



**SAMPLE BIDDING DOCUMENTS FOR SERVICE CONTRACT
FOR SOLID WASTE MANAGEMENT**

SCHEDULES TO CONTRACT

LOT 1: SOLID WASTE COLLECTION AND STREET CLEANING

This document has been prepared for the purposes of the PPP IN INFRASTRUCTURE RESOURCE CENTER FOR CONTRACTS, LAWS AND REGULATIONS (PPPIRC) website (www.worldbank.org/ppp). It is a sample document FOR REFERENCE PURPOSES ONLY and SHOULD NOT BE used as a "model". The inclusion of any legal materials on the PPPIRC website does not mean that they are in any way approved, endorsed or recommended by the World Bank Group or its affiliates. Legal advice should be sought to determine whether a particular legal document is appropriate for any given project, and how the specific terms of the document should be adapted to fit the circumstances of that project.

TABLE OF CONTENTS

	Page
SCHEDULE 1: (DESCRIPTION OF SERVICES).....	2
ANNEX A: INFORMATION TO BE PROVIDED BY THE CONTRACTING AUTHORITY	15
ANNEX B: REQUIREMENTS ON THE DRAFT WORK PLAN	19
ANNEX C: INSURANCE	21
ANNEX D: ADJUDICATOR FEES AND EXPENSES	22
SCHEDULE 2: PERFORMANCE SPECIFICATIONS AND PENALTIES	23
SCHEDULE 3: BILLS OF QUANTITY	26
SCHEDULE 4: REPORTING REQUIREMENTS	30
SCHEDULE 5: KEY PERSONNEL AND SUBCONTRACTORS	32
SCHEDULE 6: BREAKDOWN OF CONTRACT PRICE.....	33
A: BREAKDOWN OF CONTRACT PRICE IN FOREIGN CURRENCY.....	33
B: BREAKDOWN OF CONTRACT PRICE IN LOCAL CURRENCY.....	33
SCHEDULE 7: SERVICES AND FACILITIES PROVIDED BY THE CONTRACTING AUTHORITY	34

SCHEDULE 1: (Description of Services)

General Note to Contracting Authority: *The development of the Description of Services is one of the most important tasks within the framework of preparation of Bidding Documents. The primary objective of the Description of Services/ Service Specification is to provide Bidders with a clear understanding of the services that are requested from the Contractor. It tells the potential Contractor what, where and when.*

The Description of Services/ Service Specification for residential Solid Waste collection should specify the types of service to be provided and address the following basic elements of service:

- *Types of waste to be collected*
- *Points of collection*
- *Service Frequency*
- *Type of waste container to be serviced*

Note to Contracting Authority related to detailed investigations: *The preparatory work that finally leads to the elaboration of the Description of Services/ Service Specification includes several steps that are individual and specific for each service region and cannot be fully covered in these documents.*

General Note to Contracting Authority related to Services: *The Description of Services in Lot 1 of the Schedules covers Waste Collection Services and Street Cleaning Services. However there might be cases where it is not appropriate to combine waste collection and street cleaning. In such cases, the elements related to Street Cleaning Services need to be deleted. Lot 2 Schedules covers operation of a transfer station and/ or long distance transportation of waste.*

NOTE TO CONTRACTING AUTHORITY: Basic assumptions: *For the preparation of this document the following basic assumptions have been considered:*

- *the service area is urban and includes approx. 100,000-250,000 inhabitants*
- *bigger cities might be divided into several service areas of the above given size in order to create competition between several private sector operators*
- *the collection system bases on container collection, containers are initially provided by the contracting authority the mobile collection equipment is provided by the private sector operator*
- *2-5 Year contracts*

In case of deviations from these assumptions, adjustments may be needed.

1. Type of Waste to be Collected

- (1) **Waste types to be collected:** Solid Waste to be collected under this Contract is defined as household or residential waste, approved waste from communal buildings and institutional waste and commercial solid waste covered by agreements with the Contracting Authority. A description of the characteristics of the waste stream is provided in Annex A (A2).
- (2) **Waste types not to be collected:** Solid waste not to be collected as part of the Services included within this Contract comprises:
 - bulky waste
 - wood
 - green waste
 - hazardous waste/ clinical waste
 - slag
 - metal scrap

In such cases the containers should be left uncollected and reported to the Contracting Authority.

(3) Types of Waste to Be Collected Through Street Cleaning Services

- Debris includes all materials normally picked up by a mechanical sweeper, such as sand, glass, paper, cans, rocks, shredded tires, leaves, and other materials on the surface of primary, secondary, and unpaved streets.
- Litter includes all randomly discarded solid waste materials found on primary, secondary, and unpaved streets and other public areas, or placed in litter baskets.
- Street sweepings include all solid materials collected from the mechanical and manual sweeping of primary and secondary streets, including debris and litter.

2. Service Area, Container Site and Waste Disposal Site

- (1) **Service Area:** The area to receive the solid waste collection service and street cleaning service is indicated in Annex A (A1).
- (2) **Location of Disposal Sites:** The location of the disposal sites to be used under the terms of this contract is shown on the map in Annex A (A4). The Contractor will be required to inform the Contracting Authority before the commencement of the contract concerning the identity of vehicles using particular sites.
- (3) **Fees for Usage of Disposal Sites:** The Contracting Authority shall directly assume all fees and increases in fees and/or provide the Contractor with the use of this or another disposal site free of charge. The Contracting Authority will compensate the Contractor for all unanticipated costs attendant to a change in the disposal site. Use of the site for commercial and/or industrial accounts not covered by this Contract will be subject to separate disposal charges.
- (4) **Prohibition of Dumping of Waste:** The Contractor shall at all times properly discharge solid wastes only to official designated waste disposal sites during their official hours of operation. No dumping of Solid Waste shall be made to drains, sewers, open lands, quarries, rivers, channels, swamps, or other locations not officially designated. The Contractor shall at all times supervise its workers and inspect their activities to ensure that unauthorised dumping does not occur. Unauthorised dumping of Solid Waste will be investigated thoroughly by the Contracting Authority and may result in the termination of the Contract, revocation of the licence, and other punitive action prescribed by Applicable Law.
- (5) **Disposal Site Conditions:** When using the waste disposal site the Contractor shall comply with the appropriate site conditions and regulations applying to that site. Such conditions and

regulations shall be provided by the Contracting Authority to the Contractor. Any waiting period for the unloading of vehicles will be at the risk of the Contractor.

- (6) **New Disposal Sites:** The assigned waste disposal site may be closed and a new disposal site developed during the period covered by this Contract. If the Contractor is required to transport waste to a new site the Contracting Authority will adjust the contract price charged by the Contractor for the change in transit distance/time to reflect the change in operational cost of the Contract.
- (7) **Title to Solid Waste:** Title to solid waste shall not pass to the Contractor when placed in the Contractor's waste collection vehicle. At all times title in the solid waste shall remain with the Contracting Authority.

