

Terms of Reference

Request for Proposals

for Information Technology consultancy services

Title of ToR: Upgrading of SWIS and CFM tool

1. Project Background

The municipal utilities providing solid waste collection and processing services in SEE do not have reliable and accurate data upon the quantity and composition of household waste produced by the residents. The poor quality of information available precludes them from organizing adequately operations, assessing precisely their investment needs and reporting properly to municipalities and national level authorities. It hinders also making publicly available transparent information upon their services. It leads to insufficient effectiveness and efficiency in the delivery of services, poor planning and monitoring and impedes the actual implementation of European Union (EU) standards and targets set by European Waste Management Directives: the Waste Framework Directive 2008/98/EC (WFD), the Landfill Directive 99/31/EC and the Packaging and Packaging Waste Directive 94/62/EC. The quality of the data upon the household waste is a challenge for the utilities rendering the services, for the municipalities to which most of the related competencies have been transferred as well as for supervisory and other national authorities in charge of designing policies and following up their implementation at the national level.

In order to overcome such a situation, a project named "Solid Waste Data Collection in SEE" is designed and implemented by three partner networks: NALAS, SeSWA and Aquasan in 16 pilot municipalities, in four project countries – Macedonia, Serbia, Bosnia and Herzegovina and Montenegro. The project is financially supported by GIZ – Open Regional Fund/Modernization of Municipal Services.

The overall objective of the project is to make able the public utility companies and municipalities in SEE to build up better data upon the collected and processed household waste. It will be achieved through the following four components:

- Component 1: Defining Data collection methods and testing them in 16 pilot municipalities.
- Component 2: Capacity building for the effective use of data in the 16 pilot municipalities
- Component 3: Setting up an Exchange and Dissemination Platform on solid waste data collection
- Component 4: Enforcement of the Data collection methods

The Solid Waste modelling and management tools developed by NALAS and ORF MMS – Solid Waste Information System (SWIS) and Cost and Finance Model (CFM) are implemented in the frame of the project and will be adapted to fit specific needs of users (local governments and public utilities) and upgraded to take into account potential changes in the regulatory environment.

Specifically, CFM - Cost and Finance Model is a web-based modeling instrument helping the municipalities in assessing the costs of the provision of household waste collection. It also possesses a set of indicators that are calculated and compared to the average ranges from the existing CFM database. Its main purpose is to identify and allocate specific costs to appropriate waste management processes i.e. specific units (cost centers) within PUC.

SWIS - Solid Waste Information System is an MS Excel based workbook (for the versions 2003 and 2007) consisting of nine spreadsheets for entering and analysis of solid waste data including sheet with 44 different solid waste indicators calculated automatically. SWIS model was designed as a support tool for tariff setting, waste stream scenarios analysis, investments, strategic planning and other important waste related decision making at the local level.



Within the second project's component, development of recommendations for upgrading of CFM are anticipated. Representatives of the NALAS Task Force on Solid Waste and Water Management closely cooperated with SeSWA and Aquasan in developing recommendations for upgrading CFM, based on the practical implementation of the tool during the campaigns of solid waste data collection and analysis by SeSWA.

In addition, NALAS Regional Expert developed a "Report on Recommendations for Upgrading and Improvement of the SWIS and CFM" (RoR – Report on Recommendations) which provides measures for improvement of both tools, having in mind the recommendations derived from various sources (SeSWA, Aquasan, GIZ IMPACT project, GIZ SMS Kosovo, reports from SWIS&CFM trainings, Report from the meeting of the Platform etc.).

The RoR contains specification of functional requirements for Cost and Finance Model, which form the basis of the tender related to IT intervention and software reengineering.

Based on the RoR's recommendations and measures for improvement of both models, **NALAS is seeking for a competent IT Company for provision of IT expertise for upgrading and reengineering of the web-based CFM tool, as well as, upgrading of SWIS.**

NALAS Secretariat will therefore be inviting proposals through a tender exercise from well-established software development firms for the upgrading/development, testing and documentation of the Cost and Finance Model and Solid Waste Information System.

