

Terms of Reference

Customer Base Optimisation

Project:

Business Cases for Improved Waste Collection and Valorisation

Optimise the Customer Base
in Your Municipality



October 2019

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1 INTRODUCTION

Waste management utility companies in the Western Balkan countries usually categorize their customers based on the three major classes, i.e. residential, commercial and institutional customers, and this division reflects the key customer properties and characteristics. These customer classes are used as the base for determination of prices for services, including collection, transport and disposal of waste. However, there are service users that are not "visible" through the existing billing systems/customer database. In other words, although service is provided, certain users are not recorded in the Public Utility Company (PUC) databases and charged accordingly, which significantly reduces the revenue for the companies. Furthermore, the majority of municipalities have no reliable system in place for tracking and updating the exact number/characteristics of service customers. In many cases, the basis on which customers are charged is not adequate (incorrect data on the number of household members, utilized space and/or activity for commercial customers, etc.), and/or the characteristics of existing users are not updated on a regular basis (e.g. changes in the number of household members, introduction of new or change/expansion of scope of activity for existing commercial customers, etc.).

Besides, waste management companies usually use information about their customers from other institutional databases, but it has become apparent that this information is not linked and updated in a regular and systematic way. The conclusion is that PUC customer databases used as the basis for defining service tariffs are often obsolete and inaccurate, which has a negative impact on the achievement of better revenue collection rates by waste utility companies.

The German Development Cooperation, implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), aims to support local authorities and public utility companies to provide better and higher quality waste management services in Southeast Europe through the Open Regional Fund – Modernization of Municipal Services (ORF MMS) project. In this context, the Business Cases for Improved Waste Collection and Valorization Project, with the partner projects GIZ Climate Sensitive waste Management (DKTI) and GIZ Sustainable Municipal Services (SMS), as well as with the partner organizations Network of Associations of Local Authorities in SEE (NALAS) and Serbian Solid Waste Association (SeSWA), has developed a methodological approach (ToR) for the introduction of five (5) business processes:

1. customer base
2. optimization of routes
3. home composting
4. cost centers & tariffs
5. health & safety

The Customer Base process has been piloted in the city of Gostivar in North Macedonia, the municipality of Grachanica in Bosnia and Herzegovina, the city of Shabac in Serbia, and the municipality of Vushtrri in Kosovo.

The purpose of this document is to describe the methodological steps for application of the Customer Base process, which can be implemented either by the local self-governments and their public utility companies, provided that they possess sufficient internal capacities and

expertise, or through outsourcing it to advisory services specialised for this kind of tasks. In the case of outsourcing, the contents and structure of this document provide a good understanding of the process, the activities required and the outputs expected from the advisor, thus allowing for easy drafting of the service terms of reference.

2 OBJECTIVE

The objective of these TOR is to provide guidelines for the PUCs that provide waste management services or for the local authorities to analyse and update their customer base in order to optimize and make their business operations more efficient.

3 BENEFITS OF CUSTOMER BASE ANALYSIS

Detailed customer base analysis, identification and inclusion of certain service users in the existing billing systems will help local PUCs to increase their revenues and to potentially set up tariffs that are more reliable and in line with the actual costs of service rendered, and thus improve the financial sustainability of PUC and waste management services in the long run. Additional determination of a reliable number and characteristics of customers will be of great importance for fair (i.e. more precise) revenue collection. Optimization and increased operational efficiency of the PUCs sector responsible for monitoring and updating the customer database, as well as defining a future model and systemic approach to using available data from other institutions in the municipality, can be potentially achieved by implementation of the process. The secondary benefit is that the analysis of the existing customer base will lead to the creation of a solid basis for further planning in this area (e.g. changing the tariff system, defining a billing increase model, etc.).

