Section 3a

SCOPE of WORKS

1. BACKGROUND

The increase in population due to the number of Syrian refugees moving to the North, South and Bekaa of Lebanon is creating tensions among the communities and further exacerbating socio-economic problems and putting additional pressure on the already weak basic services offered by the local authorities.

In North, South and Bekaa of Lebanon, the increase in the number of Syrian refugees resulted in an increase in the amount of municipal waste generated. Garbage trucks available to the municipalities, are either not sufficient to cover the overall daily solid waste collection or in a deplorable state due to overuse. In order to provide an efficient service for solid waste collection and disposal, the villages need additional garbage compactor trucks.

The intervention consists of the procurement of 7 compactor trucks of 7 m3and a compactor trucks of 15 m3. The provision of garbage trucks will enhance the capacity of the municipalities in collecting and transporting municipal solid waste generated on a daily basis. The estimated daily amount of garbage has almost doubled since the beginning of the crisis.

Therefore, this will prevent the over accumulation of garbage inside the bins, where in many cases this results in an overflow of garbage and pollution of the streets. In addition, acquiring these trucks will allow the appropriate coverage and suppression of the spread of bad odors and possible diseases. Health risks, diseases and environmental problems are expected to decrease given that the daily routing of the trucks will be rescheduled.

2. OBJECTIVES

Technical specifications were developed for 7 garbage trucks of 7 m3 needed for the municipalities of the South (Borj Chemali and Chebaa), the Bekaa (Kherbet Rouha, Meksseh, Kfarzabad and Sawiri) and North (Syr Dannieh), and 1 garbage truck of 15 m3 needed for the municipality of the South (Borj Chemali) in order to improve environmental and health conditions among the communities. The awarded company shall ensure seven compactor garbage trucks deliver them to the municipalities and provide training to the concerned personnel on how to use the machines.

3. SCOPE OF WORKS

Provision of seven compactor garbage trucks complying with the following technical specifications:

Item No	*Name of Goods or Related Service*	*Quantity*	*Technical Specifications and Standards*
1	**Garbage Truck**	**7** **South:2** **North:1** **Bekaa:4**	***Model*** *Model Year 2015 or 2016*
			Axle configuration *4x2\ rear*
			Engine *Diesel, four - stroke engine, intercooled turbo* *Max. output, KW/ horse power: 85/ 125 (3000 -3400 rpm)* *Displacement (c.c) Minimum: 4500 / 4 cylinders* *Emission: Euro 2*
			Suspensions *Hydraulic telescopic double acting shock absorbers*
			Brakes *Hydraulic dual circuit, front two leading, rear two leading*
			Fueling *Minimum 90 liters* ***Dimensions (mm)*** *Length/ width/ height: Minimum 6500/1900/2100* *Wheelbase: Minimum 3700* *front track/ rear track: Minimum 1600/1600* *Gross Vehicle weight: Minimum 8000 Kg* *PayloadMinimum: 5300 Kg*
2	**Compactor**	**7** **South:2** **North:1** **Bekaa:4**	***Volume*** *7 m^3 (cu.m.)* *Rear Loading Garbage Compactor Flat (smooth) body side*
			Body *Body up-fit consists of a body mounted on a chassis, a tailgate with compaction mechanism, discharging/ejection plate inside the body* *Capacity (Volume) - including (Hopper + Tailgate) minimum: 7 m3 (cu.m.)* *Body Floor: Steel 4.0 mm* *Body sides: Steel 4.0 mm without any sidewalls and U-profiles on body side* *Body roof: Steel 3.0 - 4.0 mm*
			Tailgate (Rear Hopper) *Hopper (Tailgate) Steel Thickness: Tailgate floor and side walls steel 4-6 mm* *Leaking Rubber: leak-proof rubber seal between tailgate and the body in order to avoid any dirty water leakage from body*

