

SPECIFICATION RT57-08-03-01

4x4 ARMoured RIOT VEHICLE

A 10 Seater, homologated, Armoured Riot Vehicle of robust construction complying to the following is required: -

1. GENERAL:

The vehicle must be able to give ballistic protection against AK47 riffle (7:62x39 FMJ at 10m) and be upgradable to STANAG Level 1 ballistic protection on all vertical sides, roof and floor.

Particulars of offer: _____

The bodybuilder must issue a HOMOLOGATION LETTER, NATIS model number obtained from NRCS, registered with the Special Classification "S" mark.

Particulars of offer: _____

To handle the vehicle with ease in tight corners, turning circle must be 14m.

Particulars of offer: _____

The Minimum Gradeability must be at least 35% and tilt angle must be at least 27,5 °.

Particulars of offer: _____

2. VEHICLE:

In order to handle the vehicle with ease in tight corners, the turning circle must be 14m or less.

Particulars of offer: _____

The Minimum Gradeability must be at least 35% and tilt angle must be at least 27,5 °.

Particulars of offer: _____

All batteries and fuel tanks must be ballistically protected

Particulars of offer: _____

HYDRAULICALLY OPERATED DOZER SCRAPER / BULL BAR

One hydraulically operated scraper blade must be fitted to the vehicle.

"V" shaped Dozer / Bull bar must be easily removable, should it be damaged in an accident to insure vehicle mobility

The dozer must have the capacity to move a maximum of 3-ton obstruction from its drive path.

Particulars of offer: _____

Additional Equipment

Fire suppression system must be installed in the engine compartment and the 4 wheel wells.

Recovery points to be provided in the front and rear and on the roof.

Particulars of offer: _____

3. CAPSULE:

The capsule must have good ergo-metric internal height of at least 1.8m, not exceeding 2.0m. Durable soft, washable, and fire retardant internal lining to have good sound deadening and insulation must be provided.

A generic gun holder for each occupant must be provided in front of each seat to house shotguns and assault rifles

5 x Escape hatches must be provided and fitted on the roof with a 400 mm x 600 mm opening.

1 x escape hatch for the co-driver opening to the rear.

4 x escape hatches for the 8 crew opening to the outer edge of the vehicle.

The roof must be super-reinforced.

2x 4,5kg fire extinguishers to be provided and fitted inside the vehicle with a double locking pin system, 1 in the front and 1 in the rear of the vehicle.

Particulars of offer: _____

The capsule must be able to give ballistic protection against AK47 riffle (7:62x39 FMJ at 10m) and be upgradable to STANAG Level 1 ballistic protection on all vertical sides, roof and floor.

Particulars of offer: _____

4. WINDOWS:

All windows must be ballistic protection against AK47 riffle (7:62x39 FMJ at 10m) and be upgradable to STANAG Level 1

All windows must be protected with Riot screens.

The front window protection must be lifted and lowered manually.

All screens must be easily removable to allow for cleaning of windows.

One gun port Diameter 115 mm to be fitted in each crew window **excluding** the Driver and co-drivers' front and side windows.

All windows must be placed ergonomically so that the crew can have a wide field of vision.

The size of the windows must provide a panoramic unobscured view in order for the driver to operate the vehicle safely.

Particulars of offer: _____

5. SEATING

Seating for 10 personnel must be provided including Driver and passenger.

Rear seats must have 4-point seatbelts.

The driver and co-driver must have a retractable 3-point seat belt to allow them to observe traffic unrestricted.

All rear seats must be polyurethane.

Minimum side-by-side seat spacing 600 mm.

Particulars of offer: _____

6. DOORS

All doors must be lockable to prevent outside access.

The driver must be able to open and close all the doors from the seated position except the rear door.

The driver and co-driver should each have a door for ease of entry; the doors must operate manually.

The vehicle should have 2 pneumatic operated doors, 1 on each side.

1 door on each side of the vehicle must have a low entry for quick ingress / egress.

Single rear door must be provided and installed to load equipment and to function as an escape route.

The driver and crew must be able to open and close all the doors.

Particulars of offer: _____

7. VENTILATION

Fresh air ventilation of no less than 225m³/h must be provided, that can be closed or shut when required.

Air conditioners of a minimum capacity of 14kw must be provided.

Particulars of offer: _____

8. ELECTRICAL

The vehicle must be equipped with an auxiliary battery system that will be connected to 12V electrical system of the vehicle through a DC-to-DC charging system.

The second battery must be a 105Amp/h deep cycle battery.

This system must not interfere with the vehicle original power system

The vehicle must be provided with a larger alternator that will supply sufficient power not to drain the batteries with all the electrical equipment switched on at idle.

A device will be fitted that will prevent the primary battery pack from draining to a point where the vehicle cannot start.

Connection points for 2 way radios must be provided.

A minimum of 4 USB charging points must be installed.

