Implemented by:

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Terms of Reference

Consultancy Services for Development and Implementation of Business Planning Model for Water Utilities

1. Introduction

1.1 The Asset management for water and sanitation sector in South-East Europe

Public utility assets in South-Eastern European (SEE) countries are managed by Public Utilities (PU) owned by local government (Municipality). Management of all aspects of providing water supply and wastewater services is deeply influenced by the municipal authorities.

Water Utilities are experiencing greater than ever pressure to improve their overall efficiency and cost-effectiveness. The industry is being regulated at an increasing tempo, while at the same time, funding is becoming more difficult to come by. Water Utilities are left with little choice – as a minimum they will have to improve the quality and reliability of the water they supply; more likely they will be required to become less dependent on external funding and eventually self-sufficient and economically viable.

This is not an easy task with many Water Utilities having an infrastructure that has suffered from years of neglect, with supply systems that have been allowed to deteriorate due to an acute shortage of funds, inefficient over-regulation and/ or mismanagement.

To assist Public Utilities a project titled "Asset management for water and sanitation sector in South-East Europe", funded by the German Ministry of Economic Development and Cooperation (BMZ) and the Government of Switzerland, is implemented by GIZ (ORF MMS) and the Network of Associations of Local Authorities of South-East Europe (NALAS).

The project is focused on introduction of Asset Management methods in order to improve efficiency and transparency in managing water and sanitation infrastructure in SEE.

As part of the project, a Business Planning tool is required as a Decision Support tool to enable the Municipalities/ Funding organisations assess the performance and sustainability of the Public Utility's future operation, including its ability to repay loans, as a result of implementing an Investment Plan made up of interventions proposed through carrying out effective integrated asset management.

1.2 Business Planning Model as a Decision Support Tool

Various activities, as part of integrated asset management, will be carried out at the Utility that will provide proposed interventions to form part of the Investment Plan. Deciding which of these interventions should be included in the Investment Plan depends on both the risk of service failure and the cost effectiveness of such interventions.

To carry out the proposed Investment Plan the Utility will require funding and to be able to raise such funding it should be able to formulate a detailed Business Plan that will convince funding institutions that the Utility's operation is/ will become sustainable and will be able to repay its debts. Such a Business Plan will require input from information on (a) current operations (tariff structures, revenue breakdown, operational costs (fixed & variables) breakdown, debts & repayment schedules, financial statements), (b) from the proposed Investment Plan (c) as well as from other Utility operations such as water auditing and demand forecasting.

One of the main problems is that some/ most/ or even all of the integrated asset management required activities are not carried out at the Utility and the Utility/ Municipality/ Funding Institution can't always wait until such activities are carried out to determine the financial viability of the Utility or applicability of a requested loan. As a result another model is required; the "Utility Assessment Model" that will utilize easily measurable indicators from the Utility and make suitable assumptions to arrive at the outputs required by the Investment and Financial Planning models.

Therefore, NALAS (hereinafter the Client) invites Companies or Consortia of Companies with relevant experience and expertise to submit proposal for provision of Consultancy Services for Development and Implementation of Business Planning Model for Water Utilities.

2. Main Objective

The objective of the assignment is to design, develop and pilot a comprehensive "Business Planning Model for Water Utilities", that will assess the performance and sustainability of a Water Utility based on its current condition and the effect of various interventions to be carried out through a proposed Investment Plan.

The output from this assignment shall include a conceptual model and appropriate ICT solution implementing that model. There may be several iterations between the initial concept and final products to address feedback and lessons learned from the pilots.

3. General requirements

3.1 The software solution shall make use of current industry standards and practices in ICT. Arguments shall be given wherever multiple competing standards exist, or an outdated standard is implemented.

3.2 Ideally, the ICT system shall exist as a web based application. A Windows-based, n-tier based application may also be acceptable if strong arguments are given supporting this approach.

3.3 The software solution shall be user friendly and tailored for use by water utility and municipal employees. It shall be accompanied by User and Training Manuals, both written in English language.

3.4 The solution shall support multiple languages and alphabets. Translation shall be possible using any of the current software translation tools.

3.5 The system shall maintain history of business planning models with the ability to provide reports with comparisons with the previous datasets.

3.6 The ICT solution is to include a methodology and implementation plan for piloting of the system. The methodology is to cover data collection, field visits, training and workshops.

3.7 Reporting shall include queries, graphical templates and Numerical Reports. A selection of common reports shall pre-exist whilst the user should be able to make custom-made reports. Output of information to excel must be supported.

