the focus of the workshop will be

on informing about key sectoral trends, strengthening capacities for future projects, exchanging experiences and good practices, as well as enhancing cooperation among JLS and their PUC/PWCs.

The consultant is required to support FMAWF in identifying 10 JLS and their PUC/PWCs that will participate in the workshop. In addition, the consultant must prepare, and in consultation with the representatives of FMAWF, finalize the draft of the invitation and the workshop agenda for this two-day workshop, which FMAWF will send to the participants. The participation of three representatives from these JLS and their PUC/PWCs is expected, that is, two representatives from the JLS and one representative from its PUC/PWCs. The consultant must also support FMAWF in preparing materials for the workshop, presenting them during the workshop, and moderating the entire event. The consultant must ensure the logistical preparation and execution of the workshop (venue for the workshop, refreshments during breaks, lunch, and equipment). After the workshop, the consultant must prepare a report on the workshop and submit it to FMAWF.

The workshop will be held during the implementation of project activities related to strengthening the operational efficiency and financial management of PUC/PWCs (Part 2).

Project management

Responsible body

The Contracting Authority for this project shall be the Federal Ministry for Agriculture, Water Management and Forestry (PIT).

The contract performance will be assessed based on the expected results outlined in these Terms of Reference. The Consultant has full responsibility for overall contract performance, finances, expenditures, and reports directly resulting from the project.

Management structure

The FMAWMF's will appoint a Team Leader and Project Coordinator and the Consultant must communicate regularly and coordinate the Contract activities with the Project Coordinator as well as Head of Project Implementation Unit.

The FMAWMF and the municipalities/cities are the final beneficiaries of the project. The Head of the Project Implementation Unit oversees the contract implementation. Ad-hoc meetings occur whenever necessary and upon agreement of the beneficiaries.

:

The Project Implementation Team:

- Assess the performance of the Consultant and the inception report, progress reports, Draft Final and Final Reports and make recommendations as appropriate to the FMoAWMF 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 tackle problems.
- Ensure close cooperation and transparency between stakeholders.

The first meeting will be held at the beginning ofContract, then after the inception phase to examine the Inception report. Thereafter the Head of the Project Implementation Unit will meet at least quarterly intervals to oversee the project's implementation or more regularly if needed with prior invitation and agenda sent in advance to all participants. The Consultant will support the preparation of the minutes of the meetings, which will be distributed to all participants within the maximum time frame of five days after the meeting.

The Consultant shall organize the meetings (excluding the provision of premises), prepare and circulate the agenda, write and distribute the minutes, and follow-up/implement decisions. The date of the meetings, the agenda, and the necessary documents shall be set and circulated among the interested parties tentatively at a reasonable time (i.e., approximately 15 days in advance). The Consultant has to keep them in a file as project documentation. These tasks will be performed in co-ordination with the beneficiary. During the project's inception phase, a detailed working plan will be developed in cooperation with the Beneficiaries.

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

The Head of the Project Implementation Unit will adequately monitor the activities identified in the various phases of the Project in an adequate way and shall approve all project reports.

The end recipients of the project will provide all necessary information requested by the Consultant and needed for the implementation of its tasks.

QULAIFICATION REQUIREMENTS

Profile of the Consultant

During the provision of services, the Consultant is expected to apply international best practices in all fields, including, but not limited to, the areas of environmental best practice. It is anticipated that where the Consultant provides guidance and support in developing policies, procedures, and documentation for the Client, they will ensure that these are drafted to promote environmental and social best practices.

The Consultant will be a company or a group of companies with relevant previous project experience in providing similar services related to the tasks specified in these TOR and comparable investment Projects using procedures and policies of the International Financial Institutions. The Consultant must provide independent, impartial technical, cost, strategic, management, financial, and legal advice and, as such, will not be permitted to have a commercial interest in any other contracts or agreements related to the Project.

Qualified consulting companies and their staff for this assignment should have extensive experience in the field of services mentioned above.

The required minimum specific experience should be demonstrated by at least one (1) succesfully implemented contract that included similar tasks during the last fifteen (15) years in amount of minimum EUR 700,000. Contracts cannot be artificially combined to meet the requirement of a single contract.

