

## SECTION 2.1 SPECIFICATIONS

### 2.1.1 INTRODUCTION AND BACKGROUND

The Hessequa Municipality, (HM) has one hundred and seventy-seven (177) fleet vehicles. These vehicles support the business operations of the HM. HM requires a real time vehicle tracking system to support the management of the fleet vehicles. The tracking system is needed to safeguard the assets and ensure safety of the HM employees.

The HM staff operate these vehicles 24/7 in high-risk areas, sometimes travelling at night when delivering basics services, therefore a tracking system will be required to safeguard these assets against theft, hijack, and abuse. It also monitors the movement of the vehicles, assist on maintenance challenges and monitor driver behaviour such as over speeding, harsh braking, etc. This tender will be awarded for a five (5) year period.

### 2.1.2 SCOPE OF WORK

**The scope will be used for technical evaluation of the bid before award.**

### 2.1.3 TENDER RESPONSE FORMAT

Vendors are requested to respond to the tender in the following formats:

#### 2.1.4 Technical Response

A point-by-point response is required, i.e., a comment for each point or paragraph that is associated with the numbering should be made.

The response to technical requirements must state "Yes" or "No." The bidder must indicate the page reference in the returned documentation.

### 2.1.5 Pricing Breakdown Model (see also Pricing)

- 2.1.5.1 All hardware, software and licenses, installation, integration, training and support etc. must be included in the monthly fee amount
- 2.1.5.2 Bidders must provide a detailed cost breakdown by pricing all items for the delivery of **a total solution** as per the specification.
- 2.1.5.3 Supplier must provide the product specifications of the hardware and software of the items priced.
- 2.1.5.4 Bidders must submit unit and total pricing in SA Rands (Excluding VAT), and where applicable, use the Foreign currency rate below to calculate the Rand value.

**2.1.6 Driver Identification**

A facility that identifies a driver of the vehicle when the vehicle is started, by making use of a tracking tag. Provide full details and describe how this service is offered and how it will benefit HM.

**2.1.7 Reports**

Provide full details and describe the various types of management and exception reports available and/or prescribed by certain criteria (custom made reports). Your details should indicate the contents of those reports (e.g. vehicle operating costs, vehicle age analysis, maintenance costs/history, fuel excess litres, vehicle audit trail etc.)

**2.1.8 System Access:**

Dedicated HM officials should have access to vehicle tracking system for various daily functions and update. Provide full details on how this system can be accessed and how such access will benefit HM.

**2.1.9 Security:**

Briefly describe the security features and authentication processes that are embedded in the proposed management system to prevent unauthorized spending and fraud.

**2.1.10 Tracking Devices Management:**

Provide full details and describe how this service is offered, and how it will benefit HM in terms of:

- i. Manage area operations: Define no-go areas, operational zones, a reference area and waypoints
- ii. Vehicle location: Monitor and keep track of their entire fleet of vehicles regardless of where they are (including 24/7 tracking & recovery, electronic map display etc.)
- iii. Historical locations and movement can be displayed to show where the vehicle has been over a period of time and replay trips.
- iv. Real time reports: vehicle speed, position, and direction
- v. Provide information on speeding, acceleration and breaking, excessive idling, battery disconnection, tow-away alert, ignition on/off, trip distance, harsh braking etc.
- vi. Recovery or retrieve in case of loss or hijacking.
- vii. Provide Voice, SMS & email communication on real-time events, accident alert & re-construction.
- viii. Provide immediate response to all driver assistance requests
- ix. To assist with the implementation of the system at all sites where required
- x. Provide sufficient training in order for all designated employees to use the system to its full potential.
- xi. Accurate Service Level Agreements driven by exception reporting and consulting advice;
- xii. Provide a monitoring and response Customer Care helpline (24/7).
- xiii. Provide full technical assistance & maintenance service on all units with warranty & on-site repairs (24/7). Faulty units to be replaced at no cost to HM for the duration of the contract.
- xiv. Web-based reporting infrastructure, by offering monthly reports clearly outlining various elements

- such as routes driven by drivers, excessive idling, misuse of vehicles, petrol wastage etc.
- xv. Provide panic buttons, unit tamper protection on all devices & back-up battery.
  - xvi. Faulty panic buttons to be replaced at no cost to HM for the duration of the contract.