4. Business Planning Model Requirements

4.1 General

4.1.1 Tailored and flexible Business Planning Model for Water Utilities shall be designed, that will assess the performance and sustainability of a Water Utility based on its current condition and the effect of various interventions to be carried out through a proposed Investment Plan.

4.1.2 The Model shall allow sensitivity analysis through (i) tariff structure Scenarios, (ii) Required achievable Performance Target scenarios and (iii) inclusion of Investment Plan interventions.

4.1.3 The Model shall allow calculation of alternative scenarios with error estimates (margin of error) based on the assumptions made in the model. Assumptions shall include error margins.

4.1.4 The model shall include performance indicators, grouped per regional or national level compared and presented in a graphical or numerical reporting summary formats.

4.1.5 All user-entered data shall be validated before processing and the user shall be warned for entries that are illogical, or contradict each other.

4.1.6 The model shall comprise of four components as follows:

1) Utility Assessment Model: The Utility Assessment Model should be used prior to carrying out prescribed asset management activities or at any stage during the execution of such activities to provide supplementary information (not yet derived from the said activities) to the Investment Model and the Financial Model.

2) Investment Plan & Model: The investment plan receives recommended interventions from various asset management activities, such as: (a) Data Improvement Analysis, (b) Infrastructure Rehabilitation Plan, (c) Infrastructure Maintenance Plan, (d) Commercial Rehabilitation Plan, (e) Leakage Reduction Program, (f) Upgrading Plan, (g) Emergency Response Plan and the (h) Master Plan. The activities should be grouped in terms of their nature, Performance Areas (source and water

treatment plants, bulk supply, distribution networks and consumer connections) and ranked in terms of their effect on the (a) Reliability of Service and (b) Profitability of the Organisation.

3) Current Operations Questionnaire (part of the Financial Model): information on Current Operations from the Utility must be obtained and be used to compile financial statements for current operations in the Financial Model, including Profit and Loss statement, Balance sheet and Cash flow statements. Information to be obtained in the questionnaire must include (a) tariff structures, (b) revenue breakdown, (c) operational costs (fixed & variables) breakdown, (d) current debts & repayment schedules

4) Financial Model: The Financial Model will project costs and revenues and present full financial statements and key performance indicators (KPI) for the Utility over the Planning Period. The model should allow for a 20-year planning period.

4.2 Utility Assessment Questionnaire & Model

4.2.1 Objective: The Utility Assessment Model is used prior to carrying out all the asset management activities or at any stage during the execution of those activities to provide supplementary information (not yet derived from the said activities) to the Investment Plan and the Financial Model.

4.2.2 Questionnaire: the Questionnaire should include all required input to enable analysis to achieve the desired output. However, such input should be SMART (specific, measurable, attainable, realistic and timely). Information should include town planning, commercial and technical macro indicators, such as number of properties, number of metered private connections, percentage debt recovery, fixed production costs and length of transmission & distribution network, etc...

4.2.3 Main Output: The outcome of the analysis should be a water and revenue balance and a set of performance indicators that are used as a basis to calculate expected performance improvements after certain activities have been performed. Such activities must be estimated in terms of cost and benefit resulting to the Utility and must be in line with the inputs used in the Investment Plan.

4.2.4 Specific Output: The output of the model should include:

1) Water and revenue balance of the Utility. Population projections used as input are used to give demand projections.

2) Assessment of the current status of the Utility from both an institutional and distribution perspective – covering both the commercial and technical functions.

3) Overview of realistic and achievable performance targets in line with accepted industry standards and acknowledged management and engineering practices.

4) Remedial scenarios that outline the possible and desired courses of action in order to achieve the performance objectives as defined.

5) Proposed infrastructure interventions and institutional improvement programs in accordance with the recommended remedial scenarios.

4.3 Investment Plan & Model

4.3.1 Objective: To come up with an Investment Plan that will ensure a desired level of service in a cost-effective manner. To carry out interventions in the system that will improve (a) reliability of service, (b) performance of service delivery and (c) performance of the Utility.

4.3.2 Description:

1) The investment model must receive recommended interventions from the asset management activities of (a) Data Improvement Analysis, (b) Rehabilitation Plan, (c) Maintenance Plan, (d) Commercial Rehabilitation Plan, (e) Leakage Reduction Program, (f) Upgrading Plan, (g) Emergency Response Plan and the (h) Master Plan.

2) The activities must be grouped in terms of (a) Performance Areas (source and water treatment plants, bulk supply, distribution networks and consumer connections) and (b) purpose (e.g. to increase reliability of service, increase revenues, etc..) and ranked in terms of their effect on the (a) Reliability of Service (risk of failure) and (b) Profitability of the Organisation.