In addition to the requested reference, the qualified consulting companies and their staff are expected to prove the continuity of their work in the specified field, as evidence of current capability and staffing, in the form of proof of delivered services of the same or similar nature in terms of its continuous delivery of these services during the last fifteen (15) years.

Details of the referenced assignments would include the contract value, location, number of staff involved in the contract, name of the Client, name of partners for contract execution, source of financing, type of services provided, contract commencement and completion dates, and a brief description of the contract.

Specific experience related to the assignment

The Consultant shall demonstrate relevant experience in the following areas, which reflect the scope and complexity of services to be provided under this assignment:

1. Development and implementation of water utility business plans.

2. Support to local governments in tariff policy formulation and adoption.

3. Preparation and implementation of Public Service Agreements (PSAs) between LG and WUs.

4. Financial and operational performance analysis of water utilities.

5. Design and implementation of non-revenue water reduction strategies and management.

6. Support in tariff setting based on cost-recovery principles and affordability assessments.

7. Preparation and implementation of affordability surveys and subsidy schemes.

8. Strengthening governance and management structures of water utilities.

9. Development and improvement of organizational structures and internal regulations.

10. Human resources planning and optimization in the water services sector.

11. Development and implementation of customer relations systems and feedback mechanisms.

12. Digital mapping and GIS development for water and wastewater networks.

13. Design and establishment of District Metering Areas (DMAs) and pressure-management systems.

14. Metering strategies and calibration programs for water utilities.

15. Energy efficiency in the utilities.

16. Preparation of operational and investment maintenance plans, assistance to WUs.

17. Development and implementation of cost accounting by cost centres.

18. Design and implementation of Management Information Systems (MIS) for water utilities.

19. Preparation and monitoring of operational budgets.

20. Financial management, including procurement procedures and internal work-order systems.

21. Preparation of fixed assets registers and depreciation calculation methodologies.

22. Legal and institutional analysis of water sector governance frameworks.

23. Capacity building and training of local government and utility staff.

24. Quantity and quality of water in the water supply sistem.

25. Monitoring performance indicator of the WUs.

The Consultants may associate with other companies to enhance their qualifications, but should indicate clearly whether the association is in the form of a Joint Venture (JV) and/or a sub-consultancy. In the case of a joint venture, all the partners in the JV shall be jointly and severally liable for the entire contract, if selected. Furthermore, EoIs of JVs will be evaluated based on the composition of JV submitted whereas experience of the other companies not included in the JV, including proposed sub consultants, will not be considered in the evaluation.

CVs of Key Experts are not required and will not be evaluated at the shortlisting stage but will be subject of evaluation of Technical Proposals. All shortlisted Consultants shall make sure the proposed key staff fulfils the qualification requirements set forth in the ToR for the respective key staff positions.

Evaluation criteria:

The following evaluation criteria shall be applied in the shortlisting stage:

- General Experience: Core business and years in business 30%
- Specific Experience: Qualifications in the field of the assignment 60%
- Technical and managerial organization of the firm and availiability of key staff within the firm: 10%

Key staff

The Consultant's team will consist of international and/or local experts with extensive experience in implementing programs and projects to strengthen the capacities of local self-government units (LSU) for organizing water services provision, as well as programs and projects on improving the operational and financial performance of public utility companies (PUC) / public water management companies (PWC). The mentioned experts should have experience and references in the implementation of programs and projects aimed at strengthening the institutional, organizational, and human resource capacities of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC), specifically in the legislative-legal, institutional, socio-economic, financial, environmental, and technical aspects of water services management at the local level.The required fields of expertise are primarily determined by the tasks mentioned above.

It is proposed that the Consultant's team consists of at least the following international and local experts.

Key experts:

1. **Team Leader – Water Utility Expert**

The Team Leader will be responsible for the project's overall implementation, including timely submitting of the required reports, sound financial management, co-ordination of all project activities and aspects, cooperating with other relevant ongoing projects, and liaison with the Contracting Authority, the beneficiaries and other stakeholders.

Qualifications and skills

- University degree (min. 240 ECTS, master degree, or higher) in civil/sanitary/ hydrotechnical engineering or other engineering disciplines related to projects (such as environmental, water management, etc.), with at least 20 years of professional experience.

