Supply, Delivery and Registration of Hazmat Rescue Vehicle for Nkangala District Municipality

NKANGALA DISTRICT MUNICIPALITY

PROJECT NO: 52407

SUPPLY, DELIVERY AND REGISTRATION OF HAZMAT RESPONSE VEHICLE FOR NKANGALA DISTRICT MUNICIPALITY

SCOPE OF WORK

Part C3: Scope of Work
C3 Scope of Work
1. PROJECT NO: TENDER SPECIFICATIONS: HAZMAT RESPONSE VEHICLES

SCOPE

This specification provides for the supply and delivery of a functional Hazmat vehicle conversion on an extra-long high roof 4x2 panel van. The tender scope provides for the vehicle and the supply and mounting of equipment thereon (where applicable).

FUNCTIONAL QUALIFICATION CRITERIA

The following functional criteria must be met by the tenderer to move on to the technical evaluation stage of the tender. If any document is found to be false or fabricated the tenderer must be immediately disqualified. All supporting documents required for this criterion shall be certified.

Tenderers who does not meet the functional criteria will not be considered any further:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Verification of Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenderer must be an MIB registered entity</td>
<td>Attach MIB Certificates</td>
</tr>
<tr>
<td>The tenderer must have supplied at least 2 units of this type to South African users</td>
<td>A detailed reference must be attached. The list should contain the type of vehicle, quantity and name of the end user</td>
</tr>
<tr>
<td>The tenderer and the manufacturer must be ISO 9001-2008 registered</td>
<td>Attach valid ISO certificates</td>
</tr>
<tr>
<td>The tenderer shall assume complete responsibility for the supply of all items in the tender</td>
<td>Letter of declaration to be attached</td>
</tr>
<tr>
<td>Tenderer must demonstrate the company’s capability to perform a satisfactory after sales service to the Municipality – Preference must be given to firms with mobile service vehicles.</td>
<td>Tenderer must submit a detailed proposal on how they will affect after sales service</td>
</tr>
</tbody>
</table>
| In terms of National Treasury Designated Sectors Instruction Number 14 of 2016/2017 only tenders from tenderers offering locally produced or locally manufactured Fire Fighting Vehicles with a stipulated minimum threshold for local production and content must be considered. | Table 1: Fire Fighting Vehicle

<table>
<thead>
<tr>
<th>Fire Fighting Vehicle</th>
<th>Local content thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30%</td>
</tr>
</tbody>
</table>
COMPLIANCE SHEET

A detailed compliance sheet must be submitted with the tender. Tenderers stating only yes/no must be disqualified. The format of the compliance sheet shall be as follows:

Note: This is just an example and not part of the specification

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Specification requirement</th>
<th>Comply Yes/No</th>
<th>Description of item offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The pump delivery shall be at 3000 l/min at 80 bar.</td>
<td>Yes</td>
<td>The pump fitted will have a delivery of 3800 l/min at 80 bar</td>
</tr>
</tbody>
</table>

EQUIPMENT AND ACCESSORIES:

The successful tenderer(s) shall offer a complete vehicle including all the equipment and accessories where applicable and shall be responsible to have such items supplied and fitted.

STATUTORY REQUIREMENTS

The vehicle on offer will meet the following statutory requirements:

- South African National Road Traffic Act
- EN codes where applicable
- NFPA codes where applicable

MANUALS:

The successful tenderer shall supply with the vehicle manuals for the vehicle as well as the accompanying equipment. The following shall be applicable:

a) One (1) only operator's manual
b) Individual vehicle service book.
c) One (1) only maintenance manual
d) One (1) only spare parts manual

WARRANTY:

Tenderers shall submit full details of their warranty commitments on the vehicles as well as all new equipment. Tenderers shall also undertake to ensure that satisfactory after sales service and maintenance support is provided.

The warranty period shall commence from the official date in service applicable to the vehicle and the minimum warranteed shall be as follows:

- Chassis: Supplier OEM
- Conversion: 3 Years
- Paint: 3 Years

SERVICE PLAN

The vehicle must come with standard 5 year/100000 km service plan.