			Safety Valve: Equipped with anti-dropping safety valve on tailgate hydraulic lines to prevent sudden falls *Container Lifting Devices: Hydraulic Lifting Devices For Containers*
			Operation and Control *Double acting hydraulic cylinders. All devices for loading control are mounted on tailgate right side, operation and control is by electrically (automatically) Via buttons and Mechanical (manual) via handles*
			Hydraulic System *Oil Tank capacity: around 90 liters* *P.T.O: Controlled inside the cab.* *working pressure: 170-200 bars* *pump capacity: 35-55 cm3*
			General *Two plastic mudguards with rubber flaps at rear ends* *2 Rotating Beacon light ; 1 unit is in rear part and other is in front part* *Floodlight on the top of the hopper* *one handle at each side 0.75 inch diameter for the crews to grasp*

Provision of 15 m3 compactor garbage trucks complying with the following technical specifications:

Item No	***Name of Goods or Related Service***	***Quantity***	***Technical Specifications and Standards***
1	**Garbage Truck**	**1**	***Chassis Specification*** *Model Year 2015 or 2016* *Wheelbase 3600 mm to 4200 mm* *G.V.W. 18,000Kg*
			Cab *Single Cab* *Pneumatic Driver Seat* *One Bench For 2 Passengers With Seat Belts*
			Engine *6 Cylinders In Line* *Direct Injection* *Diesel Type* *Turbocharged, Intercooler* *Displacement Minimum 5500 cc* *Output Minimum 260 HP* *Torque Minimum 900 Nm* *Emission Euro 3*

			Steering *Left Hand Driving, Power Assisted*
			Suspensions *Leafs Spring at Front & Rear* *Anti-Roll-Bar At Front & Rear* *Shock Absorber At Front & Rear*
			Gearbox *Minimum 9 Speeds Forward + 1 Reverse*
			Brakes *Disc Type At Front & Rear* *ABS* *Parking Brake Mechanical Type With Spring Cylinder Acting On Rear Wheels* *Exhaust Brake*
			Tires *Single At Front & Double At Rear, 6+1 Spare Wheel*
			Fueling *180 Liters Minimum, With Locking Fuel Cab*
2	**Compactor**	**1**	***Volume*** *15 m^3 (cu.m.)* *Rear Loading Garbage Compactor Flat (smooth) body side*
			Body *Body up-fit consists of a body mounted on a chassis, a tailgate with compaction mechanism, discharging/ejection plate inside the body* *Capacity (Volume) - including (Hopper + Tailgate) minimum: 15 m3 (cu.m.)* *Body Floor: Steel 4.0 mm* *Body sides: Steel 4.0 mm without any sidewalls and U-profiles on body side* *Body roof: Steel 4.0 mm*
			Tailgate (Rear Hopper) *Hopper (Tailgate) Steel Thickness: Tailgate floor and side walls steel 4-6 mm* *Leaking Rubber: leak-proof rubber seal between tailgate and the body in order to avoid any dirty water leakage from body* *Safety Valve: Equipped with anti-dropping safety valve on tailgate hydraulic lines to prevent sudden falls* *Container Lifting Devices: Hydraulic Lifting Devices For Containers*
			Operation and Control *Double acting hydraulic cylinders. All devices for loading control are mounted on tailgate right side, operation and control is by electrically (automatically) Via buttons and Mechanical (manual) via handles*

			Hydraulic System *Oil Tank capacity: 180-200 liters* *P.T.O: Controlled inside the cab.* *working pressure: 170-200 bars* *pump capacity: 50-95 cm3*
			General *Two plastic mudguards with rubber flaps at rear ends* *2 Rotating Beacon light ; 1 unit is in rear part and other is in front part* *Floodlight on the top of the hopper* *one handle at each side 0.75 inch diameter for the crews to grasp*

4. DELIVERY PLACE AND DEADLINE

The contracting company is expected to deliver the items within **3 months** effective from the contract signature date. The requested items will be delivered to the Municipalities located in South Lebanon: Borj Chemali and Chebaa and in the Bekaa: Kfarzabad, Sawire, Meksseh and Kherbet Rouha and in the North: Sir Dannieh.

5. TERMS OF PAYMENT

100% upon complete delivery and installation of goods value at designated sites and within 30 days from receipt and acceptance of related invoices and documentation.

6. AFTER-SALES SERVICES

- Warranty on Parts and Labor for minimum period of **One** year is required
- Technical Support
- Provision of Service Unit when pulled out for maintenance/ repair