  Specific experience relevant for the assignment:
  - ✓ Preferably 15 years of experience in leading teams of experts in the development of professional documents of similar nature and complexity;
  - ✓ Experience in working with representatives of different levels of government and various stakeholder groups in areas relevant to the implementation of this assignment (Experience in working with ministries, water agencies, local self-government units (LSU), public utility companies (PUC/PWC), associations of LSU, and associations of PUC/PWC.);
  - ✓ Experience in contract management and project cycle management;
  - ✓ Experience in working with local self-government units (LSU) and public utility companies (PUC/PWC) to establish the legal and business framework for efficient and sustainable organization of water services at the local level (process of drafting and adopting regulations, decisions, bylaws, procedures, etc.) in the field of water services, Experience in the process of drafting and adopting contracts for the provision of public water services between local self-government units (LSU) and public utility companies (PUC/PWC), the process of drafting and adopting water service providing contracts between users and PUC/PWC, and similar processes.).
  - ✓ Preference is given to experts with experience in working with local self-government units (LSU) and public utility companies (PUC/PWC) in BiH on technical and operational issues related to water supply, as well as the collection, drainage, and

wastewater treatment (Zoning of the water supply system, flow and pressure measurement, hydraulic modelling, water balance evaluation, management of non-revenue water with achieved results in reducing non-revenue water, and increasing energy efficiency in public utility companies (PUC/PWC);

- ✓ Preference is given to experts with experience in working with local self-government units (LSU) and public utility companies (PUC/PWC) in BiH on socio-economic and financial issues related to the provision of water services (tariff policy and methodology, water service price calculation, water service billing, cost accounting, budgeting and business planning, financial management, management of fixed assets (property), etc.);
- ✓ Experience in facilitating and training small groups of participants;
- ✓ Experience in implementing financial and operational performance improvement programs or similar interventions;
- ✓ Experience in planning, preparing, and implementing capital infrastructure projects in the water services sector;
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina.

Number of positions: 1

2. Water Utility Expert (Deputy Team Leader)

Qualifications and skills

- University degree (min. 240 ECTS, master degree or higher) - Civil engineering faculty with at least years of experience.

Specific experience relevant for the assignment:

- ✓ Preference is given to experts with experience working with local self-government units (LSGU) and public utility companies (PUC/PWC) in BiH on technical and operational issues related to water supply, as well as wastewater collection, drainage, and treatment (Experience in zoning of water supply systems, flow and pressure measurement, hydraulic modelling, water balance evaluation, non-revenue water management with achieved results in reducing non-revenue water, and increasing energy efficiency in public utility companies (PUC/PWC);
- ✓ Preference is given to experts with experience in working with representatives of different levels of government and various stakeholder groups in BiH in areas relevant to the implementation of this assignment (Experience in working with ministries, water agencies, local self-government units (LSU), public utility companies (PUC/PWC), associations of LSGU, and associations of PUC/PWC);
- ✓ Experience in project cycle management;
- ✓ Experience in facilitating and training small groups of participants;
- ✓ Experience in implementing financial and operational performance improvement programs or similar interventions;
- ✓ Experience in planning, preparing, and implementing capital infrastructure projects in the water services sector;
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina

Number of positions: 2

3. Mapping Specialist

- A university degree (240 ECTS, master degree or higher) in a relevant field with at least 10 years of practical relevant experience.

Specific experience relevant for the assignment:

- ✓ At least 10 years of advanced experience in mapping water supply and sewage systems in ArcGIS, QGIS, MapInfo, or similar;
- ✓ Experience in preparing electronic maps, GIS, and hydraulic models of water supply and sewage systems;
- ✓ Preference is given to experts with experience working with local self-government units (LSGU) and public utility companies (PUC/PWC) in BiH on technical and operational issues related to water supply, as well as wastewater collection, drainage, and treatment (experience in mapping and zoning of water supply systems (DMA and PMA zones), hydraulic modelling, non-revenue water management);
- ✓ Experience in facilitating and training in the field of geoinformation technologies;
- ✓ Preference is given to experts who collected data in the field.
- ✓ Preference is given to experts who hold certificates such as the GIS certificate (ArcGIS, QGIS, MapInfo, or similar).
- ✓ Experience in project cycle management;
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina.