NALAS is a network of associations of local authorities of SEE. The Network brings together 16 Associations which represent roughly 9000 local authorities, directly elected by more than 80 million citizens of this region. NALAS promotes the process of decentralization in cooperation with central governments and international organizations, considering local self-government as a key issue in the current process of transition affecting the 12 countries in SEE. NALAS builds partnerships in order to contribute to the reconciliation and stabilization process in the region and henceforth contributes to the process of the European integration of the whole region.

NALAS aims to provide services to local governments for the benefit of the citizens in the region and aspire to develop itself as the Knowledge Center for local government development in SEE, recognized among all relevant stakeholders. At the heart of NALAS are the Task Forces, organized by the Secretariat bringing together the experts from the region, competent association staff and professionals employed in the local government administration.

Having into consideration the main project's achievements related to solid waste data collection on local level in the participating countries, a key role is committed to the NALAS Task Force on Solid Waste and Water Management. The task forces members support the implementation of the project by provision of technical assistance, sharing experiences and initiatives for better realization of the project activities. Thus, the task force's members are considered as a core team of local experts who will be actively involved in the establishment and implementation of the Benchmarking on Solid Waste Management in SEE.

2. The Present Tools

Cost and Finance Model

Cost and Finance Model is an application developed to support local governments and their public utility companies in South Eastern Europe to get better overview of their waste management cost structure. Conceptually CFM is based on typical Waste Management activities like collection, transport, separation and disposal. Thus it helps the local authorities to understand the costs of each activity separately and enables a better cost management. The Model can also serve as a tool for identification and appreciation of the general financial data of the waste management systems of the local governments and possibly help them define and apply policies aimed at ensuring the quality of service to the citizens at a lower cost.

On a separate "Indicators" sheet costs of waste management service are divided between 4 different groups of indicators. All indicators are given in two formats: in national currency per year and in Euros per year. Indicators are meant to show what the true costs of waste management service is and how these costs are distributed between specific waste management activities. The first indicator is the Total cost which shows the total cost of waste management service at the company level per year. The second indicator is showing the breakdown of Total costs per waste management activity blocks. This indicator can be used for setting tariffs for separate activities. Last two indicators show costs of specific waste management activity per ton and per capita showing the efficiency within single activity blocks. Derived indicators can be used to perform different types of comparisons. **Special attention in this regard is given to the need of NALAS network for comparative analysis among the different indicator at regional level of South-east Europe.**

Municipal Solid Waste Information System Model - SWIS

The SWIS model is a tool designed for municipal waste management data collection and analysis and is intended for use by public entities in charge for the provision of this service. It will help local governments to collect and process relevant data on the most important questions in municipal waste management such as: What are the quantities of waste generated, and how much is collected? What is the structure of mixed municipal waste? What is the amount of separation achieved? Is the waste treated and how is it disposed of? What are the costs and what is the efficiency level of the present system?

The primary goal of the SWIS model is to assist local governments in assessing and organizing information collection and processing, in a manner that will help them to obtain a clear picture of the state of waste management in their community, as a first but crucial step towards improving the methodological and organizational framework of municipal waste management and a starting point in considering and planning further steps on how to improve waste management in their communities.

The SWIS model, is an MS Excel based concept.

Entered data in SWIS are combined with other newly entered data generating results and different waste management indicators.

The model computes efficiency indicators for the Public Utility Company or operator such as quantity of waste collected annually per employee in tones, population served per employee, and employees per 1000 population served.

The model computes 44 indicators on important aspects of municipal waste management such as:

- Municipal waste quantities
- Municipal waste collection and transport
- Municipal waste depositing on landfill without separation
- Municipal waste depositing after separation
- Municipal waste recovery after separation
- Landfill usage capacity current cost, planned investments and estimated cost in EUR

Besides the English version of the SWIS, the tool was developed in additional local languages such as: Albanian, Bosnian, Montenegrin, Croatian, Macedonian, Romanian, Slovenian, Serbian and Turkish.

