

TECHNICAL CRITERIA EVALUATION SATELLITE TRACKING SYSTEM

Technical Functionality

Nr.	Functionality	Max Score	Actual Score	Score allocation: Elaborate by submitting screen shots on a separate page and reference them.
	<u>Hardware Specifications</u>			
1	Real time tracking with GPS (Global Positioning System) to locate vehicles accurately up to 5 meters or less. GLONASS is a must Build in Antenna to ensure GPS signal and avoid tampering Facility to add an external antenna	4		Submit specification report of GPS that is used If not compliant to all aspects Zero points will be allocated
2	Mandatory driver tag (1 wired) Driver Identification Starter inhibit The ability to remotely disable driver identification in the vehicle so that it cannot start (Starter cut)	6		Submit sample of report linked to driver identification tag If not compliant to all aspects Zero points will be allocated
3	Panic Button in event of emergency to notify control room and monitoring centre Panic button to send an sms to single or multiple numbers to control room to call driver back.	4		Submit report where panic button was used If not compliant to all aspects Zero points will be allocated
4	Mandatory Hardwired Voice functionality. No Bluetooth system allowed Bi-directional voice communication whereby controller can call in and communicate with the driver. Voice functionality must allow for covert dial - in to listen inside the cab.	6		Submit sample of voice communication If not compliant to all aspects Zero points will be allocated. The ability must be individually explained.
5	In Cab Speed buzzer to alert driver when speeding above threshold	1		Submit sample of report

6	Unit tamper to alert if unit is being tampered. GSM Jamming detection to warn when signal is blocked	2		Submit sample of tamped and jammed alert reports If not compliant to all aspects Zero points will be allocated
7	The hardware must have ability to monitor CAN bus data where applicable not limited to Fuel management (fuel consumption, fuel level and driver behaviour events such as speeding, rpm, odometer, harsh braking, harsh acceleration)	2		Submit sample of dashboard If not compliant to all aspects Zero points will be allocated
8	Build in impact detection to notify when vehicle is in an accident	4		Provide "black box data" for accident analysis If not compliant to all aspects Zero points will be allocated
9	Minimum IP40 rated (Water and Dust protected)	2		Submit OEM Specification sheet. If not compliant to all aspects Zero points will be allocated
10	Driver behaviour ability Speeding Harsh braking Harsh acceleration Harsh turning Over revving Smooth curving to show neat trip	4		Submit sample of generated reports If not compliant to all aspects Zero points will be allocated Supply screen print on a page per item from 2 to 6
11	The report rate must be 2 minute or higher namely 1 minute up to 15 seconds when required)	2		Submit sample of reports
12	PTO must be hardwired to the OBC to provide PTO engaged and disengaged alerts. PTO must be able to be Zoned on the Software to Engage or disengage only in those specified zones Unauthorised PTO use control room alarm Especially in the Coal environment	4		Submit sample of reports Supply a Report with your LOGO on the report as an example If not compliant to all aspects Zero points will be allocated.
13	The hardware must have the ability to integrate with add on solutions such as Video Telematics. The Camera system will be a separate device but must integrate with the OBC. Basic functions of the Video Telematics is to view real time footage, accessible to	4		Provide sample of the unit Proof the ability that service provider is capable of design and implement customer required custom developments

	historic event footage playback, Integration with OBCs events (Speeding (with severity bands), panic, impact, PTO and other events as and when required) 4 Inputs to accommodate all peripherals. Minimum of 2 fixed inputs and 2 Configurable inputs			If not compliant to all aspects Zero points will be allocated.
TOTAL SCORE DEVICE		45		
	<u>Recovery and Monitoring Services</u>			
14	Proof of 24/7 National Recovery services (covering all SA 9 provinces) with ability to safeguard vehicles as and when required. Proven PSIRA Certified Recovery 1 Gauteng 2 KwaZulu Natal 3 Western Cape 4 Mpumalanga 5 Limpopo 6 Northern Cape 7 Eastern Cape 8 Free State 9 North West 10. A letter from the recovery agency stating the agreement and the locations and PSIRA Certified proof	10		Points allocation 0 – 3 = 0 4 – 6 = 3 7 – 9 = 9 1 - letter from recovery agency and PSIRA Certificate = 10
15	National footprint - service points in all 9 provinces. This will be for any De -Re and repairs to faulty reporting vehicles. 1. Give Installer Company names for each province, 2. Technician accreditation Certificate submitted showing the accreditation for your company equipment. 3. Installer company VESA certificate to be supplied	9		Points Allocation: 1. Installer Company names for each province 0 – 3 provinces = 0 4 – 6 provinces = 2 7 – 9 provinces = 3 2. Company Accreditation Certification = 2 3. Installer company VESA certification = 2

16	Provide onsite daily technicians to be established at ERI Rosherville premises. Technicians must comply with ERI safety standards. Keep Stock on the main site in Johannesburg for the on-site technicians	2		Yes or No Yes = 2 No = 0
TOTAL SCORE RECOVERY AND MONITORING SERVICES		21		

	<u>Software Specifications</u>			
17	Cloud based software platform must allow for Google maps, satellite and street view	4		Submit sample of cloud base system Supply Report as an example
18	The software platform must have the capability to implement IP lockdown to restrict access to the software to ERI user computers, ensuring that only authorized computers can access the software.	2		System configuration documentation demonstrating IP lockdown setup. Security test reports confirming that unauthorized IP addresses are denied access.
19	System to grant permission and admin rights to setup groups from the main account.	2		Supply Report as an example
20	Software must have backups and redundancy	2		Provide proof of your disaster recovery plan