3. Services to be Provided

- (1) **Collection Service:** The Contractor shall provide solid waste collection services for solid waste containers placed at defined container sites and transportation of this waste to defined waste disposal sites.
- (2) **Defined Container Sites:** The Contracting Authority shall ensure that all defined container sites will be, in general, readily accessible to waste collection vehicles, without recourse to reversing, although this cannot be guaranteed for each individual container site. Temporary obstructions caused by parked cars or due to other reasons are the risk of the Contractor. It will be the resident's responsibility to ensure that solid waste is placed in the containers.
- (3) **List of Defined Container Sites:** Each container site is listed in Annex A (A3). The list of container sites includes the types and number of containers. The service shall be extended to all new or additional container sites immediately on request from the Contracting Authority. The adjustment will not cause a contract Variation as long the change of proportions between the different types of container does not exceed 10 percentage points.
- (4) **Health and Safety Risks:** If it appears to the Contractor that emptying a container would constitute a health and safety risk or risk to the public, the Container should be left uncollected and the circumstances reported to the Authorised Officer. Where the Contractor has reason to leave solid waste uncollected at a collection site for any other reason, he shall inform the Contracting Authority within 6 hours by written notice, detailing why the solid waste was not collected, i.e. hazardous waste, unapproved containers, improper placement etc.
- (5) **Street Cleaning Services:** The Contractor shall provide street cleaning services as defined in this Schedule. All collected street sweepings and litter should be transported to the designated disposal facility. Street cleaning services include the following sub-tasks:
1. **Mechanical Sweeping of Primary Roads:** The Contractor shall mechanically wash, sweep and remove all litter and debris along the roads as specified in Annex A (A6). The road shall include the paved area between the normal curb lines of a street, whether actual curb lines exist or not, including median islands, but shall not include traffic islands, sidewalks, areas adjacent to the street, or parking lots.
 2. **Manual Sweeping:** The Contractor shall manually sweep and remove all litter and debris from roads as specified in Annex A6. Roads shall include any road, passageway, or alley constructed of asphalt, stone, tile, and brick or concrete or is otherwise hard surfaced. The work area shall include the paved area between the normal curb lines of a street whether actual curb lines exist or not, including median islands, traffic islands, sidewalks, and areas adjacent to the street or parking lots.
 3. **Cleaning Unpaved Roads:** The Contractor shall gather and remove all loose litter and debris from unpaved roads as specified in Annex A6. The work area shall include all

public portions of the road between buildings that is used for vehicular and pedestrian traffic.

4. **Litter Basket Services:** The Contractor shall procure, distribute, install, service (empty contents), sanitize and maintain waste litter baskets along streets and at public facilities having high volumes of pedestrian traffic shall be placed at intervals as specified in Annex A6 on both sides of all designated road and at each corner of every intersection with another road. Litter basket services should be conducted during the same hours that manual street sweeping occurs.
5. **Litter Collection from Public Facilities:** The Contractor shall provide manual labour to be on duty during all open hours to sweep up and remove all litter and debris from public facilities such as open general commercial markets, squares, bus stops, and any other sites that are listed in Annex A6. This service shall include collecting all litter from common areas of open commercial markets, emptying all litter baskets and other waste receptacles, and placing collected waste into bins located in or immediately outside the market.

4. Collection Frequency, Hours of Collection / Holidays

- (1) **Frequency of Collection Services:** Collection Services have to be conducted on a daily basis.
- (2) **Collection Hours:** Normal hours of collection are to be from specify time a.m. to specify time p.m. Exceptions may be made only when the Contractor has reasonably determined that an exception is necessary to complete collection of an existing route due to unusual circumstances or upon the mutual agreement of the Contracting Authority and the Contractor.

Note to Contracting Authority related to hours of collection: *The normal hours of collection vary depending on the type of Service Area. Especially in urban areas (city centres) it might be considered to conduct collection services during the night due to traffic conditions.*

- (3) **Holidays:** There are no holidays which will be considered as non-collection days by the Contractor.
- (4) **Frequency and Service Hours of Street Cleaning Services:** Street Cleaning Services have to be conducted according to a defined frequency during specified hours that are established to minimize impacts on residents and area traffic as specified in Annex A6. In addition, the Contractor should make every reasonable effort to schedule street cleaning services within 12 hours after residential and commercial waste collection service has been provided.

5. Minimum Technical Requirements for the Collection and Street Cleaning Equipment and Vehicles

- (1) **Number of Collection and Street Cleaning Vehicles:** An adequate number of vehicles shall be provided by the Contractor to collect solid waste and provide street cleaning services in accordance with the terms of this contract.
- (2) **Dedicated Fleet Inventory:** The Contracting Authority requests the preparation of a record of all the vehicles that the Contractor intends to employ in the collection of residential and commercial waste as well as the street cleaning service. This will provide assurance that the number and type of vehicles is adequate, and for the Authority to have on record in case of complaints from citizens and businesses concerning vehicle operation. No later than 30 days

prior to service commencement, and annually thereafter, the Contractor should provide a list of the equipment to be used specifying the year, make, model, identification number, gross vehicle weight of each waste collection and street cleaning vehicle.

- (3) **Registration, Licenses and Insurance:** The vehicles shall be licensed and shall operate in compliance with all applicable state, federal and municipal regulations. All vehicles shall be manufactured and maintained to conform with state, federal and municipal regulations and norms. All necessary licences and insurances are to be obtained by the Contractor and at the Contractor's expense.
- (4) **Vehicle Maintenance and Inspection:** The Contractor shall keep all vehicles and equipment used for performing the Services in good repair, appearance and sanitary condition. The Contractor is required to inspect vehicles daily before they leave the yard. In addition, the Contractor should be required to take out of service any vehicle that does not pass inspection. Daily inspection reports should be made available to the Contracting Authority upon request.
- (5) **Appearance of Vehicles:** The Contractor shall paint all vehicles used for the collection of solid waste and street cleaning in the same colour. The Contractor's name, customer service telephone number, and vehicle number as well as name of the contracting authority shall be visibly displayed on both sides of all vehicles in letters and figures not less than fifteen (15) cm high. In addition all waste carrying vehicles should have the carrying capacity (in m³) and the maximum total weight (in Mg) displayed in the upper front corner of the left and right sides of the body.
- (6) **Sanitation:** In order to minimise odours and insect propagation and to protect worker and public health the Contractor is required to wash the interior of the waste carrying area of all vehicles used for the purpose of collecting and transporting any waste with waste an a disinfectant and cleaning agent. This should be performed at a [specify period eg minimum of weekly], and/ or according to the schedule submitted as part of the final work plan. In addition, the Contractor should be required to wash all exterior surfaces of the waste collection vehicle chassis and body with water and a degreasing cleaning agent a minimum of [specify period e.g. once per week].
- (7) **Lifetime of Collection and Street Cleaning Vehicles:** The Contracting Authority requires the Contractor to utilise vehicles which have the following age range:
- 50 % which are not more than [specify period eg 5 years] old at the Commencement Date and at any stage in the life of the Contract
 - 80 % which are not more than [specify period eg 10 years] old at the Commencement Date and at any stage in the life of the Contract
- (8) **Ancillary Equipment:** Each vehicle shall be equipped with
- a fire extinguisher and a first aid kit,
 - an audible backup warning device that activates each time the vehicle reverses
 - a two way communication with Contractor 's collection supervisor and Contractor 's dispatch/ maintenance office;
 - flares, flags and wheel chock blocks for use when breakdown occur on public streets;
 - a broom and a shovel to clean up Solid Waste that may be spilled or otherwise scattered during the process of collection.
- (9) **Waste Collection and Street Cleaning Vehicle Body Requirements:** The Contractor is required to only utilise vehicles with bodies that are manufactured for the purpose of consolidating and storing solid waste. Therefore, the area of the vehicle body used for the compaction and storage of Solid Waste should be watertight and prohibit spillage of any solid or liquid waste materials, oil, grease or other substances onto the ground or exterior body of the vehicle. In the event that any such solid waste, oil, grease or other substances is dropped