Number of positions: 1

4. **Legal expert**

- A university degree (240 ETCS) in law or a relevant field with at least 5 years of experience.

Specific experience relevant for the assignment:

- ✓ Experience in working with representatives of different levels of government and various stakeholder groups in areas relevant to the implementation of this assignment (Experience in working with ministries, water agencies, local self-government units ;
- ✓ At least 5 years of practical and proven relevant experience working with local self-government units (LSU) and public utility companies (PUC/PWC) on preparing documents related to the legal regulation of water services, i.e., establishing the legal and business framework for the efficient and sustainable organization of water service provision at the local level (Process of drafting and adopting regulations (decisions, rules, procedures, etc.) in the field of water services, process of drafting and adopting service contracts for the provision of public water services between local self-government units (LSU) and public utility companies (PUC/PWC), process of drafting and adopting service contracts for the provision of water services between service users and PUC/PWC, etc.).
- ✓ Experience in contract management and project cycle management;
- ✓ Experience in facilitating and training small groups of participants;
- ✓ Experience at the local level working with local self-government units (LSU) and public utility companies (PUC/PWC);
- ✓ Experience in implementing financial and operational performance improvement programs or similar interventions
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina

Number of positions: 1

5. **Financial and Accounting Expert**

- A university degree (240 ECTS, master degree or higher) in economics or a relevant field with a minimum of 10 years of general experience in accounting, budgeting, collections and revenues, tariff policy, or financial management.

Specific experience relevant for the assignment:

- ✓ Experience in working with representatives of different levels of government and various stakeholder groups in areas relevant to the implementation of this assignment (Experience in working with ministries, water agencies, local self-government units);
- ✓ Preference is given to experts with experience in working with local self-government units (LSU) and public utility companies (PUC/PWC) on socio-economic and financial issues related to the provision of water services (tariff policy and methodology, calculation of water service prices, collection of water services, cost accounting, budgeting and business planning, financial management, management of fixed assets (property), etc.);
- ✓ Experience in facilitating and training small groups of participants;
- ✓ Experience in project cycle management;
- ✓ Experience at the local level working with local self-government units (LSU) and public utility companies (PUC/PWC);
- ✓ Experience in implementing financial and operational performance improvement programs or similar interventions;
- ✓ Experience in planning, preparation, and implementation of capital infrastructure projects in the field of water services;
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina

Number of positions: 2

6. Expert for Institutional Matters and Human Resources

University degree (240 ECTS, master degree or higher) in social, technical or natural sciences with proven experience working on institutional issues and human resources with at least 15 years of experience.

Specific experience relevant for the assignment:

- ✓ At least 7 years of experience in working with representatives of different levels of government and various stakeholder groups in areas relevant to the implementation of this assignment (Experience in working with ministries, water agencies, local self-government units (J);
- ✓ At least 5 years of experience in optimizing the organizational structure of local self-government units (LSU) and public utility companies (PUC/PWC), developing the rulebook on internal job position systematization for LSU and PUC/PWC, establishing effective relationships with service users, and human resource management; Legal regulation of PUC/PWC; establishment of procedures and standards for the successful operation of PUC/PWC; development of training programs for employees of LSU and PUC/PWC relevant to the field of water services, etc.
- ✓ Experience in facilitating and training small groups of participants;
- ✓ Experience in project cycle management;
- ✓ Preference is given to experts with experience at the local level working with local self-government units (LSU) and public utility companies (PUC/PWC);
- ✓ Experience in implementing financial and operational performance improvement programs or similar interventions
- ✓ Experience in planning, preparation, and implementation of capital infrastructure projects in the field of water services;
- ✓ Language qualifications – Proficiency in English and one of the official languages of Bosnia and Herzegovina

Number of positions: 2

Non-key experts

The consultant may propose additional experts deemed necessary for the provision of services, but who are not listed among the key experts. Additional experts:

1. Contract management expert
2. Junior Water Specialist

This list of non-key experts is indicative, and requirements are likely to include others that a Consultant will identify in its Technical Proposal. CVs for non-key experts should not be submitted in the proposal.

Estimated man/day

FMAWMF has estimated that the implementation of this project in 20/12 local self-government units (LSU) and their PUC/PWC will require approximately 2700 man-days, including general contract management.