Besides the direct financial benefits for the PUC, for customers and the local government, an updated and optimized customer base has many advantages. An updated database with accurate distribution of different customer groups allows for a more advanced and fairer tariff system from which all customers can benefit by paying for the service they received and not covering losses incurred by poor collection rates. Local governments can also benefit, since better revenue collection by PUC means less need for interventions from the local budget.

4 CUSTOMER BASE – METHODOLOGICAL APPROACH

In order to introduce the process of updating and optimizing the customer base to achieve the benefits stated above, municipalities and their PUCs should be advised and guided to perform the following activities.

4.1 Preparatory Activities

Thorough and comprehensive update and optimization of the customer base with or without the advisory service can take place only if there is a substantive level of awareness and clear political will among the decision makers at the local level, both in the local government and the PUC, to get engaged in this kind of process. Obtaining political backing for this process and ensuring willingness of decision makers at company and local government level to support such an approach should be the first step in the process.

In order to provide advisory services, the leadership needs to have a clear idea and a vision about the benefits of customer base optimization as well as about the negative consequences to the company and local authority in the case of a status quo scenario. Political support is best obtained through direct contact with decision makers and should ideally be documented and provided in the form of a letter of interest signed by the mayor and/or a decision of the PUC Director. Such a letter or decision should clearly state the division of responsibilities and obligations between the PUC, local authority and other actors in the process. The elements of the letter or decision should come out as result of discussions and meetings with the company and municipal leadership and should be drafted after these meetings, containing, but not limited to elements such as setting up a working group for Customer Base and identifying the working group members, the responsible person in the company for the process, the time frame, etc.

4.1.1. *Meeting with the Public Utility Company and the Municipality*

The first step after the initial contacts with the political leadership is to organize a meeting at the PUC. The meeting should be attended by the decision makers and technical teams from both the municipal administration (the council member in charge of communal services, administration executive or staff members in charge for communal services, staff member responsible for IT or data collection, or alike) and the utility company (financial director, legal officer, department, staff member responsible for IT or data collection, head of the accounting unit, etc.).

The purpose of the meeting is to present the advisory service and the process to be implemented, as well as to inform them about the steps and activities to be implemented, including the activities to be performed by the team. The aim of the meeting is to also outline the problem, the possible mitigation strategy (customer base analysis and optimization), and the benefits for stakeholders, as well as to get the political support of the decision makers. The expectations from each of the stakeholder need to be clearly spoken and defined. Then, the steps and necessary resources can be outlined. The meeting should also initiate the setting up of a process implementation working group and identify the necessary start-up information (e.g. the current customer categorization, tariff system, revenue collection rate, etc.).

4.1.2. *Establishment of a Working Group*

As a result of the meeting with PUC and the local authority, a working group should be formed upon a decision of the mayor or the PUC director. The decision should specify the responsible executive from the PUC appointed by the director, who will oversee the



implementation of the process. Furthermore, the decision should specify the composition of the working group, which should consist of at least one representative of the PUC (waste management department), one representative of the municipality and potentially representatives of other relevant institutions. A process leader with certain amount of power and willingness to participate needs to be identified and appointed in charge of the working group. A representative of the civil society or a customer organization should also be a member of the group.

The main working group tasks are to: develop the action plan for implementation of the process; organize the process within the municipality; decide on the procurement of the equipment, monitor the implementation of the process, and report on the activities to the political decision makers. In all of these tasks, the working group should have the support of the advisor.

4.1.3. Development of an Action Plan (AP)

The action plan should include the responsible persons and the necessary steps and coordination between different stakeholders. This action plan should include a timeline and dates for all necessary activities. It should be developed by the working group, with the support of the advisor.

