



Islamic Republic of Afghanistan
Kabul Municipality
Transport Deputy Mayor Office



BRT Buses for Kabul City

Date: 30/October/2018

I. Technical Data:

1. MAN BRT Low-floor Lion's City C Bus Specifications: 13.68 Meters (126 Passengers)

Number of Buses Required: 15

<i>Vehicle dimensions*</i>	Length/ Width/Overall height	13,680 mm/2,500 mm/2,880 mm - 3,320 mm
	Wheelbase/Clearance circle	5,875 mm/24,720 mm
<i>Interior equipment</i>	Seating arrangement	max. 45/76
<i>Running gear</i>	ZF EcoLife Step3	6-speed automatic
	Voith DIWA6	4-speed automatic
<i>Engine</i>	Diesel	D2066 LUH Euro 6
	Arrangement	6-cylinder in-line engine
	Per formance (Diesel)	235 kW/320 hp, 265 kW/360 hp
	Capacity (Diesel)	10,518 cm ³
	max.torque (Diesel)	1,600/1,800 Nm
	Doors	Two sides both Right and Left is preferred
<i>Volume Capacity**</i>	Fuel tank	280 l – 360 l



Figure 1. Lion's City C Bus (MAN Company)

2. MAN BRT Low-floor Lion's City GL Articulated Bus Specifications: 18.750 Meters (156 Passengers)

Number of Buses Required: 10

<i>Vehicle dimensions*</i>	Length/ Width/Overall height	18,750 mm/2,500 mm/2,880mm
	Wheelbase/Clearance circle	5,875 mm/24,446 mm
<i>Interior equipment</i>	Seating arrangement	max. 57/106
<i>Running gear</i>	ZF EcoLife Step3	6-speed automatic
	Voith DIWA6	4-speed automatic
<i>Engine</i>	Diesel	D2066 LUH Euro 6
	Arrangement	6-cylinder in-line engine
	Per formance (Diesel)	235 kW/320 hp, 265 kW/360 hp
	Capacity (Diesel)	10,518 cm ³
	Max torque (Diesel)	1,600/1,800 Nm
	Doors	Two sides both Right and Left is preferred
<i>Volume Capacity**</i>	Fuel tank	350 l



Figure 2. Lion' City GL (MAN Company)

II. Services:

1. Details of Warranty

The bus manufacturer warrants the design, manufacture, condition and function of the buses to be delivered as well as the use of materials in accordance with the provisions of the Specification.

The tenderer must submit as part of the tender a full warranty statement.

The warranty statement must include the conditions (oils, lubricants, detergents, etc.) and exclusions related to the warranty provided.

The warranty should be available for at least the following items and terms:

- The overall warranty period for the whole bus is at least twenty-four (24) months without limitation on the kilometers covered according to Afghan Law. The warranty period starts on the date of acceptance of the buses by the Purchaser for service at their destination.
- The warranty period for damages resulting from corrosion is ten (10) years starting on the date of the final take-over of each bus. In that period no corrective anti-corrosion measures should be necessary.
- The Supplier must state the type of process used for corrosion protection of the bodywork and the entrance parts.
- The warranty period for the engine, transmission and driven axle is twenty-four (24) months or 200,000km from the date of acceptance, whatever occurs first.

The bus manufacturers or any third party acting as authorized agents for the manufacturers shall repair any defect due to design, production or material during the warranty period without delay and free of charge. The Purchaser will not pay for the expendable spare parts, oil and cooling liquid losses required by the manufacturer in rectifying any defect of design, production or material.

The bus supplier will be charged for collateral technical damage to the vehicle due to defect of a component during the warranty period.

2. Supplier Documentation

The Supplier shall provide the documentation as specified below. All documentation to be in the Afghan and English languages.

All documentation should be delivered at the same time as the delivery of the first bus. The buses will not be taken-over without the required documentation being available.

Documentation shall include instructions on recycling of buses as well as their components and on re-use of their parts and components.

A. Hardcopies:

Documentation required	Quantity
Set of scaled drawings showing dimensions in four different views, showing full dimensions of passenger compartment arrangements, body panel plan, front, side, rear, roof and bottom carcass, floor and doors and other characteristic technical data.	1 set for every 2 buses delivered
Set of electrical, hydraulic and pneumatic systems diagrams. (schema and drawing of elements arrangement on bus)	
Set of heating, ventilation and air conditioning plans. (schema and drawing of elements arrangement on bus)	
Drivers operation manual	
Technical maintenance and repair manual	
Diagnostic equipment manual	5
Detailed spare parts catalogue comprising catalogue numbers for ordering parts of bus, engine, gear-box (hard copy plus electronic version)	

B. Electronic version

All documentation shall be delivered on USB-stick as well.

3. Training

The Supplier is required to train bus driver instructors and workshop staff to ensure proper handling and maintenance of the buses. The number of trainees is indicated below.

The training will take place in Kabul in connection with the arrival of the first buses.

The supplier shall provide training for currently employed bus driver instructors on how to operate delivered buses, including how the different systems of the bus operate.

The supplier shall provide training for currently employed repairs and maintenance staff listed below in order to ensure that the buses will be maintained and repaired skillfully and in accordance with the manufacturer's instructions.

Training Name	Number of Trainees
Bus driver instructor	10 persons
Diagnostic specialist	10 persons
Engine repairs specialist	10 persons
Gear-box repairs specialist	10 persons
Electrical system repairs specialists	10 persons
Technical servicing specialists	10 persons
Maintenance specialists	10 persons

All training should be delivered in Afghan or English (Afghan is preferred) language.

The tenderer shall submit a full description how to fulfil the above mentioned training requirements: subjects, number of days per subject, etc.