3. Reference persons

Reference person for the mission is the Project Officer, Boran Ivanoski
Email address: ivanoski@nalas.eu

4. Reference documents

1. "Report on Recommendations for Upgrading and Improvement of the SWIS and CFM" (RoR)
2. CFM MS Excel Spreadsheet - English version
3. CFM User Manual - English version
4. SWIS MS Excel Spreadsheet - English version
5. SWIS User Manual - English version

5. Assignment objective(s)

The objective of the assignment is to re-engineer and web-enable the Cost and Finance Model (CFM) which will include revising the current architecture and functionalities, as well as, to add new functionalities in accordance to the recommendations from the RoR of the Regional Expert.

In addition, the IT Company shall revise the current architecture of Solid Waste Information System (SWIS) and to apply the recommendations of the RoR and thus re-engineer the model.

6. Scope of work

As a part of the IT intervention, the IT Company will proceed with re-engineering of the CFM by revising and improving the current functionalities of the tool in accordance to the recommendations provided within the RoR.

Special attention shall be given to reengineering of the CFM web-based application in order to provide an opportunity for regional comparison of the indicators among the municipalities and their public utilities. In order to ensure discretion of the data in the process of comparison at national and regional level among the public utilities, a set of criteria (such as number of citizens, type of the municipality: urban/rural, size of municipal territory and service coverage, economic development, type of SW activities in place, landfill in place etc.) for grouping of similar utilities will be determined.

Besides the possibility for local comparison of the SW indicators, the web-based tool will provide bases for comprehensive benchmarking on SWM at national level beneficial for the Local Government Associations in development of the national policy recommendations and measures. The national institutions responsible for environmental protection and solid waste management issues could benefit of the results from the data base of the web-based tool, too.

In addition, the IT Company shall revise the current architecture and functionalities of Solid Waste Information System (SWIS) in accordance to the recommendations of the RoR and thus re-engineer the model.

Upgrading the English versions of CFM and SWIS

The IT Company will reengineer the English versions of the Models – CFM and SWIS in close cooperation with the Regional Expert on SWM. The adaptations in other lingual versions will be considered after the finalization of the English version.

Based on the IT intervention done by the IT Company, the Regional Expert on SWM engaged by NALAS will modify the User Manual of CFM and SWIS in English language.

Therefore, the IT Company shall provide clear track of changes in the English versions of both models.

Hosting of CFM at reliable web server and backup of data

In order to ensure appropriate functioning, unhindered access and utilization of the CFM by the ultimate users, reliable server and IT support for maintaining of the software shall be secured. Therefore, the IT Company will provide expert opinion and recommendations for selecting of reliable server for hosting of CFM.

The reengineered and upgraded application of CFM shall provide easy access to the data by responsible person from the NALAS Secretariat in a form of Administrator.

In addition, the IT Company shall propose measures for ensuring protection of the uploaded data and their regular backup.

Ownership (copyright) of the CFM and SWIS

With this procurement, NALAS will obtain complete ownership (copyright) of the CFM and SWIS tools. The Program code must be properly documented and packaged in a form that allows NALAS to maintain and further develop or upgrade of the CFM, as well as SWIS.

The IT Company, when delivering the program code, is obliged to also include all tools (if they are needed and are derived from specific kind of creating software/programme code) and program documentation that enables autonomous and independent programming and changing of the functionalities of the system and integration with other software applications and solutions, without the intervention of the IT Company as contractor of this procurement.

The Program code and all supporting tools is to be delivered twice: once during testing the Beta version and again upon completion of the work.

In addition, the IT Company is obliged to provide all licenses for the software components and tools that are required for the software application that is subject of this ToR.

Appropriate installation media and / or access to a protected web location from the manufacturer for downloading the installations shall be given for the software licenses.

Cooperation with the NALAS Regional Expert on SWM.

During the implementation of works, the IT Company will closely cooperate with the Regional Expert on solid waste management, engaged by NALAS in order to apply the recommendations given within the RoR, as well as, obtaining the necessary instructions and clarification in the process of reengineering and testing the model.