## 2.2.1 ADDITIONAL REQUIREMENTS: TRACKING DEVICES MANAGEMENT

**These requirements shall be verified during the evaluation.**

- 2.2.1.1 The vehicle mounted units must have Vehicle Security Association of South Africa (VESA) fleet management certification or another industry acceptable organization. Attach a valid copy of the VESA certificate as proof that the units/s are VESA approved or approved by an industry organization or valid proof of affiliation with VESA.
- 2.2.1.2 The proposed vehicle tracking system must be certified by an International Accredited test facility for electromagnetic compatibility. The unit is to be certified with the E and e mark. The test facility report must be provided by the bidder. These E and e mark certifications relate to installation methods to minimize the possibility of electromagnetic interference (EMI) between HM monitoring equipment and the vehicle's electrical and electronic systems.
- 2.2.1.3 The proposed system must remotely and in real-time monitor vehicle trips for immediate awareness of route deviations. Substantiate by providing how the proposed system will monitor vehicle trips.
- 2.2.1.4 The proposed system must be web-based to locate vehicles at any time on real time maps. Substantiate by providing details on how the proposed system will locate vehicle in a web-based and how does it work. The proposed system must be active 24 hours per day.
- 2.2.1.5 The proposed system must automatically notify if the vehicle moves with the ignition off or if the power to the tracking device is interrupted. Substantiate by providing details on how the proposed system will automatically notifies.
- 2.2.1.6 The service provider must be able to offer mobile installations at time and place convenient to HM.
- 2.2.1.7 It has been discovered with some devices that mileage reflected on the reports are sometimes different from actual kilometers on the vehicles. Please describe how your devices operate in relation to this statement and specify how this is corrected.
- 2.2.1.8 Provide details on your geographic coverage (including urban, rural) and any other remote areas.
- 2.2.1.9 Provide full details of your audited recovery rates over the past three (3) years, clearly showing the total number of reported incidents, total number of successful recoveries, total number of failed recoveries, and any other relevant information.

## 2.2.3 TRAINING, EQUIPMENT & MATERIALS

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

During the period of the contract, the service provider shall provide training on an ad-hoc basis countrywide to HM staff, which includes management. Training shall address all related systems and specifically the application of management reports and the actions required from the end user department to rectify any areas of concern. It will furthermore cover at least the following:

- 2.2.3.1 General fleet management and vehicle tracking concepts;
- 2.2.3.2 The purpose and method of accessing management reports;
- 2.2.3.3 The implications of any system changes.
- 2.2.3.4 Training of the vehicle user.
- 2.2.3.5 Risk management.
- 2.2.3.6 Operational processes
- 2.2.3.7 The service provider shall provide HM with a manual on all systems and procedures related to the contract.
- 2.2.3.8 The service provider shall provide a competent dedicated training officer to facilitate and provide training at HM's premises (throughout South Africa) of the various users of this contract on a continuous basis from the commencement of the contract to nominated HM officials.
- 2.2.3.9 Training should include, but not limited to "best practices" within the practice of fleet management and training on how to prevent vehicle abuse or wrongful application, at no additional cost to HM.
- 2.2.3.10 All bidders are required to submit a draft programme for training with their bid. This programme shall include or make reference to anticipated time frames (dates and places of training), duration of training sessions, contents, timetables, training material etc.
- 2.2.3.11 The service provider shall provide equipment and materials of the contract, which will include electronic or hard copy "drivers handbook(s)" to be handed over to HM at the time of signature and to be issued to all HM user departments.