The table below presents the projected level of Consultant engagement for each delivery period.

Period	**Implementation** (months)	**Engagement** Man/days
Part 1		
Preliminary needs assessment of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC) (4 months)	0-4	650
Inception report, consultations, and harmonization (1 months)	4-5	50
Part 2		
Delivery period 1 (4 months)	5-9	650
Delivery period 2 (4 months)	9-13	650
Delivery period 3 (3 months)	13-16	600
Part 3		
Simple database and/or tool	9-16	30
Part 4: Workshop organisation local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)		
Introductory workshop	0-2	10
Evaluation and further planning workshop	6-7	10
Conclusions and lessons learned workshop	15-16	10
Workshop with non –project local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)	10-12	20
Final report and Project completion (1 month)	16-17	20
Total	**17**	**2700**

Commencement: June 1, 2026
Completion: August 1, 2027
Project end: November 30, 2027

Facilities to be provided by the Consultant

The Consultant must ensure that experts are adequately supported and equipped. In particular, it must provide sufficient administrative, secretarial and interpreting provisions to enable experts to concentrate on their primary responsibilities.

The Consultant is required to:

- Arrange and finance accommodation, car, allowances, international travel, local travel/transport, fuel, office rent, telecommunication costs, including internet modems and mobile phones, other related office running costs, insurances, provision of necessary office equipment (desk computer; printer; portable computer, standard software, consumables, etc.) and all other services, documentation, logistical support, etc. which is deemed necessary for the successful implementation of the contract, excluding the activities listed under Reimbursable Costs.

Equipment

No equipment is to be purchased on behalf of the Contracting Authority as part of this service contract or transferred to the Contracting Authority at the end. Any equipment related to this contract that is to be acquired by the Contracting Authority must be purchased through a separate supply tender procedure.

Reimbursable costs

The provision for reimbursable costs covers ancillary and exceptional eligible expenditure incurred under this contract. It cannot be used for costs that should be covered by the Consultant as part of its costs, as defined above. It covers:

- Expenses related to the implementation of trainings, workshops, seminars, meetings and networking (e.g., rent of conference room, accommodation, food and refreshments, translation, interpretation and translation, printing and copying training materials and equipment, transportation of participants etc.);
- Costs related to promotion and visibility of the project.

The provision for Reimbursable costs is **30,000.00 EUR**. This amount must be included unchanged in the financial proposal.

Part 5 - Monitoring, Timeframe and Reporting,

Monitoring of performance indicators for local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)

The Consultant conducts regular monitoring and evaluation of the progress of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC) based on selected performance indicators. These indicators are assessed using a simple Excel database created for each LSU (at least 10 key indicators) and for each PUC/PWC, where the initial (input) data will be determined during the Preliminary Needs Assessment of LSU and PUC/PWC in the first six months of the Program implementation. The frequency of data recording is every 3 or 12 months, depending on the expected level of changes. These individual databases for each LSU and each PUC/PWC are provided to the selected consultant for the continuation of input data recording and the evaluation of performance indicators based on these data. It is the consultant's responsibility to update the file to accommodate the expanded data set and to assess the performance indicators for the upcoming reporting periods (using the same formula and descriptions of performance indicators, which will be agreed with the consultant).

All indicators must be presented in a table format, along with the input values (in a separate table, with the source of such data specified) used for their calculation. In cases where input data for assessing performance indicators are not available, the best estimate must be provided, along with an explanation (e.g., if data on water intake are unavailable, it can be estimated based on pump capacity and operating hours, in addition to the achieved value, its estimate must also be provided. If some data are not recorded separately, the consultant will provide the best available estimate).