4.2 Data Collection on the Existing Customer Base

Together with the working group, the advisor will define all the data required for the project preparation, implementation and follow up activities, such as, but not limited to the following:

- Detailed customer database with all relevant characteristics (i.e. a review and analysis of each of the customers groups and the characteristics of each customer used for the purpose of setting tariffs)
- Detailed information about the current customers categorization (both residential and commercial/industrial customers) and the tariff system applied (e.g. per m² and/or per household member)
- An official decision determining the prices of services of collection, transport and disposal of waste by the PUC and the current price list of waste collection services broken down by customers groups
- Data about the revenue collection efficiency (i.e. the difference between invoiced and bills collected against)
- Audit and relevant information related to the customer base tracking and updating system
- Information about the potential synchronization and linkages with other related institutions databases (e.g. electrical and heating distribution companies, Business Registry Agency database, tax administration database, etc.)
- Collection frequency for different groups of customers
- Information about the current waste collection system (i.e. type of equipment - bins/containers) that is established for customers groups

4.3 Process Implementation

4.3.1. *Implementation Activities*

All activities in support of the implementation of the process should be carried out, in order to identify the number of service users that are not recorded and do not pay for the services provided or do so on an incorrect basis. Based on a previously agreed action plan with the working group, unregistered users (and/or their characteristics) can be identified after implementation of some of the following core activities, including:

- Comparison of PUC's customers bases with databases and information about users of other institutions (electrical and heating distribution companies, Business Registry Agency database, tax administration database, municipal institutions, etc.)
- Desktop assessment of the existing service users by using satellite images and maps (and/or including their positioning using GPS devices) and comparison with customers in the database
- Field testing/checking of the existing service users and comparison with customers in the database (e.g. by using a drone)
- Examination of the current customer database tracking and updating system (i.e. a review of the whole process, starting from customers recording/updating, their introducing into the database, defining tariffs, billing service, etc.).

It should be noted that the implementation of the process does not necessarily have to include all the mentioned activities on a full scale. If it is determined that the process is financially and/or technically too demanding, some of the activities may refer to a part of the municipality (e.g. one settlement) or to a single group of users (e.g. only commercial users). On the other hand, the process implementation is not limited to the above steps only and can include additional activities, should they prove to be adequate for the identification of unregistered users. Anyhow, a detailed plan of activities should be defined in agreement with the working group (after the preparation and data collection phase) in each municipality individually and should be in accordance with the needs and identified problems of the local PUC/municipality. A list of future steps/applied methods should be made accordingly.

4.3.2. *Provision and Delivery of the Equipment*

After examination of current issues related to the customer base, the provision and delivery of the equipment need to be agreed at the working group level and presented to and approved by decision makers. The planned procurement of equipment has to be budgeted. This process can potentially include the procurement of “software tools” that can help PUCs in their future work on (i.e. optimization of) their own existing customer database, and can also allow for synchronization with other databases from other institutions that are important for monitoring and updating the number and characteristics of PUC service users (databases management software, GIS software tools, etc.). Also, should the data collection phase and consultations with WG prove to be useful

and practicable, procurement of additional field work equipment (e.g. GIS device, drone, etc.) should be considered.

Following the determination of the process optimization possibilities and identification of new (or changing the characteristics of the existing) customers by using certain equipment, a specification of the equipment required should be made by the advisor with the support of the working group, and the following issues must be covered:

- Development of a detailed specification of the equipment necessary;
- Calculations and specification of the costs required for purchasing the equipment;
- Tender procedures;
- Procurement of the equipment.

The equipment will be delivered accordingly.

4.3.3. Training of Staff

Training in optimization possibilities (e.g. training in the usage of a new “software tool” and synchronization with other databases) will be provided for the staff dealing with the PUC's customer database (including processes for identification of and tracking and updating new customers).