## 2.2.4 MANAGEMENT FEEDBACK

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

- 2.2.4.1 The service provider shall present a critical evaluation of HM's fleet on at least a monthly, quarterly and annual basis. The presentation and reports, in a format and manner to be agreed with HM must deal with and shall not be limited to aspects such as vehicles utilisation, fuel usage and the payment thereof, maintenance related matters, vehicle selection, risk management, carbon footprint, new technology designed to curb abuse and recommendations to improve the overall service.
- 2.2.4.2 The service provider must provide an effective and efficient fleet management consultancy service to optimize the utilisation of the fleet.
- 2.2.4.3 The service provider must appoint dedicated service consultants, whose responsibilities includes, but not limited to the following:
  - 2.2.4.3.1 Assist HM and resolve issues that arise with the day-to-day operation of the contract;
- 2.2.4.4 Pro-actively analyse HM's fleet management costs as well as administration and provide fleet management advice and assistance to HM;
- 2.2.4.5 Assist HM's nominated representatives on the interpretation of the reports generated;
- 2.2.4.6 Act as nodal point for the collection of all documents related to the management, maintenance, and administration functions of the contract.

- 2.2.4.7 Obtain knowledge of HM's business principles and accordingly assist with the optimization of its fleet.
- 2.2.4.8 To provide recommendations, throughout the contract period, in order to optimally manage the fleet size and cost.

## 2.2.5 MANAGEMENT REPORTS

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

- 2.2.5.1 It is the responsibility of the service provider to supply accurate and relevant management information on a continuous basis to allow for the management of the fleet's requirements.
- 2.2.5.2 The service provider shall have and maintain an IT/online system that allows HM to access and retrieve accurate and relevant management information.
- 2.2.5.3 In the event of termination or breach of contract, the service provider shall provide its entire database containing the up-to-date information in respect of HM's fleet contract, in electronic format. The cost of such transfer of information will be for the account of the service provider.
- 2.2.5.4 The service provider should upon request from HM be capable to alter, change or create new reports as and when requested.
- 2.2.5.5 The service provider must have proven IT capability to provide management reports in hard copy and electronically from the date of the award of the contract.
- 2.2.5.6 The service provider shall ensure that vehicle history and transaction data relating to any vehicle is retained for the period of the contract even in the case where the agreement for the individual vehicle has been terminated or cancelled.
- 2.2.5.7 All reports in terms of kilometer readings will need to be scrutinized prior to presentation to HM and any anomalies/exceptions must be reported accordingly.
- 2.2.5.8 The service provider's information system shall have the facility to provide information relating to the fleet at various levels, which includes but not limited to the following levels:
  - 2.2.5.8.1 The entire fleet;
  - 2.2.5.8.2 The fleet per province;
  - 2.2.5.8.3 The fleet per department;
  - 2.2.5.8.4 The fleet per district or operating area;
  - 2.2.5.8.5 Per category/ type of vehicle;
  - 2.2.5.8.6 Per vehicle and per end user/driver;
- 2.2.5.9 The system shall allow for the printing of on-line reports by all parties who have authorised access to reports.
- 2.2.5.10 Reports and reporting systems shall be user friendly:
- 2.2.5.11 Each report shall have a narrative heading which indicates the nature of the report and clearly identifies the information required and for which level it is applicable. (Section, Department, Town, etc.)
- 2.2.5.12 The reports / data required in an electronic format and hard copy shall be easily accessible through an efficient, user friendly menu system compatible with at least Microsoft Windows operating system;

- 2.2.5.13 The service provider must supply HM with a system/application in order for HM to analyse electronic downloaded data where required;
- 2.2.5.14 All reports must be exportable to at least a Microsoft Windows and/or Microsoft Excel application;
- 2.2.5.15 The purpose of, and suggested usage for, each report shall be documented in "help" manuals and shall be addressed during training sessions conducted by the service provider throughout the contract;
- 2.2.5.16 Printed reports that are required monthly, quarterly, annually and shall be delivered within 7 (seven) working days of the cut-off date of that period (i.e. monthly, quarterly, annually);
- 2.2.5.17 Printed reports that are required weekly shall be made available within 24 -48 hours of the cut-off date for that week.