- or spilled during the Contractor's operations, the Contractor should be required to clean it up immediately.
- (10) **Vehicle Loading:** No vehicles shall be wilfully overloaded. Maximum weight requirement in accordance with the national legislation as well maximum weight requirements of specific roads or bridges must not be violated.
- (11) **Use of Hydraulic Compaction:** In general the vehicles used for waste collection should be equipped with hydraulic compaction. In case of specific conditions which require non compaction vehicles at least the following requirements for vehicles without compaction need to be fulfilled:
- All waste must be enclosed and covered when the distance between the collection points exceeds 100m or the speed of the vehicle exceeds 30km/h,
 - Such vehicles are equipped with a mechanical dumping mechanism;
 - All wastes are transferred to vehicles with hydraulic compaction if the distance between the end point of the vehicles collection route and the disposal facility exceeds 5 km.
- (12) **Chassis Requirements:** Depending on the disposal conditions as described in Annex A, the Contractor is obliged to provide adequate equipment. (e.g. off road ability).
- (13) **Maintenance:** All lights, horns, warning devices, mufflers, fuel tanks and emission controls on the collection vehicles and equipment shall be kept operable at all times. A sufficient supply of spare parts shall be kept on hand to ensure the timely and continuous fulfilment of this Contract. When a vehicle is unavailable to provide the service, either for maintenance or repair, it shall be the Contractor's obligation to provide a replacement vehicle from the list of spare vehicles within its fleet or a comparable replacement through rental or leasing arrangements.
- (14) **Reserve Equipment:** To minimise the risk of interruption or delays in service delivery, the Contractor needs to have an adequate level of waste collection and street cleaning equipment in reserve at all the times. The Contractor is obliged to have available at all times reserve equipment that can be put in service within two hours of any breakdown, so that no interruption in regularly scheduled waste collection occurs. Such reserve equipment should be required to correspond in size and capacity to the equipment normally used by the Contractor to perform the waste collection and street cleaning services.
- (15) **Operation Log:** All vehicles shall maintain a log of time and movement, including: departure time from the parking area at the start of work, arrival time at and departure time from the officially designated discharge location, and arrival time at the parking area at the end of work. Vehicles which have their loads weighed or measured shall have this data included in their logs. Downtime and the nature of any breakdown and repair activities shall also be recorded. Data from the vehicle logs shall be collated and presented in a monthly report of service delivery from the Contractor to the Contracting Authority. In addition, the Contracting Authority shall have access to the vehicle logs upon demand.
- (16) **Private Solid Waste Collection:** The Contractor may undertake private solid waste collections (not covered under this Contract) with the same vehicles used for Contract collections, provided that such use in no way impairs the delivery of the service required under this Contract.
- (17) **Maintenance Facilities and Depot:** The Contractor shall establish and maintain a facility, not necessarily within Service Area's limits, where the service may be organised from and where mobile equipment is stored and maintained. Such facilities shall be equipped with adequate telephone communications, shall have at least one responsible person in charge and present during all normal working hours, and shall be open during these hours.

Note to the Contracting Authority:

The Contracting Authority may wish to make all or part of the existing depot or collection vehicles available to the Contractor in order to make best use of the existing facilities. In such case the following requirements have to be specified, usually to be funded by the Contractor and to be part of the Contract price:

- transfer of depot or vehicles to the Contractor on a temporary or permanent basis
- determination of provisions for rental or transfer of contracting authority facilities
- copies of leases for temporary transfer
- transfer of licenses
- insurance and maintenance requirements
- minimum technical requirements
- maps of the depot indicating responsible areas, rights of way, shared facilities, security and access

6. Containers

- (1) **Provision of Containers:** The Contracting Authority will initially provide at no cost the current waste containers. The Contractor will take over these containers. All later replacements due to wear and tear or due to other reasons will be the task of the Contractor independent from the initial status of the Containers.
- (2) **Materials and Finish Surfaces:** Containers must be made from materials that are functional, durable and weather resistant. Interior surfaces have to be smooth with a semi-or high-gloss finish to minimize accumulation of residue. Exterior surfaces should be suitable for hot stamping appropriate information and instructions for users on the lid and body and be free of sharp edges and corners, protrusions, or other structures that could pose a nuisance or hazard to users. Containers that the Contractor is required to provide should have a rust-inhibitive, corrosion resistant coating.
- (3) **Colour:** The required colour of the containers is specify colour_____
- (4) **Volumetric Capacity:** Containers need to have a volumetric capacity of specify volume m³ and a minimum load rating of specify loading rate kg.
- (5) **Design Standards:** The containers have to be designed according to industry standards. The containers have to meet all relevant sections of European Standards EN 840, or equivalent. Containers should be designed such that all waste flows freely out of the container when dumped by a semi-automated bar-locking lifting mechanism.
- (6) **Compatibility:** Each type container specified must be compatible with the type of collection vehicle that the Contractor intends to use.
- (7) **Lids:** Waste container lids are essential to ensure that waste stays in the container and that rain, pests and other animals are kept out. At the same time, lids should be lightweight in order to facilitate opening and closing by a variety of users.
- (8) **Handles:** Handles should be required on all waste containers to facilitate their movement either by users or the Contractor s' collection crews.
- (9) **Lifting and Emptying:** All containers supplied by the Contractor should be equipped with attachment points that facilitate safe lifting and complete emptying of all contents.

- (10) **Casters, Wheels and Axles:** In addition to handles, waste containers smaller than 3 cubic meters must be equipped with casters or wheels to improve their movement by users or service crews.
- (11) **Identification and Marking:** All waste containers should have identification numbers and others markings to reduce potential thefts, facilitate Contractor inventory control and aid contract monitoring. Markings also should include easily read and understandable information regarding usage.
- (12) **Useful Life:** The useful life of all containers supplied by the Contractor should be a minimum of 10 years. The warranty should not be prorated over the container life, and should specifically provide for no-charge replacement of any component parts that fail in materials or workmanship for a period of 10 years after placed in service. Any failure under warranty should require replacement with a newly manufactured cart, which should be defined to be the body of the cart, wheels, lid handles and other ancillary features and fasteners.
- (13) **Distribution Plan:** The Contractor has to ensure that waste containers will be delivered to service users in a timely and cost effective manner. The Contractor is required to submit a distribution plan with his or her Tender Offer for any containers that he or she is to provide. Delivery has to be finalised at the scheduled starting date for collection services and the time period for delivery is at maximum ____; specify number ____ weeks.
- (14) **Maintenance:** To ensure the preservation and long life of waste containers and to minimize customer inconvenience, the Contractor has to monitor, control, sanitize and otherwise maintain them over the life of the contract. Bins should be washed at least once every 3 months and rollout carts should be washed at least twice annually or according to the schedule and plan submitted by the Contractor with his Tender Offer.
- (15) **Replacement:** Some waste containers will need to be replaced from time to time over the contract period due to irreparable damage or theft. The Contractor is required to replace within in a specified time period, and at his or her own expense, any container that has been removed from its designated location or that is not fully functional and cannot be repaired. Replacement should be required within 2 days of notification from the contracting authority.
- (16) **Ownership:** Ownership of supplied containers will be with the Contractor. The Contracting Authority has the option to purchase the Containers at the end of the contracting period from the Contractor. The average price for each container will be defined as follows: unit price for the provision and maintenance per container/month as stated by the Contractor * (50 - Number of months of contract period).

*Explanation: In other words, after a contract period of 50 months the Contracting Authority has the right to purchase the container free of charge. After a contract period of 25 months the Contracting Authority has the right to purchase the container at a price of (50-25) * unit price for the provision and maintenance per container/month as stated by the Contractor. This reflects the typical lifetime of a container.*

Note to the Contracting Authority on Ownership of the containers: To provide added incentive to maintain waste containers at the highest practicable level, and to reduce potential liability to the Contracting Authority, ownership should remain with the Contractor. The Contracting Authority should be given the option to purchase the waste containers at the end of the contract period at a price to be specified in the service contract. Otherwise a new procedure of initial stationing will be required after termination of the Contract. Such initial stationing requires a lot of coordination and efforts..