5 ACTION PLAN FOR PROVISION OF THE ADVISORY SERVICE

Activity	Time frame																Responsible				
	Month 1				Month 2				Month 3				Month 4					Month 5			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		I	II	III	IV
1. Preparatory activities																					
1.1 Meeting with the Public Utility Company and Municipality																					SWM expert, Representatives (PUC, Municipality and relevant Institutions)
1.2 Setting up a working group																					SWM expert, Representatives (PUC, Municipality and relevant Institutions)
1.3 Development of an action plan																					SWM expert & Working Group
2. Data collection and planning																					
2.1 Data collection about customer base																					Working Group/PUC
2.2 Analysis of collected data																					SWM expert & Working Group
2.3 Defining plan for process implementation																					SWM expert & Working Group
3. Process implementation																					
3.1 Implementation activities																					PUC/Working Group
3.2 Procurement and delivery of the equipment																					PUC/Working Group
3.3 Training of the staff																					IT company/expert



6 KEY DELIVERABLES AND INPUTS BY ADVISOR

For the implementation of the advisory service and the above given tasks, the key deliverables and inputs to be provided by the advisor for each stage of the service implementation are as follows.

Key tasks and deliverables of Advisor	Number of expert days	Total
1. Preparatory activities		4 days
1.1 Meeting with the Public Utility Company and municipality	1 day	
1.2 Meeting with the municipality	1 day	
1.3 Support in defining the Action Plan	2 days	
2. Data collection and planning		10 days
2.1 Data collection (define data requirements and prepare questionnaires for PUC)	2 days	
2.2 Analysis of collected data	3 days	
2.3 Defining the plan for optimization of customer base processes	5 days	
3. Process implementation		6 days
3.1 Implementation activities	3 days	
3.2 Provision and delivery of the equipment	2 days	
3.3 Training of the staff	1 day	
TOTAL		20 days¹

¹ Days for implementation may vary depending on the size of local self-governments, the current status, equipment needed, etc.

7 SETTING UP THE METHOD AND MONITORING THE FINANCIAL BENEFITS

The objective of the monitoring method (Annex 1 – Monitoring Method) is to compare the positive impact on the company's revenues with the costs generated in the process, using a real-life example. The model of monitoring the progress and identifying the benefits from the introduction of the process has been set up in the form of the three related data groups, as follows:

- "Company level data" group, quantifying the indicators of the number and structure of all service users, prices, and average bills by defined groups of users, total revenues of the business, number of workers engaged and initial investments
- "Monitoring" group, fed by the project user, i.e. the local utility company on a monthly basis with data on: changes in the structure of users; effective working hours of the employees in charge of updating the database; as well as directly incurred costs
- "Indicators" group, automatically providing the results of the operations and the indicators of the performance of the process as a whole, based on the previously recorded data in item 1 and item 2.

Changes in segments that could have been a subject of potential adjustments and that have as such effects on the activities related to the Customer Database management, including, on one hand:

- Changes in households in collective residential buildings
- Changes in households in individual residential buildings (city area)
- Changes in data on rural households
- Changes in data on companies and entrepreneurs
- Changes in data on the other users (administration, institutions, non-profit organization, associations...)

as well monitoring the costs in the course of the exploitation of the process itself, on the other:

- Effective working hours on activities related to the identification and maintaining records of the changes in the segments observed
- Amounts of direct costs of such identification and maintaining records of changes.

It is also important to appoint a person from the local self-government unit in charge of monitoring and delivery of data.

8 Case Studies

The City of Gostivar, Municipality of Gračanica, City of Šabac and Municipality of Vushtrri were the local self-governments that applied and were selected for piloting the Customer Base process under the "Business Cases for Improved Waste Collection and Valorization" project. By applying for the pilot process, these local self-governments clearly expressed their commitment and

political will to implement it. SeSWA (Serbian Solid Waste Association), as a partner organization on the project, delegated solid waste management experts to guide them through the process.

8.1. Gostivar

Analysis of the current state of play. In accordance with the categorization of PUC users, the price is determined as a lump sum, separately for individual households, collective housing and the commercial sector. There is no precise list of service users that are not fed into the existing user database. However, users that are not registered in the database and are not charged for the services provided are mainly located within settlements on the periphery of the city and dispose of their waste in containers for collective housing in the urban zone. Currently, no specific software or program is used to guide and update the existing customer base. However, the customer database is available in electronic form. New users are entered and the existing ones are updated by the workers distributing bills in the field. Representatives of PUC state that there is a potential possibility of access to databases of other relevant institutions (e.g. Electricity Distribution).

