ADDENDUM N° 01 Issued against the tender 307/G/NCB/2021/2022 for the Supply, Installation & Commissioning of CCTV Surveillance system, Alarm System. Access Control system & GPS vehicle tracking and Fuel Consumption Monitoring System

SUBJECT: Additional information on Technical Requirements & Bill of Quantities

Reference made to the above mentioned tender and considering further clarification required, we would like to inform the interested bidders about the following amendments

Major highlights of changes in this addendum

SCHEDULE OF REQUIREMENT

1. Deadline for bids submission is extended from **January 27, 2022** to **February 03, 2022** at 10:00am at RMS conference room, and the opening will be at 10:30am at same place.
2. The technical specifications and estimated quantity are amended as per the details attached.
3. Quantity stands as an estimation and will be confirmed by individual purchase order.
4. LOT 3 for GPS vehicle tracking and Fuel Consumption Monitoring System will be lump sum based contract
5. The title of the tender will be **Supply, Installation & Commissioning of CCTV Surveillance system, Alarm System. Access Control system & GPS vehicle tracking and Fuel Consumption Monitoring System**
6. CE Marked or US FDA Certificate Not Applicable
7. The tender method is National competitive bidding.
8. The bidder is required to provide the DDP unit price to site (RMS HQ, RMS free zones warehouses and 30 branches in all districts of Rwanda.
9. The bidder is required to provide the bid security equivalent to 2% of the total cost of the bid,
10. The details of this addendum may be obtained at RMS head office in working days from 7:00 am to 5 pm.
11. Other clauses which are not mentioned in this addendum N° 1 remain unchanged as announced in initial tender.

The price schedule should respect the following format:

No	Item description	Quantity	Unit price(ddp- site with all tax inclusive)	Total price ddp- site with all tax inclusive)	Delivery time

Sincerely,

Pie HAKERIMANA
Chief Executive Officer

Technical Specifications for the Supply, Installation & Commissioning of CCTV Surveillance system, Alarm System. Access Control system & GPS vehicle tracking and Fuel Consumption Monitoring System

Technical Specifications for the Supply, Installation & Commissioning of CCTV Surveillance system, Alarm System. Access Control system & GPS vehicle tracking and Fuel Consumption Monitoring System

1. Introduction to Rwanda Medical Supply Ltd

Rwanda Medical Supply Limited is a state-owned entity whose objective is to ensure the availability of quality, reliable, and affordable pharmaceutical products in all the health facilities in Rwanda. It has the mandate of procurement, storage, and distribution of pharmaceutical products in health facilities countrywide. RMS Ltd has its head office in Kigali City and 30 branches countrywide.

The Rwanda Medical Supply Headquarters is located at Gasabo District **KG 509 St** and has branches in Free Trade Zone(Masoro), and 30 branches in all districts of Rwanda.

To attain higher security and safety measures in terms of timely operational functionality at all workplaces, the installation of an integrated Security and safety System in required. Rwanda Medical Supply LTD is therefore proposing to acquire a Security system with a centralized CCTV Camera System, Intrusion Detection System, Access Control System and Emergency Alarm System.

2. Objectives

In this regard the Rwanda Medical Supply LTD intends to commission a company with the capacity to install a modern Security and Safety Management System (SSMS) at the Rwanda Medical Supply LTD head Quarters and its branches described in scope of work bellow

3.Scope of Work

S/N	Description	sites
LOT1	Supply, installation and commissioning of complete video surveillance systems that includes CCTV cameras supported by 24/7 Monitoring system	32 sites(RMS Head Office, Free Zone, at Each District)
LOT2	Supply and installation of a GSM wireless alarm system touch keypad design self-monitoring sends SMS & Supply & Installation of Door Access Control (Sensor Based card, Biometrics)	32 sites(RMS Head Office, Free Zone, at Each District)
LOT3	Supply and installation of GPS Vehicle tracking & fuel consumption and refueling tracking system (as reference per the technical specification) (The price shall include supply, installation, commissioning and a computer that will be monitor the devices	36 Vehicles

3.1 LOT1. Technical Specifications for CTTV System

The CCTV surveillance system shall be accessible online using IP based cameras via Network Video Recording (NVR) system with a standard browser or accessible locally through wall mounted screens.

The network video recorder (NVR) to be provided for recording and storing camera surveillance footage shall be accessible and viewing the records remotely **over the internet from a mobile phone, web browsers or a computer** by remote video surveillance operator located at HQ or another location outside the premises where cameras are located. To login into NVR viewing software, the NVR built-in network (IP address), Unique identification UID and/or account login can be used. The NVR viewing software shall have capability of switching from one NVR to another by selecting the configured NVR IP address or its UID. The viewing software shall be accessible and display video recording with the minimum internet bandwidth (3G). The viewing software, the UID, and other access methods shall not occur additional or recurrent costs either for licensing or usage.