7. Litter Baskets

- (1) **Provision of Litter Baskets:** The Contracting Authority will initially provide at no cost the current litter baskets. The Contractor will take over these litter baskets. All later replacements due to wear and tear or due to other reasons will be the task of the Contractor independent from the initial status of the litter baskets. The requirements for the placement and number of litter baskets are outlined in Annex A6. In accordance to these requirements the Contractor must distribute and service additional litter baskets, or retrieve existing litter baskets, when requested in writing.
- (2) **Design Standards, Materials and Finish Surfaces:** Litter baskets must be high quality, standard manufactured units that are durable, attractive, structurally sound, and vandal resistant. The litter baskets have to be designed according to industry standards. Litter baskets must be made from materials that are functional, durable and weather resistant. Exterior surfaces should be free of sharp edges and corners, protrusions, or other structures that could pose a nuisance or hazard to users. Litter baskets must be self-locking and opened with standard key and closed with slam shut action.
- (3) **Colour:** The required colour of the litter baskets is specify colour.
- (4) **Volumetric Capacity:** Litter baskets need to have a volumetric capacity of specify volume l.
- (5) **Useful Life:** The useful life of all litter baskets supplied by the Contractor should be a minimum of 10 years. The warranty should not be prorated over the container life, and should specifically provide for no-charge replacement of any component parts that fail in materials or workmanship for a period of 10 years after placed in service. Any failure under warranty should require replacement with a newly manufactured cart, which should be defined to be the body of the cart, wheels, lid handles and other ancillary features and fasteners.
- (6) **Distribution Plan:** The Contractor has to ensure that required litter baskets will be delivered to service users in a timely and cost effective manner. The Contractor is required to submit a distribution plan with his or her Tender Offer for any litter baskets that he or she is to provide. Delivery has to be finalised at the scheduled starting date and the time period for delivery is at maximum specify number weeks.
- (7) **Maintenance:** To ensure the preservation and long life of waste litter baskets and to minimize customer inconvenience, the Contractor has to monitor, control, sanitize and otherwise maintain them over the life of the contract. Litter baskets should be washed at least once every 3 months or according to the schedule and plan submitted by the contractor with the tender offer.
- (8) **Replacement:** Some litter baskets will need to be replaced from time to time over the contract period due to irreparable damage or theft. The Contractor is required to replace within in a specified time period, and at his or her own expense, any litter baskets that has been removed from its designated location or that is not fully functional and cannot be repaired. Replacement is required within 2 days of notification from the Contracting Authority.
- (17) **Ownership:** Ownership of supplied litter baskets will be with the Contractor. The Contracting Authority has the option to purchase the litter baskets at the end of the contracting period from the Contractor. The average price for each litter basket will be defined as follows: unit price for the provision and maintenance per litter baskets /month as stated by the Contractor * (50 - Number of months of contract period).

8. Collection and Street Cleaning Practice

- (1) **Public Safety and Convenience:** To minimize safety hazards, inconvenience and annoyance of the general citizenry the Contractor has to conduct his work without disturbing

the public. To achieve this objective the Contractor is required to take all practicable steps to minimize obstruction to pedestrians and motor vehicles during the performance of all aspects of the Waste Collection and Street Cleaning Service.

- (2) **Access to Private Property:** With the exception of providing collection services at dwelling unit doors, the Contractor's employees is not allowed to trespass or litter, cross property to adjoining premises, or meddle or tamper with property that does or should not concern them.
- (3) **Property Damage:** Manoeuvring large collection and street cleaning vehicles in heavy traffic and the negotiation of narrow roads create significant risk of damage to public and private property. To minimize this risk, the Contractor is held responsible for all costs associated with the repair and replacement of damaged property of any kind that can be ascribed to the actions of its equipment, employees or agents. Moreover, collection and street cleaning crews are required to immediately report any incident that might have caused damage to third party property to the field supervisor, who shall in turn inform the customer and contracting authority within 8 hours of such occurrence.
- (4) **Noise:** The noise associated with lifting, dumping, and compacting wastes from semi-automated waste containers can be unnecessarily loud and annoying if collection vehicle Contractor s do not make a conscious effort to minimize it. The Contractor is required to minimize noise from collection and street cleaning equipment and the activities of waste collection personnel by taking suitable measures such as opening and closing waste container lids carefully, and only compacting wastes at a frequency necessary to achieve high compaction and efficient collection productivity.
- (5) **Street Usage Rights:** The Contractor is granted the right to use the streets for the purpose of providing waste collection and street cleaning services specified in the contract, but is not granted exclusive use of such streets. The Contractor must observe all local ordinances relating to obstructing streets, keeping passageways open and protecting same, and obey all laws and ordinances controlling or limiting those engaged in service provision. When the Contractor's vehicle blocks the passage of other vehicles, the Contractor's vehicle is required to pull aside at the first opportunity and allow waiting vehicles to pass.
- (6) **Waste Spillage:** Waste spilled and not picked up by the Contractor's collection and street cleaning crews sends a negative message to the public regarding the Contracting Authorities commitment to improving Solid Waste management through privatisation. While the Contractor is not responsible for cleaning up solid waste around any of the waste containers caused by the carelessness of the Customers, the Contractor is responsible for removing any spillage of Solid Waste that occurs due to the action of the Contractor's collection and street cleaning equipment and/or personnel.
- (7) **Conditions for Not Providing Service:** In those instances where dwelling unit occupants or commercial business owners do not comply with service user requirements, the Contractor is not be obligated to provide service. However, in every such case, the Contractor is required to leave a notification form specified by the contracting authority that informs the resident or business of the exact reason why service was not provided. In addition, the Contractor is required to report all such instances of user non-compliance to the contracting authority.
- (8) **Scavenging:** Scavenging of materials from waste containers or litter baskets by collection or street sweeping staff reduces productivity, is dangerous, and projects a negative image of the job, the Contractor, and the service. The Contractor is required to forbid any employee from placing any solid waste inside or on the outside of waste collection and street cleaning vehicles except in the waste storage area of the vehicle. Moreover, the Contractor is required to prohibit staff from offloading or removing any materials while on collection or street cleaning routes or during transfer of waste materials to designated facilities.
- (9) **Public Diplomacy:** Long-term public support of improved Solid Waste collection and street cleaning services will be greatly impacted by how the employees of the Contractor interact with service users. Therefore, the Contracting Authority requires that all waste collection and

street cleaning personnel employed by the Contractor be provided with training adequate to provide customers with factual information concerning service regulations, and to deal with customers and the public in a courteous and non-contentious manner.

- (10) **Fees and Gratuities:** Fees that residents and commercial businesses pay through general tax revenues or surcharges on utility bills should be sufficient to cover any needed waste collection, street cleaning and disposal services. Service users should never have to pay the Contractor's employees for any service. Therefore, the contracting authorities requires that the Contractor not permit any employee, agent or subcontractor to offer special service beyond the scope of the contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of the contract.
- (11) **Routes and Schedule of Collections and Street Cleaning:** Not less than 30 days prior to commencing the service, the Contractor shall prepare for the Contracting Authority's approval the initial schedules and maps of all routes to be used in serving the area as specified within this Contract. Any changes in routes and/or schedules will also be subject to the Contracting Authority's approval, which will not be unreasonably withheld.
- (18) **Number of Passes and Operation Speed of Street Cleaning Vehicles:** The mechanical street sweeper operator is required to make as many passes as are necessary to meet the performance standard. On route, the operator should limit the mechanical sweeper speed to 10 km/hr, and where vehicles are parked, make every effort to clean the gutter as close to the parked vehicle as possible.
- (19) **Transfer of Street Sweepings and Litter on Public Streets:** The Contractor must not transfer street sweepings from street cleaning equipment to waste transfer vehicles in any manner that would result in obstructions to pedestrian or vehicular traffic, result in the creation of blowing dust and/or the spillage of any collected materials, or pose a health or safety threat to any individual or commercial business.

9. Responsibilities and Requirements of the Service Users

- (1) **Acceptable Waste:** The type of acceptable wastes that residents and businesses are allowed to place in the waste containers is specified as follows: Acceptable waste is limited to municipal solid waste and includes garbage, refuse, and other discarded materials including, but not limited to solids, semi-solids, sludge, liquids, and contained gaseous waste materials. It does not include bulky waste, yard wastes, hazardous wastes, radioactive wastes, medical wastes, or construction and demolition wastes.
- (2) **Set out Requirements:** The waste storage point is the waste container at the container site and waste generators are allowed to place waste in them at any time.
- (3) **Abuse of Containers:** The Contractor is required to replace any collection container that is damaged or rendered functionally unusable by any employee of the Contractor.

10. Public Information and Reporting Requirements

- (1) **Public Information Programme:** The Contractor is obliged to establish a public information programme including the following items:
 - public awareness campaigns:
 - distribution of information material
 - etc; please add further specification;
- (2) **Reporting Requirements:** The Contractor is obliged to provide reports according to the requirements described in Schedule 4.