Main challenges identified. The main detected problem related to the customer base are users (estimated at about 20-30%) living abroad who come to Gostivar only during summer holidays and do not pay (do not want to or are physically unable to pay for) for waste-related services. Also, the system is not updated automatically, since there is no software/program for updating the existing and entering new data; the updating is, therefore done based on the field inventory.

Activities implemented. The PUC tried to obtain a database of users of other institutions (the electricity distribution company and the Ministry of Interior) and compare it with its existing database. After that, a field inspection was performed and unregistered users were identified. For this purpose and in order to be more efficient and allow for easier use of the data obtained, tablets with an adequate software were purchased for 11 field collectors. In addition, a legal consultancy service was also provided, in order to define the best way to set up tariffs for people who are staying abroad (i.e. Decision on a special lump price for services provided).

Monitoring and Evaluation

The Gostivar local utility company teams in charge of field inspection recorded a total of 697 changes in data on users in their customer database in the five-month (March – July) period in 2019, over which the progress was monitored. Of that number, 373 changes (54%) referred to the “discovery” of completely new service users, to whom bills had never been sent prior to the application of the process. At the same time, they also recorded a total of 79 users (11%) to whom bills have been delivered, but in the case of whom it was established that they no longer live at the original address; following the checks made, such users were deleted from the customer database. In the case of 245 users (35%), the inspection found that their data are either incorrect or incomplete and, following the checks made, the correct and complete data were fed into the system.

The company obtains direct financial gains in the form of additional revenues from the new users of services (newly discovered customers) in the amount of bills issued, with the special feature of such additional revenues being that they are actually constant and financial gains will be obtained in the months, and even years to come. On the other hand, revenues go down by an amount equal to the revenues that would have been made from the users deleted from the

records; thus, looking at the overall benefits of the company, it is only about the net effect, which is computed by deducting the loss of revenues following the deletion of a number of users from the database from the additional revenues from the new users.

Changes (updates) of data in the case of individual users neither raise nor reduce the revenues; still, they do have (mainly positive) impact on the financial operations. Namely, when the company delivers a bill for services provided to a wrong address, the costs of delivery are unnecessarily increased, and such bills will not be paid in most of the cases. On one hand, the company will not be exempted from the obligation to calculate and pay VAT on account of unpaid bills and, on the other, it is much more difficult to enforce the collection of such debts, exactly because the data on the debtor are not updated.

Based solely on the results achieved thus far in terms of updating its customer database, the Gostivar utility company will generate additional annual revenues in the amount of EUR 22,170; once the process is applied throughout the entire territory of the municipality, far higher gains may be reasonably expected. Namely, due to staff limitations, the customer database optimization process was implemented in merely 2 of the total 13 regions of the municipality of Gostivar; yet, the remaining regions will certainly be subjected to controls in the coming period.

The projections of the overall effects on the utility company's revenues and direct costs related to the updating of the database indicate that the entire investments and work on the implementation of the process of optimization of the user database in Gostivar will be fully returned in a period of less than 2 years. The indicators of financial sustainability of the process are exceptionally positive. The net revenues discounted value over a period of 5 years amounts to 13,634 €, with the internal rate of return on investments being as high as 58% on an annual basis. The profitability index, obtained as a ratio of the benefit (gain) to the costs (investment) is 2.28 and is significantly above the lower threshold allowed (1). Simply put, the Gostivar example shows that the introduction of the user database updating process can be considerably cost-effective.