3) Activities must also be grouped in terms of their nature, separating capital costs from preventive maintenance costs and other costs dealing with data improvement exercises as well as exercises of institutional nature.

4) For each activity the cost of carrying out the activity must be specified together with its time (year) of implementation.

5) Based on the different variables an importance rating must be deduced in terms of priority of inclusion in the Investment Plan. The use should have the option of changing criteria for inclusion to enable him to compile an investment plan that.

4.4 Financial Plan and Model

4.4.1 Objective: To come up with a comprehensive Financial Plan that will enable the implementation of an Investment Plan that will ensure a desired level of service in a cost-effective and sustainable manner, including the repayment of loans required for the investment

4.4.2 Description: The Financial Plan and Model will project costs and revenues and present full financial statements and key performance indicators (KPI) for the Utility over the Planning Period. It must also serve as a decision support tool to assist in compiling the Investment plan in such a manner that sustainability of Utility's operations are ensured; In some cases tariff increases might be required to increase Utility's income to achieve such sustainability. The Financial Plan and Model should have the following components:

1) Current Operations: information on Current Operations from the Utility must be obtained and be used to compile financial statements for current operations, including Profit and Loss statement, Balance sheet and Cash flow statements. Information to be obtained and analysed must include: (a) tariff structures, (b) revenue breakdown, (c) operational costs (fixed & variables) breakdown, (d) current debts & repayment schedules, (e) annual statements (if available).

2) Population forecast and Water Demand projections: Such information is important for projecting both revenues and variable operating costs.

3) Water Balance projected: All components in the water balance should be projected separately, based on assumed performance targets, based on investment plan interventions to be carried out.

4) Operational Expenditure is a combination of three components, those being (a) Fixed operational expenses – projected from current expenses, (b) Variable expenses based on suitable rated and projected water demands and (c) Preventive maintenance interventions as stipulated in the Investment-Operational Plan.

5) Capital Expenditure is given in the Investment-Capital Plan. User definable assumptions must exist in terms of Loans relating to capital works and their repayment schedules and terms.

6) Revenue Model & Forecasting, preferably per consumer category must include: (a) Debt recovery ratio projections, (b) Assumed tariff structure increase Scenarios, (c) Revenue calculations, (d) Definition of Overall performance index and analysis for range definition, (e) Sensitivity analysis on (i) Tariff structure scenarios, (ii) Overall performance index.

7) Financial Model & Forecasting (20 years), must include: (a) Funding and debt repayment assumptions and calculation, (b) Building up a Financial model including a Profit and Loss, Balance sheet and Cash flow statements, (c) Sensitivity analysis on (a) CAPEX (b) tariffs (c) Overall performance target variations.

8) Performance & Sustainability Assessment – KPI: A summary of Utility's performance (present and projected) based on suitable Key Performance Indicators (KPI).

5. Scope of Work

5.1 Assignment Duration: The system should be installed and training completed **no later than 30 April 2016**.

5.2 Steering structure: A liaison group or steering committee will be formed consisting of personnel from the Client and from the selected Consultant. The liaison group will meet at regular intervals to discuss assignment progress, training progress and further requirements.

5.3 Activities: The following activities are identified to be carried out

1) Activity 1: Model and ICT System Specifications and Approval

2) Activity 2: System Development

3) Activity 3: System Testing on Pilot Data

4) Activity 4: System Acceptance

5) Activity 5: System Installation and Training

5.4 Activity 1: Model and ICT System Specifications and Approval: The Consultant will propose a detailed Business Planning Model for implementation and ICT specifications for a system implementing that model. Both the conceptual model and the system specifications will be open for negotiations until approved by the Client.

5.5 Activity 2: System Development: Based on the approved specifications the Consultant will proceed to develop the ICT solution supporting the proposed model.

5.6 Activity 3: System Testing on Pilot Data. The Consultant will obtain appropriate information from at least one Pilot Public Utility as per the questionnaires prepared and with the help of the Client and run the model using different scenarios.

5.7 Activity 4: System Acceptance: The Consultant will present the model using the Pilot Utilities data (on one or two workshops) and seek approval of the model.

5.8 Activity 5: System Installation and Training: Once approved the Consultant will hand-over the model and provide appropriate training. All source code shall be given and ownership shall be transferred to the Client.

The Consultant must provide the human resources necessary for the implementation, training, test and pilot. The testing should include 7 Water Utilities from Albania, Bosnia-Herzegovina, Montenegro, Macedonia and Serbia. In order to finalise the system a consultative process should be performed with the pilot Utilities and Local Governments.