## 2.2.6 RISK MANAGEMENT

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

- 2.2.6.1 The service provider's fleet management systems and procedures shall incorporate both preventative and detective safeguards capable of preventing and detecting fraudulent transactions.
- 2.2.6.2 The service provider shall report in writing or electronic mail (e-mail) to HM any suspected irregularities involving an official, or any other person immediately upon the suspicion arising.
- 2.2.6.3 Information provided by the service provider shall be sufficient to enable HM to institute investigations and / or take corrective action or institute disciplinary action against its employees.
- 2.2.6.4 The service provider will need to avail any of its staff at no additional cost to HM to assist in any investigations.
- 2.2.6.5 Provide full details and describe how this service is offered, and how it will benefit HM.

## 2.2.7 SERVICE LEVEL AGREEMENT

A service level agreement shall be entered into as indicated parts of this document.

## 2.2.8 COMMUNICATION

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

HM requires continuous communication from the contracted service provider, to authorized HM officials, with regard to the management, maintenance and administration of this contract, which includes but not limited to sending out reminders (email) when a service is due on their vehicle to ensure that vehicles is serviced in time and warranties remain intact. All the above-mentioned services are needed for HM vehicles 24-hours a day, 7 days a week, and 365 days a year. Provide full details and describe how this service is offered, and how it will benefit HM.

## 2.2.9 CUSTOMER CONTACT CENTRE

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

Provide full details and describe how this service is offered, and how it will benefit HM. Your details should incorporate continuous functioning and availability of the Contact Centre during and after normal working hours, emergency contact numbers, procedures for reporting/blocking lost card and/or fraud etc. A customer/call centre facility must be implemented by the service provider at no additional cost to HM for the logging, answering and resolution of queries.

The facility needs to fulfil the following requirements:

- 2.2.9.1A shared call option will need to be made available for contacting the service provider;
- 2.2.9.2A shared call option will need to be made available for all suppliers and merchants contacting the service provider for vehicle maintenance approvals.
- 2.2.9.3All calls between HM and the service provider will need to be recorded for reference, quality, and future training purposes.
- 2.2.9.4The service provider will need to assist HM's Fleet Office with the daily management of the contract. This includes fuel claims processing, maintenance repairs, and maintenance management and needs to fulfil the needs of the relevant end user departments of HM.
- 2.2.10The customer contact centre will need to be fully functional at the time of the commencement of the contract.
- 2.2.11After hours the customer contact centre will need to assist in terms of the management of roadside assistance and towing.
- 2.2.12The service provider must submit information in terms of the current or anticipated call centre capabilities in terms of volume and service levels as well as the capability to generate the reports as required and the system to be used. Should this function be outsourced to any other company, the outsourced agreement must be supplied.

## 2.2.10 DATA PROTECTION & OWNERSHIP

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

- 2.2.10.1To protect the database relating to HM's fleet contract, the service provider shall have in place, and maintain, suitable back-up procedures and disaster plans to protect vehicle data.
- 2.2.10.2The service provider shall back-up all electronic data on a daily basis. Any costs associated with the recapture and processing of data for whatever reason shall be borne by the service provider.

## 2.2.11 IMPLEMENTATION PLAN

**This part shall form part of the Service Level Agreement with the successful bidder and elements hereunder shall be used during evaluation.**

- 2.2.11.1The service provider must submit an implementation plan that includes steps, timeframes, and responsibilities of the

various parties (if any), based on the assumption that the contract shall commence on 01 Dec 2022.