7. Main Activities and Related Outputs/deliverable

Considering that the IT Company shall re-engineer two separate IT applications, the execution of the following activities and their outputs shall be delivered in parallel:

7.1 Activities related to CFM

Activities	Related output/deliverable	Expert days	Period of implementation
1. Revision of the current architecture and functionalities of Cost and Finance Model	Current version of the CFM revised and plan for its reengineering developed	2	
2. Reengineering and upgrading of the CFM Implementation of recommendations derive from the RoR. Special attention shall be given to migration of linguistic versions into a single database and a single application with synchronization of resources of all applications and additional system upgrade.	CFM model reengineered and updated in close cooperation with the NALAS Regional Expert.	35	
3. Testing of the CFM model	Reengineered CFM model tested and adjusted for final use. Final version of the CFM model submitted to NALAS.	3	
	TOTAL expert days	40	

7.2 Activities related to SWIS

Activities	Related output/deliverable	Expert days	Period of implementation
1. Revision of the current architecture and functionalities of Solid Waste Information System (SWIS)	Current version of the SWIS model revised and plan for its reengineering developed	2	
2. Reengineering and upgrading of the SWIS	SWIS model reengineered in close cooperation with the NALAS Regional Expert.	6	
3. Testing of the SWIS model	Reengineered SWIS model tested and adjusted for final use. Final version of the SWIS model submitted to NALAS.	2	
	TOTAL expert days	10	

After the submission of the final versions of the upgraded CFM and SWIS model, the IT Company shall provide technical support (training, advice, instructions) in the implementation of the model in the period of 90 days.

The IT Company will ensure that meetings and interventions on the SWIS model are appropriately documented. The IT Company is expected to work closely with NALAS Reference Person and programme team.

8. Timing and duration of mission/s

The level of effort anticipated for the assignment is 50 person days which will cover all the activities and tasks required for the successful completion and delivery of the consultancy. The consultancy is expected to be undertaken during the period – **05th of December 2015 to 05th of February 2016**.

9. Reporting

A Final Mission Report with all related outputs shall be submitted to the Project Officer, referenced in point 1 of this ToR for reviewing and approval, not later than 01st of March 2016. The Final Mission Report with all related outputs, shall also state observations on problems/risks encountered and recommendations for improvements/additional activities/risks mitigation actions.

10. Instructions to Bidders

General

NALAS reserves the right to modify the terms of the ToR at any time at its sole discretion.

Short-listed proposals may be asked to make a presentation to the Evaluation Committee, which will be solely at the bidder's expenses.

The IT Company is requested to hold the proposal valid for 30 days.

NALAS may not necessarily accept any proposal. At its sole discretion, NALAS 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. NALAS 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 IT Companies who have responded. NALAS 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 favorable to NALAS.

The Language of the proposal and all correspondence is English.

Submission of proposals

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.

1. Cover Page, showing IT Company's name, address and contact information;
2. Presentation of the IT Company and its suitability for the assignment;
3. IT Company Reference List (with references' names and contact details) with at least 3 similar tasks conducted;
4. Detailed CVs of the Senior and Junior Expert proposed to execute the assignment, along with his/her current employment status with the IT Company
5. Appropriate IT- related certification of the proposed experts, at least 3 per expert and brief description of experts' qualifications and requirements suitable for this assignment given below in the next chapter, part "B. Staff".
6. A document for registered activity as evidence that the IT Company is registered as a legal entity for performing the activity related to the subject of the Services.
7. Financial offer separately submitted in a closed additional envelope that shall contain the total budget for executing of the assignment for 50 person days. The Financial Offer shall clearly show the expert fee per one working day per expert (Senior and Junior). The price should be stated in Macedonian Denars (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 IT Company.

Minimum organisation and consultancy requirements

A) Consulting IT Company

- At least 5 years experience in developing information systems.
- The IT Company has prepared/executed at least 3 similar assignments.
- The experience of the IT Company in providing services for solid waste sector at local level will be considered as advantage.
- Experience of the company in the region of SEE.