11. Waste Collection and Street Cleaning Personnel

- (1) **Competence and Skills:** The Contractor shall provide an adequate number of employees with adequate skills and training to conduct the services as may reasonably be determined by the Contracting Authority.
- (2) **Uniforms and Safety Equipment:** The Contractor is required to provide uniforms and safety equipment for the waste collection and street cleaning personnel with the multiple purposes of protecting worker health and safety, minimising direct contact with waste, ensuring worker cleanliness, and providing a means of projecting a positive image of the service to the public.
- (3) **Driving License and Training:** Each employee assigned to drive a vehicle shall, at all times, carry a valid driver's license for the type of vehicle he is driving. The Contractor is also obliged to provide and document additional training appropriate to equip the personnel with the skill needed to safely operate the collection vehicles under the local conditions as outlined in the Work Plan.
- (4) **Behaviour:** The Contractor shall require his employees to be courteous at all times, to work quietly and not to use loud or profane language. The Contractor is obliged to train its employees in maintaining positive interaction with residents, business owners, and representatives of the Contracting Authority. The Contracting Authority shall have the right to make a complaint regarding any employee of the Contractor who violates any provision hereof or who is wanton, negligent, or discourteous in the performance of his duties.
- (5) **Waste Picking:** The Contractor's employees shall not be allowed to remove any articles of Solid Waste which have been placed in the Container or litter basket for waste collection.
- (6) **Field Supervision:** To facilitate the communication of the Contracting Authority with the Contractor and to ensure adequate management of all waste collection and street cleaning personnel in the field, it is essential that a minimum ratio of supervisors to work crews is specified in the Work Plan. The Contractor should be required to provide the names of all field supervisors in writing to the Contracting Authority. Finally the field supervisors are required to be present in their assigned area of responsibility at all times that crews are working, and have radio or cellular telephone communication with the Contractor's office and all waste collection and street cleaning vehicles under their supervision.
- (7) **Removal of Personnel:** In case of violating the above mentioned requirements, the Contracting Authority may require the removal from service provision of certain personnel, which shall be carried out by the Contractor.

12. Customer Service and Complaint Handling

General note to the Contracting Authority on customer service and complaint handling system: *The Contractor should be required to offer a system that facilitates the receipt, recording and resolution of inquiries and complaints from all categories of service users. To optimise customer usage the system must be widely publicized and easy to use.*

- (1) **Hours of Service:** The Contractor is obliged to provide a customer service office that should be open daily from ___ to ___ specify period ___.
- (2) **Staffing:** The office should be staffed with a number of trained personnel adequate to ensure that customers are able to reach a qualified customer service representative within 5 minutes of calling.
- (3) **Communication Equipment Requirements:** The Contractor is required to equip the customer service office with enough telephone lines to be able to answer all calls in less than

[] minutes, even during peak hours. The office should be equipped to transmit complains to field supervisors through the use of two-way radio or cellular telephone communications.

- (4) **Complaint Handling:** The ability and commitment of the Contractor to expeditious resolution of all complaints is essential to maintaining the financial and behavioural support of service users. As a first step, the Contractor is required to record in a bound book all complaints, noting the name and address of each complainant, date and time of complaint, nature of complaint, and nature and date of resolution. The Contractor is also required to compile a summary statistical table of the complaint record in a form satisfactory to the Contracting Authority, which reserves the right to examine it at any time.
- (5) **Complaint Resolution:** The Contractor is required to respond to all customer complaints within, at most, 12 hours. If a complaint involves a failure to collect waste from any customer as required in the contract, the Contractor should collect the solid waste or bulky waste in question within 12 hours of notification, provided it has been prepared for collection in accordance with the service user requirements.
- (6) **Unresolved Complaints:** In case that a complaint has not been resolved to the customer's satisfaction, the Contractor should submit a detailed report outlining the nature of the complaint and the resolution or actions taken to resolve the complaint. If, in the opinion of the contracting authority the proposed resolution or actions taken are insufficient to satisfactorily resolve the claim, it is required that the Contractor to carries out a process to satisfactorily resolve the complaint.

Annex A: Information to be Provided by the Contracting Authority

A1: Description of the Service Area

Note to the Contracting Authority related to description of the service area: A major step to develop and specify a waste collection system is a comprehensive assessment of the demographic and physical characteristics of the service area. The following table include basic figures that should be assessed and provided to the bidder by the Contracting Authority. Please Note that italic items are only indicative and might be skipped if no information is available.

Description of Area	
Total area:	[to be filled in] km ²
Total inhabited area	[to be filled in] km ²
Housing and scattered areas	[to be filled in] km ²
Utilities and cemeteries	[to be filled in] km ²
Swamps and arid land	[to be filled in] km ²
Agricultural land	[to be filled in] km ²
Percentage of inhabited to total area	[to be filled in] %
Population Data	
Total population	[to be filled in]
Annual population increase rate	[to be filled in] %
Population density compared to total area	[to be filled in] Inh./km ²
Population density compared to inhabited area	[to be filled in] Inh./km ²
Number of residential structures/ districts or sub districts	[to be filled in]
Population of sub district 1	[to be filled in]
Population of sub district xx	[to be filled in]
Population increase during peak season (e.g. tourist or festival period)	[to be filled in] %
Portion of urban population	[to be filled in] %
Portion of rural population	[to be filled in] %
Number of commercial establishments by type	[to be filled in]
Number of government/ institutional buildings by type (e.g. school, hospital etc.)	[to be filled in]

A map should be provided indicating traffic patterns and transportation infrastructure.

Note to the Contracting Authority: It can be assumed that the bidder will do his own investigations e.g. related to traffic patterns and infrastructure as it is essential for him to prepare his proposal and is the core business of the Contractor. Nevertheless, available data should be provided by the contracting authority in order to facilitate the preparation of bids and hereby improve their quality. In addition the contracting authority needs to have a full picture and clear understanding of these items, as they need to evaluate the proposals of the bidders and have to make a judgement if the proposed Work Plan is adequate and reasonable.

A2: Description of the Characteristics of the Waste Stream

Note to the Contracting Authority related to waste characteristics: Waste characteristics vary according to the extent of urbanisation, the income level of the area and the degree of industrialisation and commercialisation. Households, commercial establishments, institutions such as schools, hospitals and government offices generate different quantities and types of waste. Within the bidding documents relevant information on quantity, composition and density of waste should be provided.

Quantity:
Minimum information to be provided is the total annual quantity. However, the waste generation might change from one season to another (e.g. due to tourist season, heating system organic waste portion. Respective information should be provided. Furthermore information on waste generation in the districts might be provided based on results of surveys.

Composition:
The composition of Solid Waste depends to a large extent on the affluence of the population. Further influence might be caused by seasonal variations or cultural aspects. The results of respective surveys should be provided. Again additional information with regard to seasonal changes and to the splitting related to districts is useful.

Density:
The density of various residential and commercial waste streams should be determined in kg/m³. A high portion of paper and plastics in affluent housing or office buildings will yield a waste stream that has a low density. A high portion of dust, ashes or organic residues will result in a high density. Knowledge of the waste density is needed to ensure that the collection vehicles selected by the Contractor have adequate carrying capacity.

Type Of Waste	Number of Containers emptied/day	Unit Volume of Container m ³	Total Tonnage Collected* tonnes/year
Household			
Container type 1	[to be filled in]	[to be filled in]	[to be filled in]
Container type 2	[to be filled in]	[to be filled in]	[to be filled in]
Container type 3	[to be filled in]	[to be filled in]	[to be filled in]
Institutional			
Container type 1	[to be filled in]	[to be filled in]	[to be filled in]
Container type 2	[to be filled in]	[to be filled in]	[to be filled in]
Container type 3	[to be filled in]	[to be filled in]	[to be filled in]
Commercial			
Container type 1	[to be filled in]	[to be filled in]	[to be filled in]
Container type 2	[to be filled in]	[to be filled in]	[to be filled in]
Container type 3	[to be filled in]	[to be filled in]	[to be filled in]
Total	[to be filled in]	[to be filled in]	[to be filled in]

*based on assumed density of 200 kg/ m³

Note: Depending on Service Area and type of collection system the data should be listed for each sub district or municipality within the service Area.