2.2.11.2 The service provider shall provide the below-mentioned items and materials to HM:

2.2.11.3 Tracking device.

2.2.11.4 Drivers tags;

2.2.11.5 Stickers if applicable;

2.2.11.6 Software and or hardware needed for on-line access to reports.

2.2.11.7 Procedure manual



**2.2.12 SPECIFICATIONS FOR EVALUATION OF THE BID**

- Please indicate the Page to Reference where applicable. Failure to do so may result in the bid being evaluated as Non-Responsive.
- These are minimum specifications, anything better and above may be offered.
- The specifications and the scope will be tested during evaluation.

| <b>SPECIFICATIONS FOR AUTOMATIC VEHICLE LOCATION / TRACKING SYSTEM</b>   | <b>Comply YES/No</b> | <b>Page to Reference</b> |
|--|----------------------|--------------------------|
| 1. The automatic vehicle location and tracking system will include all hardware required to comply with this tender specification.   |                      |                          |
| 2. The vehicle location and tracking system must report data and status alert to the application software operated from at least a central point at Hessequa Municipality.   |                      |                          |
| 3. System must use GPS for vehicle location, speed and distance recording, GPRS and the primary means of data communications with automatic fall back to SMS where there is no GPRS coverage.  |                      |                          |
| 4. The vehicle-mounted unit must incorporate a state-of-the art Global Positioning System (50 channel GPS receiver/antennae or better) with positional accuracy of ten (10) meters or better with location data from this unit being plotted on accurate aerial photography and vector maps. |                      |                          |
| 5. The proposed system must afford real time vehicle tracking and monitoring with access to historical reporting and trip replays and must be scalable, allowing for future expansion.   |                      |                          |
| 6. While the vehicle is travelling, the system must automatically increase the rate of recording when the vehicles heading changes by more than a specified number of degrees.   |                      |                          |
| 7. The splash-proof vehicle-mounted unit must be robust in construction and designed to handle off-road conditions. It must be installed out of sight in the vehicle and should be mounted in such a way that it can be repaired or replaced quickly by qualified technicians if required.   |                      |                          |
| 8. All wiring and connectors shall be durable and in compliance with International and National automotive standards.  |                      |                          |
| 9. Connections between the vehicle-mounted vehicle-tracking unit and the vehicle's electrical wiring shall not be done on the wiring harness but should terminate directly via an in-line fuse on the vehicle's electrical controls or battery.  |                      |                          |
| 10. The vehicle-mounted vehicle-tracking unit must report loss of external power and detect tampering immediately.   |                      |                          |
| 11. The vehicle-mounted vehicle-tracking unit must be capable of receiving outside inputs (signals) e.g. for the monitoring of power take offs etc. (must be able to interface with 8 digital and 2 analogue inputs)   |                      |                          |

|   | Comply<br>YES/No | Page to<br>Reference |
|---|------------------|----------------------|
| <p>12. The vehicle-mounted vehicle –tracking unit must, as a minimum, be capable of recording the following aspects related to driving:</p> <ul style="list-style-type: none"> <li>• Over revving of the vehicle</li> <li>• <b>Over speeding of the vehicle - (According to the road speed limits)</b></li> <li>• Harsh braking of the vehicle</li> <li>• Harsh Acceleration</li> <li>• Excessive vehicle idling</li> </ul> |                  |                      |
| 13. The installed system must provide a running odometer independent of the vehicle odometer.   |                  |                      |
| 14. System must be capable of reporting data and tracking at various intervals and sending that data in "real time", including the exact location of the vehicle.   |                  |                      |
| 15. The vehicle-mounted vehicle-tracking unit must incorporate a built-in backup battery which must ensure independent operation of the unit for a minimum period of three days.  |                  |                      |
| 16. The system must capable of recording and reporting second by second accident information (speed and RPM (revolutions per minute) prior to (minimum 60 seconds) and after (minimum 30 seconds) a possible accident has occurred.   |                  |                      |
| 17. The installed system must be capable of recording route information and report on any deviation from the route.   |                  |                      |
| 18. The system must be capable of defining safe / preferred areas and no-go area's and report on any event of leaving the safe / preferred area or entering a no-go area. The intelligence/setting for such geo-fences must be stored on the actual vehicle mounted unit so that a violation is immediately detected and immediately reported.  |                  |                      |
| 19. The system must support the creation of waypoints i.e geo-fences which, when the vehicle enters or leaves the geo-fence /waypoint, the system will indicate this on the mapping software in real time.  |                  |                      |
| 20. The system must be capable of facilitating driver identification through the use of "keys/tags" and report the identity of the driver for any specific trip, prevent unauthorised/unqualified drivers from starting a specific vehicle/category of vehicle or approve driver activation.  |                  |                      |
| 21. The system must be capable of overriding driver access by enabling an "authorised manager" to immobilise a vehicle remotely.  |                  |                      |
| 22. The system must have a panic button installed and report immediately to the control   |                  |                      |