5.9 Support & Software Maintenance: It might be required from time to time to update the model (if it is needed it will be subject to different contract after completion of the assignment) based on new requirements or lessons learned from implementing the model. The bidder is required to allow for such activities and provide an annual cost for them in a separate offer to the financial offer.

5.10 Warranty: The ICT solution will remain under warranty for at least 1 year. Any defects, including, but not limited to, functional, security, performance and visual flaws are to be fixed and deployed free of charge to all pilots.

6. Instructions to Bidders

6.1 General

6.1.1 The Client reserves the right to modify the terms of the ToR at any time at its sole discretion.

6.1.2 The cost of preparing a proposal and of negotiating a contract, including trips is not reimbursable as a direct cost of the assignment. Short-listed proposals may be asked to make a presentation to the Evaluation Committee, which will be solely at the bidder's expenses.

6.1.3 The Company is requested to hold the proposal valid for 90 days.

6.1.4 The Client may not necessarily accept any proposal. At its sole discretion, the Client reserves the right to reject any or all proposals received and to accept any proposal which it considers advantageous, whether or not it is the lowest priced proposal. The Client is not under any obligation to award a contract, and reserves the right to terminate the request for proposal process at any time, and to withdraw from discussions with all or any of the Companies who have responded. The Client reserves the right to accept the proposed offer in total or in part, to reject any or all offers, to waive any minor informalities, irregularities, or technicalities, and to accept the offer deemed most favourable to the Client.

6.1.5 The Language of the proposal and all correspondence is English.

6.1.6 The Financial Offer must be presented in EUR.

6.2 Preparation of Proposal

6.2.1 The following format and sequence should be followed in order to provide consistency in Companies' responses and to ensure each proposal receives full and fair consideration. All pages should be consecutively numbered.

6.2.2 Technical Offer:

a) Cover Page, showing Company's name, address and contact information.

b) Up to one page Letter of Introduction, signed by an authorized signatory.

c) Table of Contents, including page numbers.

d) Detailed description of understanding of assignment.

e) Understanding of Model and ICT System Requirements: Response to Client requirements as set in Chapter 3 and 4 of this document. A more detailed description of requested sub-models is required as envisaged by the bidder.

f) Recommended approach/methodology on how to realise the assignment (explanation of working steps to carry of the above mentioned sets of activities including necessary feedback process and users training).

g) Recommended approach with regard to project management, coordination of activities and communication (including potential meetings and media to use).

h) Proposed operational plan (time line, milestones, meetings etc.).

i) Proposed number of travels.

6.2.3 Capacity Guarantee:

j) Presentation of the Company and its suitability for the assignment including information such as:

- Specialization of the Company, with specific reference to relevant experience in the water sector, and

- Relevant experience of the Company in developing Information systems for Water Utilities.

k) A Company Reference List (with references' names and contact details) with at least 3 similar tasks conducted.

l) In case of Consortia of Companies, partnership document (signed by all partners) that clearly states the Lead Partner and the roles and responsibilities of all consortia's parties.

m) Detailed CVs of the experts proposed to execute the assignment, along with their current employment status with the Company or in case of proposing external expert a pre-contract document specifying availability of the proposed expert.

n) Appropriate IT- related certification of the members of the team supporting this project. For example, MCSD certification if a Windows-based solution

is offered, Java programmer certification if the solution is to be built using Java etc.

o) Project Management - related certification of the members of the team supporting this assignment will be an asset.

p) Documents confirming the financial capability of the Company.

q) A document for registered activity as evidence that the Company is registered as a legal entity for performing the activity related to the subject of the Services or evidence that belongs to appropriate professional association in accordance with the regulations of the country where the Company is registered.

6.2.4 Financial Offer:

r) The Financial Offer shall contain the fee (per given requirements in chapter 3 and 4) i.e budget presented the fee for each task. The fee should include the expert/s fee; the travel costs of expert/s, any additional expenditure as VAT (or other taxes) should be presented separately (if applicable). The Financial Offer shall include a separate offer for annual software maintenance for the model.

s) The prices should be stated in EUR (gross amount), VAT (or other applicable taxes) shown separately, following the specified Terms of Payment.

The list is not exhaustive; additional sections and further information can be provided by the Company.

6.2.5 Minimum organization and consultancy requirements

A) Consulting Company

- At least 5 years experience in the water and sanitation sector at the local level and experience in developing information systems for Water Utilities.
- The solid experience of the Company in the field of Asset Management.
- The Company has prepared/ executed at least 3 similar assignments.
- The Company has the necessary financial capacities, presented in the Company's annual financial report for 2014.

B) Staff

<u>Senior Expert in Asset Management (one position)</u>

Academic Qualification:

- At least Bachelor degree in Engineering, Economics, Management, Public Administration, Development studies and/or related fields.