Note: In the case that the collection system does not base on container system, respective information should be given with regard to the used system (e.g. percentage of bag collection etc.

Depending on the collection rate a figure should be given which portion of the waste generated in the service area actually is collected.

A3: List of Container Sites, Containers and Litter Baskets

Note to Contracting Authority: In the case that a container system or a litter basket need to be operated or to be implemented a list / map indicating the specific sites, number and type (specification) of containers or litter baskets is required. In addition it needs to be clarified: what are the procedures for adjustment (addition, deletion) of sites, who is responsible for updating the list. In the case that the Contracting Authority applies user charges for specific containers it has to be ensured that the Contracting Authority always has the valid version of the list.

A4: Map Indicating the Disposal Sites and Description of Disposal Site

Note to the Contracting Authority: The map indicating the disposal sites needs to be provided by the Contracting Authority

The existing Assignment of Waste from different parts of the Contracting Authority to different disposal sites should be indicated.

Furthermore the site conditions of the disposal site should be described such as weighing procedure, transfer points for unloading the waste on the site, site road conditions and the resulting technical requirements for the collection vehicles (e.g. off road ability).

A5: Option: Hand over of Equipment

Note to the Contracting Authority: In case that equipment will be handed over from the Contracting Authority to the Contractor a list with a description, of no, type, age etc. should be provided by the Contracting Authority.

A6: Description of the Street Cleaning Area and Service Level**Map of Street Cleaning Area:**

A map should be provided indicating all categories of streets squares and other areas that are covered by the street cleaning services.

Specification of Street Cleaning Services:

Note to the Contracting Authority: The specification and frequency of street cleaning services can be made individual for each road. However, it is recommended to specify groups of roads with identical services such as primary roads, secondary roads etc. in order to facilitate accounting and invoicing. Please note that each group of services must be represented in the Bill of Quantity table including a multiplier (e.g. total km of primary roads to be cleaned per month or total number of litter baskets with daily service) in order to enable invoicing.

BOQ Item/ Name of Area	Length / Area	Litter Basket Service	Required Cleaning Frequency and Type	Hours of Service
Primary Roads (paved)				
4.1.# [insert names of road type]	[km of road type to be filled in]	[to be filled in e.g. yes-basket interval <50m]	[to be filled in e.g. Mech. sweeping 3 times/week; Litter basket service: daily]	[to be filled in e.g. mech and man. sweeping outside peak traffic period (6:00 – 9:00 and 15:00-19:00)]
4.2.# [insert names of road type]	[km of road type to be filled in]	[to be filled in e.g.]	[to be filled in e.g. Man. sweeping 1 time/ day; Litter basket service: daily]	[to be filled in]
4.2.# [insert names of road type]	[km to be filled in]	[to be filled in]	[to be filled in]	[to be filled in]
Secondary Roads (paved)				
4.3.# [insert names of road type]	[km to be filled in]	[to be filled in e.g. yes-basket interval <50m]	[to be filled in e.g. Manual sweeping 1 time/ day; Litter basket service: daily]	[to be filled in e.g. man. Sweeping outside peak traffic period (6:00 – 9:00 and 15:00-19:00)]
4.3.# [insert names of road type]	[km to be filled in]	[to be filled in]	[to be filled in]	[to be filled in]
4.3.# [insert names of road type]	[km to be filled in]	[to be filled in]	[to be filled in]	[to be filled in]
Unpaved Roads				
4.4.# [insert names of road type]	[km to be filled in]	[to be filled in e.g. yes-basket interval <80m]	[to be filled in e.g. Manual sweeping 3 times/ week]	[to be filled in]
4.4.# [insert names of road type]	[km to be filled in]	No	[to be filled in]	[to be filled in]
Public Facilities such as Squares and Markets				
4.5.1 [insert name 1 eg xy market]	[area to be filled in]	[to be filled in e.g. yes-basket interval <50m]	[to be filled in e.g. daily] litter collection service from public facilities	[To be filled in e.g. continuous during all normal open hours]
4.5.2 [insert name 2 eg. xy square]	[area to be filled in]	[to be filled in]	[to be filled in]	[to be filled in]
4.5.# [insert name xx]	[area to be filled in]	[to be filled in]	[to be filled in]	[to be filled in]

ANNEX B: REQUIREMENTS ON THE DRAFT WORK PLAN

Note to the Contracting Authority: *As part of the offer each bidder should be required to submit a Draft Work Plan that illustrates his or her understanding of the service requirements and describes exactly how he or she intends to perform them. The minimal technical requirement for the Draft Work Plan includes the following:*

1. Description and location of offices, collection vehicle parking areas, maintenance garages and other facilities which are proposed to be utilised in connection with the proposed contract.
2. List and maps indicating scheduled routes and proposed time schedules for waste collection and street cleaning services:
 - Composition of work groups within each scheduled route, including numbers and designation
 - Hours of daily work
 - Work patterns and normal working week
3. Schedule for accepting and rehabilitating existing facilities.
4. Job description and the number of personnel to be deployed in each position:

Waste Collection Staff	Administrative	Technical	Supervisors	Drivers	Contractors
Number presently employed					
Total numbers to be employed under the Contract					
Proposed source of additional staff					
Mobilisation period of additional staff					
Average normal and overtime to be worked each week					

Street Cleaning Staff	Administrative	Technical	Supervisors	Drivers	Contractors
Number presently employed					
Total numbers to be employed under the Contract					
Proposed source of additional staff					
Mobilisation period of additional staff					

Average normal and overtime to be worked each week					
--	--	--	--	--	--

5. Plan for recruiting and training labour, equipment and supervisory personnel.
6. Description of driver training and testing programme.
7. Lists of equipment indicating type, size and age and related manufacturer's literature

Description	Make Model	Year of manufacture	Equipment already procured	Mobilisation Period (supply period)

8. Description of waste collection and street cleaning vehicle sanitation and preventive maintenance programme and schedule.
9. Description and plan for distribution, sanitation and maintenance of rollout carts, bins and litter baskets.
10. Description of the plan for transfer of street sweepings and litter from the point of collection to the designated transfer or disposal facility.
11. Plan for supplying water for mechanical sweepers.
12. Plans for contract administration and field supervision
 - procedures, staff, record keeping and reporting for all data required to be submitted
 - procedures for communicating with the contract administrating organisation
13. Description of record keeping and reporting system for all information and data required to be submitted.
14. Proposed procedures for communication with the Contracting Authority.
15. Plan for staffing, equipping and maintaining a customer service office and related to planning an implementation of public information programme.
16. Planning and implementation of public information programme,
17. Description of how the Contractor will comply with each of the service specification and minimum technical requirements.

ANNEX C: INSURANCE

The risks and coverage by insurance to be taken out and maintained in accordance with clause 37 of the Contract shall be *please complete*:

- (i) Third Party motor vehicle: _____
- (ii) Third Party liability: _____
- (iii) Contracting Authority's liability and workers' compensation:

- (iv) Professional liability: _____
- (v) Loss or damage to equipment and property: _____

ANNEX D: ADJUDICATOR FEES AND EXPENSES

The Adjudicator shall be paid by the hour at the rate of *[insert amount and currency]* per hour of work.