Implementation period, deliverables and expected deadlines

Period	Implementation	Delivery subject	Deadlines

	(months)		
Part 1: Preliminary needs assessment			
Preliminary needs assessment of local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC (4 months)	0-4	-	
Inception report, consultations, and harmonization (1 months)	4-5	Inception report	
Part 2: Strengthening operational efficiency and financial management of public utility companies (PUC) / public water management companies (PWC)			
Delivery period 1 (4 months) – Program implementation	5-9	Progress report 1	
Delivery period 2 (4 months) – Program implementation	9-13	Progress report 2	
Delivery period 3 (3 months) – Program implementation	13-16	Progress report 3	
Part 3 – Institutionalization of business performance and success monitoring for local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC)			
Simple database and/or tool	9-16	Database /tool	
Part 4: Organisation of workshops with LSU and PUC / PWC			
Introductory workshop	0-2	Report from Introductory workshop	
Evaluation and further planning workshop	6-7	Report from Evaluation and further planning workshop	
Workshop on Conclusions and Lessons Learned	15-16	Report from Workshop on Conclusions and Lessons Learned	
Workshop with non-Project LSU and PUC / PWC	10-12	Report from Workshop with non-Project LSU and PUC / PWC	
Final report and project completion (1 month))	16-17	Final report	
Total (17 months)	**17**		

Achieved progress during the period of the preliminary needs assessment (Inception report))

he inception report will cover the phase of analysing deficiencies and developing action plans, as well as the selection of 12 local self-government units (LSU) and their public utility companies (PUC) / public water management companies (PWC), including defining priority activities for each task individually for each LSU and its PUC/PWC. Additionally, the inception report will include a proposed schedule of man-days for each improvement measure, i.e., for each of the 17 key tasks.

Timeframe for the period of the preliminary needs assessment.

The draft inception report is submitted to the FMAWMF after the completion of the preliminary needs assessment, i.e., after the first 6 months of contract implementation (Part 1). The exact dates for the start of the implementation period of the preliminary needs assessment should be defined upon the contract signature between the Consultant and the FMAWMF Representatives of the FMAWMF will review the

aforementioned report within 15 days and provide comments to the representatives of the LSU, PUC/PWC, and the Consultant, who must finalize it within 15 days thereafter. The reports will be submitted in Word document format (with Excel tables) and will be prepared in one of the official languages of the people of Bosnia and Herzegovina. The Consultant will prepare and propose a template for the preparation of the aforementioned report to the FMAWMF during the Inception Phase.

Progress Achieved during Delivery Period 1 (Progress Report 1)

Progress Report 1 (for each LSU and each PUC/PWC) covering all areas of improvement. For each area of improvement, the report will include details of the activities carried out during the first reporting period, the values of performance indicators at the beginning and at the end of the reporting period, deliverables (documents), the plan/list of activities to be implemented during the next reporting period, and the expected progress (outcome with projections of performance indicator values).

An integral part of these reports are individual Excel tables for each LSU and each PUC/PWC, which contain the basic, advanced, and target values according to the performance indicators. The reports and their attachments are delivered in electronic form and sent by email to the LSU, the management of PUC/PWC, and the FMAWMF. The Consultant will first review all individual Excel tables for each LSU and each PUC/PWC and align them with the representatives of the LSU and PUC/PWC to ensure that all data provided by the LSU and PUC/PWC in the mentioned tables are accurate, verified, and credible. The reports must be approved by the management of the PUC/PWC and the LSU.

Timeline for the delivery period 1

The draft Progress Report 1 is submitted to FMAWMF after the first 6 months of program implementation (Part 2). The exact dates for the start of the delivery period 1 should be defined upon the contract signature between the Consultant and FMAWMF and verified in the Initial Report. Representatives of FMAWMF will review the mentioned reports within 15 days and provide comments to the representatives of LSU, PUC/PWC, and the Consultant, who must then finalize them within 15 days. The reports will be submitted in Word document format (with Excel tables), and will be written in one of the official languages of the peoples of Bosnia and Herzegovina. The Consultant will also prepare and propose a template for the creation of the mentioned report to FMAWMF during the Initial Phase.

Progress Achieved during Delivery Period 2 (Progress Report 2)

Draft Progress Report 2 (for each LSU and each PUC/PWC) covering all areas of improvement. For each area of improvement, the report will include details on the activities carried out during the second reporting period, values of performance indicators at the beginning and end of the reporting period, deliverables (documents), a plan/list of activities to be carried out during the next reporting period, and expected progress (results with projected values of performance indicators).