Experience:

- At least eight (8) years of relevant professional experience in water and sanitation sector, public utilities and local government. Proven experience in at least three projects in water and sanitation sector.
- Practical knowledge of asset management in the water and sanitation sector proven with experience in implementation of relevant projects.

- Experience in economic surveys and data collection and analyses will be an asset.

Competencies:

- Excellent research and analytical skills related to governance and in the water and sanitation sector.
- Sound organizational, coordination and communication skills.
- Strong presentation and facilitation skills.
- Good knowledge of international development projects, particularly in water and sanitation sector at the local level and asset management.
- Computer literacy, particularly, with MS Office.
- Excellent command on both written and spoken English is essential.

Senior ICT Expert (two positions)

Academic Qualification:

- A Bachelor degree in IT, management or related fields.

Experience:

- At least eight (8) years of relevant professional experience; Strong software development background (at least three projects) with emphasis on designing and establishing a web-based database and web-based modules.
- Practical knowledge of asset management in the water and sanitation sector at the local level will be an asset.
- Experience in development of business planning software, data collection and analyses will be an asset.

Competencies:

- Strong writing skills including technical reports, general reports.
- Demonstrates sound knowledge and skills of data communications and software integration.
- Displays a good understanding of ICT issues in the developing country.
- Excellent command on both written and spoken English is essential.

6.3 Submission & Evaluation of Proposals, Award and Contract

6.3.1 Proposal submission

One (1) original and two (2) copies of the proposal must be submitted in a sealed envelope at the address:

NALAS
St. Varshavska 36A
1000 Skopje, Macedonia

The Financial Offer shall be enclosed in separate sealed envelope, clearly stating “Financial Offer.

6.3.2 Closing Date and Location

To be considered, proposals must be received not later than 17 July (Friday), 16.00 (CET), with subject: **Offer for Consultancy Services for Development and Implementation of Business Planning Model for Water Utilities.**

6.3.3 Enquiries

This ToR can be downloaded from the NALAS websites at www.nalas.eu.

For any questions about the content of this ToR, please contact NALAS Project Manager, Mr. Miodrag Kolić at kolic@nalas.eu

6.3.4 Evaluation of Proposal

1) Evaluation of the proposals will be undertaken by NALAS Evaluation Committee.
2) The proposal will be evaluated for completeness as well as for conformity to system requirements and will receive a technical score.
3) The final score will be calculated based on the following criteria:
   - Technical Offer 40 points: proposed approach, solutions, work plan;
   - Company's Capacities 40 points: relevance of the Company's and suggested personnel's expertise and experience for fulfilling the tasks under this ToR.
   - Financial Offer 20 points.
4) The Technical proposal will be evaluated using the following criteria:
   a) Adequacy of the proposed model and ICT solution in response to requirements set in the terms of reference: (25 points)
   b) Recommended approach/methodology: (10 points).
   c) Recommended approach with regard to project management, coordination of activities and communication and proposed operational plan: (5 points)
5) The Company's Capacities will be evaluated using the following criteria:
   a) Specialization of the Company with specific reference to relevant experience in the water sector and relevant experience of the Company in developing Information systems for Water Utilities, number of projects: (16 points)
   b) Proposed Experts (CVs): (24 points)
6) The price score will be calculated in the following manner: the score allocated to the lowest offer will be 20 points, and to any other offers (X/Y) x 20 points, where "X" is the price of the lowest offer and "Y" is the price of any other offer.

6.3.5 Negotiations: The Client reserves the right to negotiate specific terms of the contract with the short-listed companies prior to the final award of the contract. The Client intents to negotiate a contract with the Company, which secures the highest, overall weighted score as a result of the evaluation. Should it not be possible to finalize an agreement with that Company, negotiations will be terminated and the next highest rated firm will be invited. The Client also reserves the right to negotiate specific terms of the contract with the Company as the contract progresses.

6.3.6 Contract:

1) The Company appointed for the assignment shall be required to enter into a contract with the Client.
2) The Company must propose a schedule of payments that will be discussed and finalised at negotiations.
3) The contract between the Client and selected Company will be signed under the Macedonian Laws.
4) In case of Consortia of Companies, the contract will be signed with the Company appointed as Lead Partner.
5) It should also be noted that the import of any materials or property must be in accordance with the local laws.

6.3.7 General:

1) All documents, including submitted proposals become the property of the Client. However, only the submissions by the successful Company will be used.
2) The decision of the Client regarding the choice of a Company is final and is not subject to appeal.
3) Once a contract has been awarded, the name of successful Company will be available to the public upon request.