The following reimbursable expenses are recognized: *[list expenses]*

SCHEDULE 2: PERFORMANCE SPECIFICATIONS AND PENALTIES

For the purposes of assessing whether Financial Penalties are recoverable by Contracting Authority from the Contractor the following method shall be used:

Each notice (according clause 25 of Section IV "General Conditions of Contract") issued shall correspond to the following Default Points:

Rectification Notice:	1 point
Default Notice:	2 points
Supplementary Default Notice:	3 points

In the event of incidents of the Contractor's failure to properly perform the Services the Contractor shall be liable to Contracting Authority for the costs incurred thereby to be calculated as set out below:

Default Points in any Month	Deduction from Monthly Instalment
0 - 20	Nil
21 - 40	1.25%
41 - 60	2.50%
61 - 80	3.75%
81 - 100	5.00%

Notes to the Contracting Authority on performance specifications and related penalties: Performance specifications specify the minimum acceptable levels of performance. There should be a quantifiable Performance specification corresponding to each service specification and minimum technical requirements to enable the Contracting Authority to monitor Contractor compliance and performance. It is important that the Performance specifications be written in a way that the Contractor can easily understand them and how they will be measured by the organisation responsible for administering and monitoring the contract.

Note to the Contracting Authority: Please note that the performance criteria have to be adjusted depending on the selected waste collection system, the conditions in the respective area and the contract monitoring approach. A critical aspect will always be how to define service failure. Flexibility with regard to performance monitoring is necessary to allow the Contractor some excusable delays in service performance (e.g. due to traffic conditions).

Note to the Contracting Authority: All requirements are indicative only, delete or add as appropriate

The following examples address several service specifications and related performance standards. Each failure will be subject to the procedures as described in the contract.

Each reported service failures related to the following items that will be verified and noted by the Contracting Authority will lead to the issuing of a Rectification Notice:

- **Collection Service Failure:** Service failures for waste collection services shall not exceed *[add number e.g. 1]* percent of all container sites scheduled for service that date. The Contracting Authority will measure daily compliance with the performance standard by dividing the total number of reported service failures by the total number of container sites scheduled for service that date. A service failure will constitute in case that service has not been performed 2 hours after the scheduled service time and no information on a delayed service has been submitted by the Contractor.
- **Street Cleaning Failure:** Service failures for mechanical/ manual street sweeping services (including missed cleaning or clearly insufficient cleaning with unambiguous and concentrated residual litter remaining) shall not exceed *[add number e.g. 10]* percent of all street km (for public facilities: hectare) scheduled for mechanical street sweeping service that date. The Contracting Authority will measure daily compliance with the performance standard not later than 4 hours after the scheduled service time by dividing the total distance in km (for public facilities: hectare) of reported service failures by the total distance in km (for public facilities: hectare) scheduled for service that date. A service failure will constitute in case that service has not been performed 2 hours after the scheduled service time and no information on a delayed service has been submitted by the Contractor. In addition a service failure will occur in case that a service compliance rate of *[add number e.g. .98]* percent of all street km (for public facilities: hectare) scheduled for mechanical / manual street sweeping service that date is not achieved on *[add number e.g. .90]* percent of days of one month.
- **Litter Basket Service Failure:** Service failures for litter basket services shall not exceed *[add number e.g. 5]* percent of all litter baskets scheduled for service that date. The Contracting Authority will measure daily compliance with the performance standard not later than 4 hours after the scheduled service time by dividing the total number of reported service failures by the total number of litter baskets scheduled for service that date. A service failure will constitute in case that service has not been performed 2 hours after the scheduled service time and no information on a delayed service has been submitted by the Contractor.
- **Illegal Dumping:** Illegal dumping of collected waste is not allowed at all. Each reported service failures related to illegal dumping of collected waste by the Contractor that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 1 day (recollection and cleaning).*
- **Vehicle Maintenance and Inspection:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Appearance of Collection and Street Cleaning Vehicles:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Sanitation:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Lifetime of Collection and Street Cleaning Vehicles:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 28 days*
- **Waste Collection and Street Cleaning Vehicle Body Requirements:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 28 days*
- **Use of Hydraulic Compaction:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Operation Log:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Replacement:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*

- **Property Damage:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Violation of Defined Collection and Street Cleaning Hours:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Vehicle Wrecks:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 1 day*
- **Scavenging:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority.
- **Conditions for not Providing Services:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Fees and Gratuities:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority.
- **Public Information Program:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Reporting:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 14 days*
- **Driving License and Training:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 14 days*
- **Behaviour:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Field Supervision:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Hours of Service and Staffing:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Communication Equipment Requirements:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 28 days*
- **Complaint Handling and Resolution:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 7 days*
- **Acceptance of Final Work Plan:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 14 days*
- **Monthly and Annual Reports:** Each reported non-compliance with the requirements that will be verified and noted by the Contracting Authority. *Typical Remediation Period: 14 days*

SCHEDULE 3: BILLS OF QUANTITY

General Note to Contracting Authority related to Lump Sum versus Unit Price Payment

There are several options for remuneration of Contractor. Most important common are lump sum and unit price payment. This schedule assumes that payment will be by unit price.

- *Payments based on unit prices and measurement reflect the extent of work carried out. Examples of items to be measured in a collection contract include a unit price for each ton of waste collected (and delivered to the respective facility) and / or number of containers provided and served by the Contractor ;*

Unit prices have a direct linkage between the service provided and payment. This allows a simple mechanism to adjust payment when changes occur, such as an increase of waste quantities or the number of containers etc.

Such a mechanism ensures fairness and reduces risks for the Contractor. In case that there is an increase in waste generation, which for example might require supply of additional vehicles, the Contractor will receive an adjusted payment. In view of this, the expected overall quantities to be collected should be clearly stated in the contract, to provide a basis for assessing the change in scope of works and capital / operating costs relating to waste collection. The same approach should be considered where the scope of work in other areas changes (e.g. number of waste collection containers or waste pooling sites).

However, such measurement and payment requires a defined and verifiable measurement procedure. Such procedure should base on a weighbridge that is operated or at least supervised by the Contracting Authority. Otherwise there is a strong temptation for the Contractor to manipulate the measurement in order to increase his payment.

An assessment without a weighbridge e.g. based on the volume of the truck and an assumed density, usually is not exact enough to form the basis for the reimbursement of the Contractor. In addition during the design of the measurement and payment clauses always a cross check should be undertaken in order to identify potential options of misuse and fraud. (Example: In the case of payments based on the waste quantity collected and delivered to the landfill the Contractor might try to charge for commercial waste that he has collected under separate contacts with commercial waste producers and for which he already has charged the waste generator.)

On the other hand weighbridges are often not yet installed so that no correct measurement is possible. Therefore, Contracts are often based on payment per month). This leads to a higher risk to be covered by the Contractor in case that waste quantities increase and the Contractor probably will include a surcharge in his proposal. It might be considered to have at least an adjustment based on the number of inhabitants served or an other measurable item which determines the work. (However, in case of adjustment related to number of inhabitants again a mechanism and procedure related to its determination has to be defined such as annual statistical data etc.).

Note to Contracting Authority related to Bills of Quantity: *Typical items for a Bill of Quantity are listed as follows. Please note that in order to determine a final price during the contract evaluation for each item the expected quantity as indicated as well in Annex A "Information to be provided by the Contracting Authority" need to be defined.*

The following table gives an example for a Bills of Quantity based on monthly unit prices and measurement combining the elements waste quantity (of different waste types) and the provision of containers (different container types).