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| centre, and responsible manager when the panic button is activated.  |  |  |
| 23. The system must be capable of forwarding selected alarm messages to one or more cell phones.   |  |  |
| 24. The operational status of the vehicle indicating whether it is available to be dispatched to an incident or else is already assigned to a task should be visible to the system operator.   |  |  |
| 25. Management of the system should be possible means of scalable hosted software as well as web dash-based C dash software.   |  |  |
| 26. The system must be capable of providing various fleet management reports, such as down time, utilisation, kilometres travelled etc per vehicle, depot, cost centre.  |  |  |
| 27. The completed installation AND HARDWARE must be guaranteed for 3 years.  |  |  |
| 28. System must be active, transmitting alarm / priority statuses in real time.  |  |  |
| 29. Must interact with the driver by means of a warning buzzer, to prevent where possible actual violation of parameters.  |  |  |
| 30. Must record tachograph data i.e. speed, RPM (revolutions per minute) and green band performance at 10 second intervals.  |  |  |
| 31. The bidder must be an ISO 9001:2008 certified service provider.  |  |  |
| 32. The system must serve the dual functions of active fleet management and stolen vehicle recovery and must be supported by a 24/7 365 call centre which provides both a bureau and stolen vehicle recovery service.  |  |  |
| 33. The application software must facilitate the setting of maintenance, licence renewal and roadworthiness reminders.   |  |  |
| 34. The application software must be able to be networked from various computers to the main server hub-on the Clients premises or cloud-based.  |  |  |
| 35. The bidder must list available reports.  |  |  |
| 36. The software must enable an operator to replay a trip visually on a map.   |  |  |
| 37. The software must allow for a search by Point of Interest, by address or by location marked by the system operator and should allow the system operator to view which vehicles are closest to that location. The radius for the search of vehicles closest to the location must be user definable. |  |  |
| 38. A search for vehicles by skills set must be possible.  |  |  |
| 39. All access to the application software and data MUST be password protected with multiple layers of Passwords and functions tailored to suit each user.   |  |  |

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| 40. The vehicle-mounted tracking unit, fully functional including GSM must be able to operate within range of -10 Celsius to +60° Celsius.   |  |  |
| 41. The vehicle-mounted vehicle –tracking unit, fully functional including GSM must be able to operate within a range of 95% RH at 30 to 60° Celsius and non-condensing.   |  |  |
| 42. The vehicle-mounted tracking unit must have South African Insurance Association (SAIA) approval. Proof that vehicle-mounted unit is SAIA approved is required to be included in the tender.                    |  |  |
| 43. The complete system must be certified by an international accredited test facility and carry the "e" and 'CE' mark.  |  |  |
| 44. The system must offer seamless integration to a web-based (or at least 20 user access) fleet and asset management solution which offers full visibility of costs and information from procurement to disposal. |  |  |
| 45. The system must offer seamless integration with a traffic offence management, licensing and registration service.  |  |  |

**Failure to adhere to the beforementioned may result in your tender being declared non-responsive.**

DECLARATION,

I, THE UNDERSIGNED (NAME) .....  
 CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT. I ACCEPT THAT THE MUNICIPALITY MAY ACT  
 AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

AUTHORISED SIGNATURE: .....

NAME: .....

CAPACITY: .....DATE: .....