8.2. Grachanica

Analysis of the current state of play. The tariff system is defined equally for all households (8 KM / household), and all users (households) must have a signed contract with the PUC and municipality for the service provided. PUCs have relatively accurate lists of existing as well as unregistered users for each settlement covered by the waste collection service. With the help of the municipal administration office, a list of all households within settlements where the waste collection service is provided was obtained, and it was then checked in the field which households do/do not have signed contracts. The list is updated by the workers who distribute bills in the field on a daily basis.

Main challenges identified. The main issue are the illegal users, i.e. users who have not signed a "Waste and Disposal Contract" (which is a requirement under the Law on Communal Activities of the Tuzla Canton), which significantly reduces the revenues of the PUC that provide the service. An additional problem is the fact that PUCs and field workers have no jurisdiction, possibility or power to force illegal users to sign the contract. Engagement of communal staffs (inspection services) is necessary for concluding a contract.

Activities implemented. The activities completed include the procurement of tablet computers to assist the field workers in doing more efficient crosschecks of the characteristics of customers (whether there is a signed contract and basic user data - number of household members, square meters, etc.). The new equipment enables the PUC to make use of a questionnaire to identify how many unregistered users are ready to sign a contract, and what the main obstacles/objections of those who do not are. This survey, along with the inspection services, can help the PUC to define its strategy and priority in having unregistered users sign a contract.

Monitoring and Evaluation

A total of 4057 changes in data on users were recorded in the customer database of the PUC in Grachanica in the six-month (January – June) period in 2019, over which the progress was monitored. Of that number, 278 changes (69%) referred to the “discovery” of completely new service users, to whom bills had never been sent prior to the application of the process. At the same time, they also recorded a total of 54 users (13%) to whom bills have been delivered, but in the case of whom it was established that they no longer live at the original address; following the checks made, such users were deleted from the customer database. In the case of 73 users (18%), the inspection found that their data are either incorrect or incomplete and, following the checks made, the correct and complete data were fed into the system.

In this way, the company obtains direct financial gains in the form of additional revenues in the amount of EUR 13,750 annually, with the nature of the changes being such that additional revenues will be generated in the years to come, as well.

The projections of the overall effects on the revenues and costs related to the updating of the database indicate that the entire investments and work on the implementation of the process of optimization of the user database in Grachanica will be fully returned in a period of slightly more than 2 years (2 years and 54 days). The indicators of financial sustainability of the process are exceptionally positive. The net revenues discounted value over a period of 5 years amounts to 20,162 €, with the internal rate of return on investments standing at solid 49% on an annual basis. The profitability index, obtained as a ratio of the benefit (gain) to the costs (investment) is 1.81 and is significantly above the lower threshold allowed (1). Simply put, just like in the case of Gostivar, the Grachanica example shows that the introduction of the user database updating process is highly cost-effective.

8.3. *Shabac*

Analysis of the current state of play. The coverage of the population by organized waste collection is close to 100%. The prices for the municipal waste management services are different for the residential and commercial premises and are calculated per m². There is no well-defined list of service users that have not been entered into the existing user database. PUC "Stari Grad" has a software that is used for keeping and updating the existing customer base, based on which monthly invoices are issued. However, it is often not possible to get the appropriate input data for specific users or to update their data.

The introduction of new users and updating the existing users is done by the collectors (field work), as well as by making use of databases of other institutions (the electricity distribution company, registry, etc.); it should be noted here that such data are obtained in a non-systematic

manner (on request, contacts, etc.). The customer base of the PUC "Stari Grad" contains about 35,700 users (households, commercial entities), which makes everyday changes difficult to follow. Updating the changes is also slow, because accurate data usually comes through the involvement of other institutions and through the work of controllers / collectors on the ground.

Main challenges identified. Representatives of the PUC pointed out that the lack of a systematic and/or "automated" process of obtaining the data required for updating the customer database and the poor coordination with the competent services and institutions from which they can get such information are some of the biggest problems in working with the customer base. There is also the issue of incomplete or incorrect data that is specific to certain users. There is no automatically "tracking" system that provides information about the number of customers who are not recorded in the existing database.