Integral part of these reports will be individual Excel tables for each LSU and each PUC/PWC containing basic, advanced, and target values according to the performance indicators. The reports and their attachments will be provided in electronic form and sent via email to LSU, the management of PUC/PWC, and FMAWMF. Prior to this, the Consultant will review all individual Excel tables for each LSU and each PUC/PWC and agree on them with the representatives of LSU and PUC/PWC, ensuring that all data provided by LSU and PUC/PWC in these tables is accurate, verified, and reliable. The reports must be approved by the management of PUC/PWC and LSU.

Timeline for the delivery period 2

Draft Progress Report 2 will be submitted to FMAWMF 12 months upon program implementation. The exact dates for the commencement of Delivery Period 2 should be defined upon the contract signature between the Consultant and FMAWMF and verified in the Initial Report. Representatives of FMAWMF will review the aforementioned Reports within 15 days and provide comments to representatives of LSU, PUC/PWC, and the Consultant. These reports must then be finalized by them no later than 15 days thereafter. The reports are submitted in Word document format (with Excel tables), and are prepared in one of the official languages of the peoples of Bosnia and Herzegovina. The Consultant will develop and, during the Inception Phase, propose a template for preparing the aforementioned Report.

Progress Achieved during Delivery Period 3 (Progress Report 3)

The draft Progress Report 3 (for each local self-government unit (LSU) and for each public utility company (PUC) / public water management company (PWC)) will cover all areas of improvement. For each area of improvement, the report will include details on the activities carried out during the third reporting period, the values of performance indicators at the beginning and end of the reporting period, deliverables (documents), plan / list of activities to be carried out during the next reporting period, and expected progress (results with projections of performance indicator values).

Integral part of these reports will be individual Excel tables for each local self-government unit (LSU) and each public utility company (PUC) / public water management company (PWC), containing baseline, advanced, and targeted values according to performance indicators. The reports and their attachments are delivered in electronic format and sent via email to the LSU, the management of PUC/PWC, and the FMAWMF. Prior to this, the Consultant will verify all individual Excel tables for each local self-government unit (LSU) and each public utility company (PUC) / public water management company (PWC) and align them with the representatives of the LSU and PUC/PWC to ensure that all data provided by the LSU and PUC/PWC in these tables is accurate, verified, and credible. The reports must be approved by the management of the PUC/PWC and LSU.

Timeline for the delivery period 3

The draft Progress Report 3 will be submitted to FMAWMF after 18 months of Program implementation. The precise commencement dates for the implementation period of delivery 3 should be defined upon the contract signature between the Consultant and FMAWMF and verified in the Inception Report. FMAWMF representatives will review the aforementioned reports within 15 days and provide comments to the representatives of the local self-government units (LSU), public utility companies (PUC), and public water management companies (PWC), who must then finalize them within 15 days. The reports will be submitted in Word document format (with Excel tables) and will be prepared in one of the official languages of the peoples of Bosnia and Herzegovina. The Consultant will prepare and, during the Inception Phase, propose a template for the preparation of the mentioned report to FMAWMF.

Achieved progress during the delivery period at the end of the program implementation

The draft of the Final Report, as a summary of all previously delivered progress reports, should include a common table of all performance indicators for all local self-government units (LSU) and public utility companies (PUC) / public water management companies (PWC), as well as a general summary of all areas of performance improvement, providing key statistics on the activities carried out and the improvements achieved for all LSU and PUC/PWC.

Timeline for the preparation of the final report

The draft final progress report is submitted to FMAWMF after 30 months of program implementation, or upon the completion of the entire program phase. The exact dates for the submission of the final progress report should be defined upon the contract signature between the Consultant and FMAWMF. Representatives of FMAWMF will review the final report and provide comments to the representatives of the LSU, PUC/PWC, and the Consultant, who must finalize it within 15 days. The report will be delivered in Word document format (with Excel tables) and will be written in one of the official languages of the peoples of Bosnia and Herzegovina. The Consultant will prepare and propose to FMAWMF the template for the above-mentioned report.

Publicity and Visibility

During the Inception Phase, the Consultant shall develop a Communications and Visibility Action Plan in collaboration with the Bank and the Client.

All communication and visibility activities should be carried out in close cooperation with the Client as the authority to review and approve visibility-related materials and activities. The Consultant shall seek the Client's written approval before initiating any information, communication, or visibility material and activity.