Particulars of offer: _____

All cables must be protected, and the wiring must be adequately fused at a central point.

Particulars of offer: _____

9. LIGHTING AND SIRENS

Provision must be made on the body for the fitment/installation of lights, cameras, digital and analogue type antennas, PA speakers with outer protection.

Clusters with 8 generation 3 blue flashing LED must be fitted on each side corner of the vehicles, the front blue lights must be visible to all road users.

Particulars of offer: _____

A 200w siren with PA will be fitted.

The speakers will be fitted as far forward as possible on the vehicle.

Particulars of offer: _____

Four static LED searchlights must be fitted on the roof.

All exterior lights must be protected with stone guards.

Adequate interior LED lights must be provided.

Particulars of offer: _____

10. CAMERA

The mounting of 6 x HD quality ruggedized cameras must be mounted outward facing. Camera has a horizontal field of view within the range of 90 to 130 degrees, two on each side of the vehicle, (front side and back side) and one camera each facing forward and back. Providing a 360-degree visual coverage around the vehicle.

Particulars of offer: _____

The mounting of a Pan Tilt Zoom (PTZ) camera with a night vision / thermal camera system, which can detect humans hiding in the dark, must be provided. The PTZ camera must be mounted on the roof at the front of the vehicle, protected and encased in a hard, ruggedized outer casing.

Particulars of offer: _____

The installation of an 8 x channels DVR with a solid-state drive (SSD) of minimum 2Tb must be fitted to record all channels with the additional ability to provide a “live feed” capability with remote monitoring via a 3G network.

Particulars of offer: _____

Minimum recorded image quality: Standard Definition and 30 frames per second.

Particulars of offer: _____

The solution must also be able to be triggered by Alerts and Alarms generated, for example activation of the light bars or sirens, switching on the recording mode if the recording mode is not activated.

Particulars of offer: _____

The solution must make provision for specific footage of incidents to be “filed” in separate folders as well as make provision for a book-marking function.

Particulars of offer: _____

The recorded footage shall contain a date and time stamp (hrs:mins:secs).

Particulars of offer: _____

The recording device must have a unique ID that is physically visible on the device, footage and meta data.

Particulars of offer: _____

The solution must prohibit recordings from being edited or deleted (except via data management software, once recordings have been transferred) and should not overwrite existing data before they have been transferred.

Particulars of offer: _____

Provision must be made for an on-board storage solution with a removable external hard drive, mounted within a crash resistant, secure, lockable mounted rack/cabinet. Recording from the PTZ must be separate from the six externally mounted cameras.

Particulars of offer: _____

A user-friendly control capability must be installed for the front seat passenger with a display screen of minimum 15cm by 15 cm to control the view of footage of any of the 6 HD quality cameras or the PTZ camera.

Particulars of offer: _____

A second Rugged, roof mounted flip down screen facing backwards, allowing viewing for the seated crew to allow observation and planning of a situation prior to exiting the vehicle, controlled by the front seat control station operator.

Particulars of offer: _____

The solution must be able to export all recorded footage to data archiving/management system in its original file format and without loss of quality or associated metadata.

Particulars of offer: _____

The solution must meet for reasons of functionality, quality, evidential integrity or to ensure that the recorded product can be used effectively within the criminal justice system.

Particulars of offer: _____

The solution must be designed to minimize all protruding connections or edges that may cause physical injury to the occupants in the event of an accident.

Particulars of offer: _____

Successful bidders must take note that SAPS reserve the right to conduct quality assurance on the camera solution provided in the demonstration model. The test method utilized will be the Internationally use Rotakin testing methodology.

Particulars of offer: _____

SAPS will make use of the Rotakin trained personnel to conduct these tests to determine if the payload Image quality is meeting the requirements of SAPS.

Particulars of offer: _____

Detailed Rotakin Test:

Rotakin/Digikin (ISO 50132) or IEC 62676-based test results (applicable to surveillance systems) as required by the surveillance needs per camera:

Objective criteria and standardised process for measuring actual recorded image quality, including spatial resolution, image sharpness, focus, light levels and colour accuracy.

A formal sign-off process must be done for the solution once it is determined that all business and functional requirements have been met as defined in the RFB.

Particulars of offer: _____

11. STORAGE

Storage must be provided for the following:

8 x rifles.

8 x riot shields.

4 x ammunition boxes.

Vehicle Jack & Tools.

Particulars of offer: _____

12. MUDGUARDS:

Sturdy, firmly braced mudguards must be fitted behind and in front of the rear wheels.

Particulars of offer: _____

13. FINISH:

All metal shall be thoroughly cleaned and primed and painted with two coats of prime and good quality automotive enamel to match the departments colour spec.

Particulars of offer: _____

14. PARTICULARS OF OFFER:

A detailed sketch or full drawing of the body offered, showing all leading dimensions, must be submitted with tender.

Particulars of offer: _____