B) Staff

For completion of the assignment demanded within this ToR, 2 (two) ICT Expert shall be proposed by the IT Company who will meet the following qualifications and requirements:

Senior ICT Expert:

- A Bachelor degree in ICT, management or related fields;
- In-depth knowledge in the field or working experience in ICT software development (at least 7 years);
- Experience in designing and establishing a web-based database and web-based modules with more than 100 internal users (at least 3 relevant projects with similar scope);
- Experience in handling voluminous data (at least 3 relevant projects with more than 100 internal users);
- Sound knowledge and skills of data communications and software integration;
- Proven knowledge of web technologies such as HTML, XML, SQL, .NET and/or .PHP;
- Experience in development Server Solutions, procurement of hardware and software licenses;
- Strong writing skills including technical reports, general reports;
- Excellent command on both written and spoken English is essential;
- Practical knowledge of solid waste management at the local level will be considered as advantage;
- Experience in donor funded projects related to local governments and public utilities, and working in international environment will be considered as advantage;
- Available to participate at regular coordination meetings in NALAS office in Skopje, Macedonia.

Junior ICT Expert:

- A Bachelor degree in ICT, management or related fields;
- Knowledge in the field or working experience in ICT software development (at least 3 years);
- Experience in designing and establishing a web-based database and web-based modules with more than 100 internal users (at least 2 relevant projects with similar scope);
- Experience in handling voluminous data (at least 1 relevant projects with more than 100 internal users);
- Knowledge and skills of data communications and software integration;
- Sound knowledge of Microsoft Office and MS Excel;
- Writing skills including technical reports, general reports;
- Excellent command on both written and spoken English is essential;
- Practical knowledge of solid waste management at the local level will be considered as advantage;
- Available to participate at regular coordination meetings in NALAS office in Skopje, Macedonia.

The Senior ICT Expert will be responsible for communication and coordination of the IT Company activities with NALAS Reference Person.

11. Submission & Evaluation of Proposals, Award and Contract

Closing Date and Location

To be considered, proposals must be received in hard copy in two envelopes:

1. Documents listed in the chapter 10 of this ToR for the points 1 to 6 and
2. Financial offer in a closed envelope explained within chapter 10, point 7 of this ToR.

The proposals shall be submitted not later than 30th of November (Monday) 2015, 16.00 (CET) at NALAS Secretariat Office's address:

Varshavska 36 A, 1000 Skopje, Macedonia,

with subject:

Offer for Consultancy Services for Upgrading of SWIS and CFM tool.

For any questions about the content of this ToR, please contact NALAS Reference Person.

Evaluation of Proposal

Evaluation of the proposals will be undertaken by NALAS Evaluation Committee.

The proposal will be evaluated for completeness as well as for conformity to system requirements and will receive a technical score.

The final score will be calculated based on the following criteria:

- IT Company's capacities and relevance (30 %)
- Proposed experts' expertise and experience for fulfilling the tasks under this ToR (Senior 25%, Junior 15%, total 40 %)
- Financial offer (30 %).

Negotiations:

NALAS reserves the right to negotiate specific terms of the contract with the short-listed companies prior to the final award of the contract. NALAS intends to negotiate a contract with the IT 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 IT Company, negotiations will be terminated and the next highest rated IT Company will be invited. NALAS also reserves the right to negotiate specific terms of the contract with the IT Company as the contract progresses.

Terms of Payment

The payment will be based on the actual number of working days (according to the submitted timesheet/s) invested for the development of each deliverable. The payment will be done upon submission and approval of the deliverables listed above, provided and approved timesheet/s and after submission of invoice.

The amount paid shall be gross and inclusive of all associated taxes relevant to the payment. All taxes obligatory under the Macedonian Law will be deducted and paid from the overall amount before transferring.

The assignment-related costs (travel and accommodation costs, if any) will be covered by NALAS or reimbursed according to the NALAS reimbursement rules. All travels have to be endorsed by NALAS prior its realisation.

Contract:

The IT Company appointed for the assignment shall be required to enter into a contract with the NALAS.

The IT Company must propose a schedule of payments that will be discussed and finalised at negotiations.

The Contract between the NALAS and selected IT Company will be signed under the Macedonian Laws.

12. Evaluation of work

The performance of the tasks will be assessed by the NALAS Reference Person.