No	Item	Unit Price [currency]:	Quantity	Total Price (Unit price * Quantity) [currency]:	Measurement Procedure According to Section 4, Clause 32 (3)
Waste Collection					
1	Collection of Waste type a (e.g. household waste) and Transportation to defined facility	<i>To be stated by the Bidder :</i> Price per ton	<i>To be stated by the Contracting Authority:</i> Ton/ month	Price per month	Quantity per month measured at weight bridge by Contracting Authority
Waste Containers					
2.1	Provision and maintenance of container type a	<i>To be stated by the Bidder :</i> Price per container/ month	<i>To be stated by the Contracting Authority</i> No of Containers	Price per month	No of container according to updated container list approved by Contracting Authority
2.2	Provision and maintenance of waste containers type b	<i>To be stated by the Bidder :</i> Price per container/ month	<i>To be stated by the Contracting Authority</i> No of Containers	Price per month	No of container according to updated container list approved by Contracting Authority
2.3	Provision and maintenance of containers type c	<i>To be stated by the Bidder :</i> Price per container/ month	<i>To be stated by the Contracting Authority</i> No of Containers	Price per month	No of container according to updated container list approved by Contracting Authority
3.1	Public information programme	<i>To be stated by the Bidder :</i> Price	Month	Price per month	Conduction of public information programme, approved by Contracting Authority
3.2	Reporting	<i>To be stated by the Bidder :</i> Price	Month	Price per month	Report, approved by Contracting Authority

3.3	Operation of Customer Complaint Office	<i>To be stated by the Bidder :</i> Price		Month	Price per month	Operation and report, approved by Contracting Authority
	Street Cleaning					
4.1	Mechanical Cleaning of Primary Roads	<i>To be stated by the Bidder :</i> Price per km	<i>To be stated by the Contracting Authority</i> <i>No of km/month</i>		Price per month	No of km as defined in the contract and service executed according to Contractor's report
4.2	Manual Cleaning of Primary Roads	<i>To be stated by the Bidder :</i> Price per km	<i>To be stated by the Contracting Authority</i> <i>No of km/month</i>		Price per month	No of km as defined in the contract and service executed according to Contractor's report
4.3	Manual Cleaning of Secondary Roads	<i>To be stated by the Bidder :</i> Price per km	<i>To be stated by the Contracting Authority</i> <i>No of km/month</i>		Price per month	No of km as defined in the contract and service executed according to Contractor's report
4.4	Manual Cleaning of Unpaved Roads	<i>To be stated by the Bidder :</i> Price per km	<i>To be stated by the Contracting Authority</i> <i>No of km/month</i>		Price per month	No of km as defined in the contract and service executed according to Contractor's report
4.5	Manual Cleaning of Public Facilities					
4.5.1	Public Facility type 1	<i>To be stated by the Bidder :</i> Price per hectare	<i>To be stated by the Contracting Authority</i> <i>No of hectare/month</i>		Price per month	Area as defined in the contract and service executed according to Contractor's report
4.5.2	Public Facility type 2	<i>To be stated by the Bidder :</i>	<i>To be stated by the Contracting Authority</i>			Area as defined in the contract and service

		Price per hectare	<i>No of hectare/month</i>	Price per month	executed according to Contractor's report
4.6	Implementation and servicing of public litter baskets	<i>To be stated by the Bidder :</i> Price per litter basket/month	<i>To be stated by the Contracting Authority</i> <i>No of litter baskets</i>	Price per month	No of baskets according to updated basket list approved by Contracting Authority
Total					
	Total per month			Price per month	
	Total Contract Price per year			Price per year	

Note: All duties, taxes, and other levies payable by the Service Provider under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids exclusive of the applicable VAT indicated in the SCC shall be included in the total Contract Price submitted by the Bidder.

Note: The Contractor's invoice shall outline in addition the applicable VAT according to national regulations.

Schedule 4: Reporting Requirements

Reporting Requirements:

Note to the Contracting Authority related to reporting requirements: List format, frequency, and contents of reports or products to be delivered; persons to receive them; dates of submission; etc.

- (1) **Monthly and Annual Reports:** The Contractor has to prepare and submit on a monthly basis accurate reports. These reports must be timely and therefore should be submitted within 15 days of the end of the month being reported on. The information to be required in each monthly report and a summary annual report should include the following: delete or add items for
reporting if applicable for the specific case
- Total number and registration numbers of waste collection and street cleaning vehicles put in service and personnel deployed each day, by waste collection service type and area.
 - Total number of man-hours and truck hours employed each day for waste collection and street cleaning services.
 - Number of places (dwelling units, buildings, waste pooling sites, large commercial generators) solid waste was collected from each day.
 - Total km scheduled for mechanical and manual sweeping and total km swept.
 - Tons of solid waste were collected from each day. Tonnes and volume of street sweepings collected and disposed.
 - Monthly tonnage of solid waste diverted through material recovery and composting.
 - Number of notices of non –collection and missed street cleaning daily, with addresses and description of problem.
 - Summary of customer service office staff hours worked daily.
 - A complaint record enumerating customer complaints received daily.
 - Description of resolution for each complaint.
 - Disposition of all solid waste collected, amounts collected, transferred, discovered and disposed-
 - Updated container site and litter basket list and database of all containers and litter baskets listing repairs, replacements and additions.
 - Number of times each waste pooling site serviced.
 - Accurate records or repairs which shall include, the vehicle identification number, the date/mileage, nature of repair, compliance with preventive maintenance schedules as submitted as part of the Contractor 's Final Work Plan, the signature of the maintenance supervisor that the repair has been properly performed.
 - Summary report of daily vehicle inspection.

- An updated inventory of all vehicles used for all waste collection and street cleaning services including the make, type, year, license number and ownership.
 - An updated list of all names of all supervisory personnel assigned to each type of residential and commercial collection and street cleaning service.
 - A description of problems encountered and proposals for increasing service efficiency and achievement of service objectives.
 - A description of all cases of public and private property damage and personal injury that have occurred while providing waste collection and street cleaning services, including the copy of the accident or incident report filed with the company or with the appropriate authorities.
 - A description of all cases of health and safety issues such as personnel injury that have occurred while providing waste collection and street cleaning services, including the copy of the accident or incident report.
 - A description of any violation of local ordinances.
- (2) **Missed Collections and Streets Not Swept:** All missed collections and streets not swept, for whatever reasons, should be reported to the Contracting Authority at the end of that working day. Notification of missed collections and streets not swept by the Contractor should include details of location and reason for service failure e.g. damaged container, misuse, access etc.
- (3) **Additional Reporting Requirements:** The Contractor will be required to provide any information to the Contracting Authority that is reasonably requested. This will include information regarding waste licences, information on disposal, any information required to comply with Contracting Authority or state regulations or legislation and full details of all commercial premises serviced by the Contractor.
- (4) The Contractor will provide any information as required and mentioned in the General Conditions of Contract or the Specific Conditions of Contract.

Schedule 5: Key Personnel and Subcontractors

Note to the Contracting Authority *As part of the offer each bidder is required to submit a list and description of personnel and subcontractors. The Contracting Authority might define minimum qualification criteria for senior staff such as year of experience in the waste management or similar sector:*

List under: C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications of Personnel to be assigned.

Typical key personnel for collection contracts are:

- General Manager with insert years and type of experience
- Accountant insert years and type of experience
- Technical Manager for Collection Services and Logistic insert years and type of experience
- Engineer Responsible for Maintenance insert years and type of experience
- Engineer Responsible for Supervision of Works insert years and type of experience

C-2 List of approved Subcontractors (if already available);

C-3 Same information with respect Subcontractors Personnel as in C-1.

The Bidder shall submit the curriculum vitae of principal/key personnel which it proposes to employ in the execution of the Contract.

The Bidder shall provide a description of the functions of the key personnel.

The Bidder shall specify the academic, professional or other qualifications and experience considered necessary of the personnel to fill the key positions.

Schedule 6: Breakdown of Contract Price

A: Breakdown of Contract Price in Foreign Currency

Note to the bidder: List here the elements of cost used to arrive at the breakdown of total Contract Price (per year) —foreign currency portion:

1. Rates for Equipment Usage or Rental or for Personnel (Key Personnel and other Personnel).
2. Reimbursable expenditures.

This appendix will exclusively be used for determining remuneration for additional Services.

B: Breakdown of Contract Price in Local Currency

Note to the bidder: List here the elements of cost used to arrive at the breakdown of total Contract Price (per year) —local currency portion:

1. Rates for Equipment Usage or Rental or for Personnel (Key Personnel and other Personnel).
2. Reimbursable expenditures.

This appendix will exclusively be used for determining remuneration for additional Services.

Schedule 7: Services and Facilities Provided by the Contracting Authority

Note to the Contracting Authority: In the case that the Contracting Authority provides Services and Facilities a clear and full description of type and extent need to be added.