TESTING:

The following tests must be carried out and certification provided upon delivery where applicable:

Road test

INSPECTION OF VEHICLES:
Provision shall be made for two inspections for two officials, the first inspection being a pre-production meeting and the second inspection on the completed vehicle at the manufacturing plant of the successful tenderer(s).

If the successful tenderer requires any additional inspections, it must be clearly indicated in the tender documents. All of the above shall be for the account of the successful tenderer.

SPARES:

The successful tenderer shall maintain a spares department to furnish replacement parts and service. Ample stock of individual components and unit replacements shall be carried for at least 10 years.

TRAINING

Comprehensive driver operator training is to be provided by the successful tenderer at the premises of the client or a suitable venue. The cost of the training shall be included in the tender price. A minimum of 12 drivers should be catered for. Training should be accredited by a recognized Institution and successful learners must be issued with certificate.

CHASSIS -CAB

DRIVER’S CAB

An extra-long wheel base, high roof panel van is required with at least a sliding door on the left-hand side of the unit and a double opening door at the back.

The crew cabin must be a two-door cabin with seating for at least a driver and passenger.

The unit shall be waterproof and shall be insulated against heat. The driver's seat shall be adjustable for driver's comfort. All seats shall be upholstered.

ENGINE

A six (6) cylinder v type turbocharged, intercooled diesel engine is required. The engine shall have a power output of at least 140Kw (190Hp) at 3800 rpm with a torque of minimum 440Nm at 1400-2400 rpm

FUEL

The vehicle shall have a diesel tank of at least 75 liters.

TRANSMISSION

A fully automatic transmission is required – No Exception

BRAKES

The Service brakes of the vehicle shall be dual circuit. The brakes must have an Adaptive electronic stability program that adapts to control based on the vehicle load. The brakes must also have ABS (Anti-Lock Brake System), ASR (Acceleration Skid Control) and EBD (Electronic Brake Force Distribution).

The parking brake shall operate independent from the service brake and shall be able to hold a fully laden vehicle on an incline of 1 in 5. The vehicles shall have disk brakes front and rear.

SUSPENSION

The vehicle shall have a shock absorber strut independent front suspension with transverse leaf parabolic springs and stabilizer. The rear axle shall be rigid with parabolic springs and shock absorber.

TYRES

The tyres shall be 195/75R16C.
**STEERING**

Steering shall be for right hand drive

**WRAP AROUND BULL BAR WITH SPOT LIGHTS**

The vehicle shall be fitted with a wraparound type polished – stainless steel bull bar. The bull bar shall have mountings for spot lights.

LED spotlights must be fitted to the bull bar with the following specifications:

- Watts: 33
- LED's: 9
- Raw Lumens: 2736
- Lux @ 10m: 2115.35
- Peak Beam Intensity: 211535 cd

The spot lights shall carry a lifetime warrantee

**STEP TOW BAR**

A step tow bar with standard sabs tow connection must be fitted. The steps must be cladded with non-slip tread plate

**BATTERY MANAGEMENT SYSTEM**

The vehicle shall be fitted with an additional heavy-duty battery that is connected to a battery management system. The system will provide power to all auxiliary systems such as LED body and scene lights. The battery shall be fitted in such a way that it will charge from the vehicle alternator whilst the engine is running. As part of this system an inverter must be fitted to allow the use of 220v power when required.

**COMPARTMENTATION**

**GENERAL**

The load compartment behind the driver’s cab must be divided into two sections namely a mid-section and a rear section. Except for the driver compartment the whole interior must be clad with 1.6 mm single bar aluminum tread plate.

The interior of the vehicle must be divided into two sections namely section one directly behind the driving compartment and section two at the rear of the vehicle behind the wheel wells.

An additional battery c/w charging capability form the vehicle’s alternator must be installed for the use of an inverter.