Activities implemented. During the second phase (data collection and planning), it was agreed that - due to the objective impossibility of influencing the work of other services in the city in order to systematically obtain updated and accurate data - the project activities should be focused on the optimization of the work and efficiency of PUC's controllers in the field. For the purpose of optimizing and more accurate updating of service users, it was proposed that 8 tablet computers be purchased and used by the PUC's "control service", i.e. field controllers. To that goal, it was necessary to allow for direct connection and access to the existing customer base (desktop software) from the field (with tablets). In addition, training was provided for the PUC's staff (i.e. field controllers) in the use of tablet computers & software for synchronization with the desktop database. The training included explanation of the steps and processes for identification of and entering new customers, as well as updating information related to the existing customers.

The benefits expected from the procurement of the mentioned equipment were primarily reflected in the following:

- Increase in the operational and workflow efficiency (currently there are about 150 changes of customers-related information per month)
- Reduction of VAT losses for each unnecessarily submitted invoice
- Control of the work of the collectors/controllers
- Faster introduction of new and updates of existing users

Monitoring and Evaluation

The customer database updating process in the city of Shabac began in March, and the results were monitored by and inclusive of June 2019. Over the four months, a total of 969 changes in the data were recorded. Unlike in the case of Gostivar and Grachanica, the majority of changes (75%) were related to updates in the existing data, with only 137 cases of completely new users "discovered". At the same time, the utility company registered a total of 108 users (11%) to whom bills have been said for the services, but were not found at their original address; following the checks, such users were deleted from the database. The large number of data that are not updated in this case clearly indicates that the introduction of the process makes a lot of sense, as it is evident that a significant number of the bills was and still is delivered to insufficiently reliable addresses.

In this case, as the number of new users is only slightly higher than the number of deleted ones, there were no direct positive effects on the company's revenues, as was expected. Since the application of the process did not result in a meaningful increase of the number of registered

users, it is clear that the indicators of financial stability of the process of updating the customer database were also basically unfavourable. The costs are naturally higher than the direct revenues and it may, therefore, be stated that – from a merely commercial aspect – this activity is not cost-effective in Shabac in the short term. From a longer-term perspective, however, the poorer rate of detection of new users and reduction of the number of existing ones is no concern whatsoever, as the database is edited, more easily tracked and analysed in the process, and the probability of a positive outcome of any attempts to collect or come to an arrangement with the service user is much higher than in the case of systems that are not updated.

8.4. Municipality of Vushtrri

Analysis of the current state of play. The existing operating model in the municipality of Vushtrri was similar to that in most of the municipalities in the country - one where the PUC has direct contract with households and businesses and serves the role of both the operator and fee collector for tariffs that are set by the municipality. In order to have better control over the quality of services and the money flow, the municipality adopted the decision to undergo a reform by taking over the fee collection and contracting operators for the services. The implementation of this major reform in the sector requires that the municipality identifies and clearly records all clients on its territory. Having an updated customer base ensures that the municipality will contract the correct number of users and will be able to make the necessary financial arrangements by planning for the budget and expected cash flow.

Main challenges identified. The main challenge identified along the process lies with the fact that, although the municipality extended its services to all households on its territory, it became apparent that the number of users within the PUC database only reflected about half of the total clients. The PUC did not have the legal mandate to force users to enter into a contract. Now, having taken over the fee collection, the municipality will require all households and businesses to accept and pay for the services, or will otherwise condition the waste tax with other municipal services; it goes without saying that it will do so without violating any human rights. Furthermore, it was noticed that there was no system in place to update the information of existing clients.