21	Software must be able to store: Vehicle license Service maintenance Driver PRDP reminders	3		Supply Report as an example If not compliant to all aspects Zero points will be allocated
22	Geo-fence Points of Interest. This is where blanket Zones can be set up on Software for all vehicles. Not on vehicle device	2		Supply Report as an example
TOTAL SCORE SOFTWARE		15		

	<u>Reports</u>			
23	All reports must have ability to be presented in: Excel CSV XML PDF formats. And must have ability to be automated	4		Submit screen dump displaying on a one pager Formats as an example. Excel = 1 CSV = 1 XML = 1 PDF = 1
24	Fully route history report includes geolocation, vehicle registration, start and end ODO, distance travelled, speed, date and time	1		Submit screenshot displaying on a one pager
25	Turnaround time reports – Vehicle registration Start date and end date Customer site name and Departure Site Name Duration Spend on Site	4		Submit screenshot displaying on a one pager Vehicle registration = 1 Start date and end date = 1 Customer site name and Departure Site Name = 1 Duration Spend on Site = 1
26	Road sector speed limit must be available on the Software maps and reports can be drawn on that	2		Submit screenshot displaying on a one pager
27	Congestion and Tail gating report	2		Commitment to be capable. And if already available Report with your LOGO on the report as an example

28	Automated 1 page Accident reconstruction report to provide information on the accident pre and post accident.	3		Submit an example of a real event investigation Report with your LOGO on the report as an example. You can use any accident in your Archive to demonstrate your capabilities.
29	Executive summary dashboard report either accessible via the software or provided daily. Information on dashboard must have the following but not limited: - Vehicle active vs inactive - Vehicle reporting vs non reporting - Driver Safety score and trends (includes all safety events such as speeding, harsh braking, harsh acceleration, excessive idling, harsh cornering/turn - Turnaround time exception - Kilometres driven - Reminders overdue (driver's license, vehicle service and maintenance)	3		Proof the ability that you are capable of design and implement customer required custom. Report with your LOGO on the report as an example The ONUS is on the service provider to demonstrate the system can produce such a document from your Reporting system. Demonstrate the Index of your Software Report System indicating the Available reports.
TOTAL SCORE REPORTS		19		
TOTAL For all Categories		100		
THRESHOLD		80		

Site Visit Evaluation Criteria: The Bidder must have a Vehicle available to demonstrate all the required criteria.

Site Visit Criteria	YES	NO
Demonstrate the Voice Device and the hardwired connectivity.		
Demonstrate making a call to the vehicle.		
Demonstrate Receiving a Please Call me from the Vehicle		
Demonstrate dialling the vehicle and listen in to the cab		
Activate the inhibitor on starting of a vehicle. Demonstrate on the actual live software.		
Does the OBC supply Jamming Detection warnings?		
The system must have the ability to store downloaded vehicle tracking for a period of 6 months online and rest in Archive. Demonstrate that on your system		
Demonstrate that product provide real time tracking		
Show Speed and RPM information for each GPS co-ordinate recorded		
Demonstrate Date, Time, Vehicle and Driver information, Start/Stop times, Odometer reading, RPM and Speed		
Demonstrate the driver identification unit buzzer and or light to warn the driver of any violations that may occur i.e Speeding.		
Demonstrate The vehicle's position to be visible to the customer at any given time.		
Demonstrate Multiple Users can be able to access the information simultaneously on Web Based.		
The fitment shall not affect the normal vehicle operations and shall be independently powered in the form of a back-up battery, in the event of the vehicle battery being disconnected for some reason.		
Demonstrate User can be able to create scheduled reports to be sent to various recipients		
Demonstrate system can be able to send sms or email alerts to users on speeding and other specified events i.e Impact etc.		
Reports must be available on Area of activity where waypoints have been loaded of delivery sites and or power stations etc.		
Demonstrate Road Sector Speed technology available to report on over speeding.		
Confirmation that the Software is be able to be managed by the end users on an administrator level where vehicles can be added into groups by business units or depots and departments.		
Demonstrate Detailed trips must be available with interaction on Google Maps.		
Demonstrate a detailed asset report available to show active, non-active and de-installed vehicles in the allocated groups.		

Software must be programmable to allow authorised users to be able to monitor vehicles in respective department, and also the control rooms be able to have a complete view of combined groups or all vehicles depending on allocation.		
Supplier installation documents to be provided, completed and signed off by an authorized ERI appointed person.		
Loading of additional vehicles after new installations can only be done by the supplier with details such as Registration number; VIN; engine number as well as make and model.		
Demonstrate and explain in detail your GEOVAS capabilities to ensure the zones are software driven and not to overload the vehicles OBC memory. Zone is created for a specific reason it will apply to all vehicles or a group of vehicles without that zone being uploaded to the actual OBC		
Demonstrate vehicles cannot be able to start without a driver individual driver tag been presented onto an installed key slot. Tags and readers as an example.		
Can internet Protocol be locked on software as well as mobile app safely against hackers to ensure no unauthorized use. To ensure Eskom IM approval. Supply proof to the committee		
Does the system allow for user permission and user groups access control by Business Contract Manager		
Critical reports: Turn around time; Congestion Reporting; Fleet health report; Unauthorized Power Take Off; Customer site management report; Driver fatigue; fuel reports? Show and explain your reports according to the above information.		
Can supplier offer Dashboard reports? Critical information on dashboard is driver tag conformance, safety report (speeding, severity bands); Geo-Fence speeding and road sector speed limit for Management in ERI		
Can supplier provide automated Accident analysis report directly after accident taken place? Demonstrate or show an Archived incident.		
Can supplier demonstrate they have capacity to manage large roll out? Project Plan to be submitted for entire 3000 vehicles.		

DEVELOPED BY:

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