**MID SECTION**

A sliding window must be fitted between the driver compartment and the rear compartment. Two foldup seats must be fitted behind the driver and passenger seats against the wall of the partition. Provision must be made for a storage shelf to store a megaphone and rechargeable flashlights. The 12/220-volt inverter must be fitted in this compartment to charge electrical equipment.

A collapsible work space must be fitted at one of the tables for laptop use

Two (2) storage facilities must be provided, one on each side of the vehicle. The storage facility must be from the floor to the roof of the vehicle and have four storage racks equal in size.

Provision must be made for hanging four complete sets of SCBA apparatus in front of the storage racks against the right-hand side of the vehicle.

A bracket for a BA tally board must be fitted against the left storage rack in the front.
Provision for a water container for drinking water must be provided in the front of the unit.

Provision must be made for storage of airbags against the divider at the rear of the walk way between the storage racks.

The floor of the unit must be covered with studded non-slip anti-static floor covering.

**REAR SECTION**

The rear section storage area must be fitted with at least two (2) adjustable shelves and two (2) slide out trays on the bottom for the stowage of a generator and additional equipment.

The generator slide out tray will allow the generator to be operated whilst on the tray. (Slide out position)

**FINISH**

**SLIP-RESISTANT WALKWAY SURFACE**

All exterior surfaces designated as stepping, standing, and walking areas shall have a slip-resistant finish.

**ELECTRICAL**

Electrical wiring and cables shall be fastened to the frame or body structure of the apparatus and shall be furnished with protective looms, grommets, and other devices at each point where they pass through body panels or structural members or wherever they lay against a sharp metal edge. Where any through-the-frame connectors are provided, any such connector and/or wiring shall be protected from shearing or tearing.

The body 12-Volt electrical system shall be designed specifically for the apparatus body. Wiring diagrams must be supplied. All wiring shall run via a clearly marked fuse box indicating the final destination of the wiring. A comprehensive wiring diagram shall be supplied with the vehicle on delivery.

**COMPARTMENT LIGHTING**

All equipment compartments and shelving must be provided with LED lighting mounted in such a way that adequate lighting is available for all work areas. Lights must switch on by means of a toggle switch on the dashboard panel and/or by door activation. A warning light in the cab shall indicate when locker lights are on.

**ELECTRONIC SIREN AND PA SYSTEM**

A 3-tone siren with Hyper, Yelp and auxiliary tones with a hardwired microphone, PA system and speaker shall be provided and mounted in the cab.

**GROUND LIGHTS**

The vehicle shall be fitted with four ground lights. Each light shall have a 400 Lumen output and project light downwards at an angle of at least 30 degrees. Lights shall have a lifetime warranty.

**LED EMERGENCY LIGHT BAR**

One (1) red LED light bar shall be mounted on chassis cab roof and have the following specifications:

- 12 / 24 V
- Red with 4 X 6 LED D-Fuser corner light heads and 4 X 3 LED forward facing light heads.
- 1 x 100W Integrated Speaker

**LED FLASHER/MARKER LIGHTS**

The following red LED flashers must be mounted on the vehicle:

- Two each side at the rear of the body
- Two each side of the body, four in total
• Two fitted on the grille of the chassis at the front.

The headlights of the vehicle must be fitted with a gizwag system

**SCENE LIGHTING SYSTEM:**

The vehicle shall be fitted with standalone lighting system complete with power pack in a durable case for storage.

**LIGHT**

**Key Features:**

- 360° swivel and 180° tilting head
- No noise or pollution
- Carbon fibre telescopic poles
- Low carbon, reducing CO2 emissions
- Easy, set up
- Vacuum moulded fitting for safe storage of parts
- Low battery warning
- Wheels and integrated pull up handle
- Comfortable rubber coated anti-slip handle
- All parts are housed inside the IP67 rated case
- High visibility locking latches for easy setup
- Battery status indicator
- Retractable high visibility stability feet
- 25 year guarantee on the case

**PAINTING**

The apparatus body shall be painted with hexadecimal #ce2029 (also known as fire engine red). The color code or a paint sample shall be supplied to the Chief Fire Officer before commencing with the painting of the vehicle.