Activities implemented . As a first step, the municipality compared the overall number of clients from different databases, including the existing PUC one, as well as the databases of the property tax authorities and the energy provider. As the client list of the energy supply company could not be used due to legal restrictions on data protection, the municipality of Vushtrri decided to use the property tax authorities' database that each municipality possesses as a starting point. This database was then filtered through for garages, barns, etc. The municipality then needed to adapt the software to transfer all customer data, including that of households, businesses and institutions, that would aid to the issuance of bills and

management of client information and accounts receivable. The program will aid the monitoring and revenue growth analysis, as well as the massive data management.

9 QUALIFICATION OF THE ADVISORS REQUIRED

- a) An SWM expert with a university degree in environmental engineering sciences, solid waste management, engineering or related disciplines. The expert shall have a minimum of 5 years' experience in waste management in developing and transition countries;
 - b) (OPTIONAL) An IT expert with a university degree. The expert shall have a minimum of 5 years' experience in the IT sector, related to working with different databases and software development in developing and transition countries;
- Experience in conducting measures related to the improvement of waste management services at the local level;
 - Experience in the provision of consultancy and advisory services including capacity development measures;
 - Experience in evaluation of different components of integrated waste management systems at local and regional level (i.e. development of waste management plans, regional as well as local, waste management modelling and options analysis);
 - Experience in policy support for waste management development is an asset;
 - Experience in the computerized environment; MS Office is a must;
 - Strong organizational, interpersonal, moderation, facilitation, communication and networking skills.

This model has been developed by the "Business Cases Development for Improved Waste Collection and Valorization" Project, implemented by the GIZ Open Regional Fund for South East Europe - Modernisation of Municipal Services, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). The Project was implemented in Western Balkan partner economies in the period October 2017-October 2019, in partnership with the Serbian Solid Waste Association (SeSWA) and the Network of Associations of Local Authorities of South East Europe (NALAS).

ANNEX 1 (MONITORING METHOD)

The annex is provided in a separate MS Excel File:
Customer Base Optimization - Annex 1 Monitoring Tool

ANNEX 2 - REGIONAL WORKING GROUP INPUTS - LESSONS LEARNED THROUGH IMPLEMENTATION

During the third meeting of the Regional Working Group on Solid Waste Management held in Belgrade on 21 November 2019, the main focus was dedicated to discussion and presentation of the activities, changes and benefits of the piloted business process. The applied interactive method World Café resulted in outputs regarding three aspects: applicability of the piloted process in other local contexts, possible improvements and way of dissemination of the project products. The content of this Annex is an added value to the ToR by bringing pragmatic reflection and recommendations on the process by the experienced practitioners from the region.

Optimisation of Customer Base

World Café Outputs



Applicability of the process

Having in mind the actions taken during the implementation and benefits of the process achieved in Gostivar, the general opinion of the participants in the World Café leads towards the conclusion that the process could be beneficial and applicable as such mostly in the medium and small size of municipalities. However, in larger municipalities such as capital cities, the approach of visiting the households and updating the customer base should be adapted to the particular context.

It was emphasized that the approach should be applied equally for the households, but also for commercial and public entities. Based on the discussion and by comparing different approaches of billing systems, the conclusion was that the process is fully adaptable and applicable, both in case when the public utility companies are issuing bills and collect fees, as well as when the municipality does so.



Improvement of the Process

Once the process is applied in the particular local context, it should be considered as an ongoing activity of the PUC and the municipality. In order for the collected customer data to be verified, regularly updated and considered as reliable, comparison and link with available data sets such as municipal data on property tax payers and/or birth registry should be established.



High-level transparency of the activities related to process application has to be ensured. Therefore, the citizens need to be adequately informed of the upcoming field visits and the complaint mechanism is to be easily accessible, applicable and effective.



Dissemination of the Process

Besides the regular institutional channels of dissemination of the local level actors, such as utilization of the capacities of the associations of the PUC and LSG (and their regional networks), the process and its benefits could be furtherly disseminated within national and regional contexts through peer-to-peer cooperation and study visits. Making a video clip with guidelines on the practical steps in the implementation of the process might be considered as tool for knowledge sharing and dissemination of the process as a product.