The following coats of paint shall be applied.

  Two coats of primer
  One coat of universal primer
  Two layers of final coat

The tenderer must make provision for 3M reflective signwriting, striping and decals to the satisfaction of the Chief Fire Officer.

**MISCELLANEOUS**

**KEYS**

Two (2) sets of keys shall be supplied for the following:

- Ignition
- Cabin doors
- Locker doors

**SIGNS AND LABELS**

All labels shall be in English. The following signwriting shall be provided on sides:
Supply, Delivery and Registration of Hazmat Rescue Vehicle for Nkangala District Municipality

- Steve Tshwete Emergency Services Hazmat Unit – 013 243 2222

The rear shall have a full length and height reflective chevron.
A vehicle data plate shall be fixed in the door of the vehicle.
Tyre pressure labels shall be placed above all wheels indicating advised tyre pressure

ACCESSORIES

One (1) each of the following accessories shall be supplied.
- Vehicle hydraulic jack with handle
- Wheel wrench
- Pair of reflective triangles

LOCAL CONTENT

The Guideline for locally produced goods or locally manufactured goods with the stipulated minimum threshold for local production and content for the designated sector is reflected on the website www.thedti.gov.za and tender document for more information.

The stipulated minimum threshold for a fully unit is 30%, over and above the overall threshold the following components and manufacturing processes are designated:
- Crew Cabin 100%
- Super Structure 100%
- Assembly 100%

If bidder requires an authorization letter from the Department of Trade and Industry (DTI) please do so timeously.

EQUIPMENT

The following equipment must be supplied and fitted on the vehicle:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Local/import</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 kg DCP Fire Extinguishers</td>
<td>2</td>
<td>Import</td>
</tr>
<tr>
<td>Level B Hazmat Suits</td>
<td>6</td>
<td>Import</td>
</tr>
<tr>
<td>Multi gas detector</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>BA tally board</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Portable Decontamination Shower</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Drum and Pinhole plugging kit</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>External Pipe Sealing Kit</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Leak sealing bag 10x10</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Leak sealing bag 18x18</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Leak sealing bag 25x25</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>10m Yellow Ratchet extension belt</td>
<td>2</td>
<td>Import</td>
</tr>
<tr>
<td>10m Orange Ratchet extension belt</td>
<td>2</td>
<td>Import</td>
</tr>
<tr>
<td>1.5bar Foot Pump</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Level A responder suits</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Hazmat Non- Sparking Tool kit</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Silver Shield 4H Gloves – Pairs</td>
<td>50</td>
<td>Import</td>
</tr>
<tr>
<td>Cooling jackets c/w gel packs</td>
<td>8</td>
<td>Import</td>
</tr>
<tr>
<td>Spark proof polypropylene shovels</td>
<td>4</td>
<td>Import</td>
</tr>
<tr>
<td>Polyester coated decontamination shelter 6mx14.6mx3m</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>25liter plastic containers with integrated tap</td>
<td>2</td>
<td>Import</td>
</tr>
<tr>
<td>Intrinsically safe rechargeable torches</td>
<td>4</td>
<td>Import</td>
</tr>
<tr>
<td>Public Address Megaphone</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>450mm road cones</td>
<td>10</td>
<td>Import</td>
</tr>
<tr>
<td>3.2KW generator</td>
<td>1</td>
<td>Import</td>
</tr>
<tr>
<td>Portable LED flood lights with 25m extension cord per unit</td>
<td>2</td>
<td>Import</td>
</tr>
<tr>
<td>Hazmat Spill containers</td>
<td>10</td>
<td>Import</td>
</tr>
<tr>
<td>Full SCBA sets c/w composite cylinders with integrated HUD, Communication and PASS device</td>
<td>4</td>
<td>Import</td>
</tr>
</tbody>
</table>
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