In order to have a complete working system, here are the following requirements:

- ✓ Supply and installation of centralized surveillance system at RMS Ltd premises (30 branches, Headquarters warehouses & administration building both indoor and outdoor and Free Trade Zone) and the upgrade the centralized surveillance room at headquarter. The system should be installed in a way that people with access (camera operator, RMS management) will have an easy access to any branch's system camera and headquarter both on mobile or computer (all accessories are part of supply and installation),

    - The system should have the features such as home visibility at home (via smartphone, or laptop,

    - Easy access surveillance to managers/predetermined people (via both smartphone and laptop),

    - The installation will include labor, accessories such as cabling, piping or cable trucking where necessary,

- ✓ Both (IP) indoor and outdoor camera should be 6 megapixels or similar in order to be compatible with the existing system,

- ✓ Network video recorder (NVR) 16 channels that are able to acquire more than six (6) disks. (As an NVR will be connected with 10-12 camera, possible disks to cover at least 6 months),

- ✓ Indoor camera (dome) will be installed to record when there's a motion (when there's a movement),

- ✓ 4G router that is able to diffuse wireless and LAN to the NVR,

- ✓ Wall-mount monitors screens

- ✓ Provision of Technical training to Security Officers or designated personnel in charge of control room

- ✓ Warranty & Free Support Services for a period of one Year

3.1.1 Technical Specifications for CCTV Surveillance system & Accessories

	Description	Specifications	Image	QUANTITY
1	PTZ Camera	Key features . 1/2.8'' Progressive Scan CMOS . Up to 6-megapixel high resolution . 1080P Full HD real-time resolution . 20X Optical zoom, 16X digital zoom . True Day/Night, D WDR , 3D DNR . Privacy Mask, Alarm input/output . 3D intelligent positioning . PoE+/ PoE / 24VAC power supply		04
2	MINI PTZ Camera (zoom camera)	Key Features • 1/3" progressive scan CMOS • Up to 2560 × 1440@25fps resolution • ☐Min. illumination: Color: 0.005 Lux @(F1.6, AGC ON) B/W: 0.001 Lux @(F1.6, AGC ON) 0 Lux with IR • 4× optical zoom, 16× digital zoom • 120 dB WDR, 3D DNR, HLC, EIS, Regional Exposure, Regional Focus • 12 VDC & PoE • Up to 20 m IR distance • IK10, IP66 • Support H.265+/H.265 video compression		01
3	Indoor IP Camera	. 1/2.5'' progressive scan CMOS . Up to 6 megapixel (2560 x 1920) high resolution . Full HD 1080P real time video . 30m IR LEDs optional (-I) . Day / night auto switch . IR LEDs optional (-I: up to 20m) . Vandal-proof housing . Motorized VF lens optional (-Z)		100

4	Outdo or IP Camer a	6mega-pixel (2560 x 1920) high resolution • Full HD1080p real-time recording • 1/2.5'' progressive scan CMOS • Motorized VF lens • Day / night auto switch • Vandal-proof housing • IP66 rating • 50m IR LEDs optional (-I) • Built-in heater & fan optional (-H)		100
5	Outdoor Bullet IP Camera - ColorVU	• 4MP • 24/7 full time color • 1/1.8" Progressive Scan CMOS 2560 × 1440 @ 25fps • F1.0 aperture, 2.8/4/6 mm fixed lens 120dB WDR • H.265+, H.265, H.264+, H.264 IP67		01
6	Indoor Dome IP Camera - ColorVU	24/7 full time color Max. 2688 × 1520 @30fps 4 mm/6 mm fixed lens H.265+, H.264+ 120dB WDR Built in mic (Optional) 12 VDC & PoE (802.3af, class 3) Built in micro SD/SDHC/SDXC slot, up to 128G BLC/3D		01
7	Camera Mounting Pole	Camera Mounting Pole, 6 inch, Steel and fastening Accessories		05
8	Adaptor for PTZ Cameras	AC Adaptor, 220V AC - 24V AC, 2-3.5 Amperes, PTZ CCTV Cameras		04

9	Network Video Recorder (NVR) - 32 Channel	• Third-party network cameras supported • Up to 6MP resolution recording • HDMI and VGA output at up to 1920×1080P resolution • Plug & Play with 16 independent PoE network interfaces • 4 SATA HDD interface up to 6TB each • HDD quota and group management		01
10	Network Video Recorder (NVR) - 16 Channel	• Third-party network cameras supported • Up to 5MP resolution recording • HDMI and VGA output at up to 1920×1080P resolution • Plug & Play with 16 independent PoE network interfaces • 2 SATA HDD interface up to 6TB each • HDD quota and group management		05
11	Network Video Recorder (NVR) – 8 Channel	• Third-party network cameras supported • Up to 5MP resolution recording • HDMI and VGA output at up to 1920×1080P resolution • Plug & Play with 16 independent PoE network interfaces • 2 SATA HDD interface up to 6TB each		30

1 2	HARD DISK FOR VIDEO RECORDING - 8TB	• 8TB Storage • SATA 6Gb/s interface optimizes burst performance • Free software in hard drives allows installation to Windows OS Supported Versions		50
1 3	HARD DISK FOR VIDEO RECORDING - 6TB	• 6TB Storage • SATA 6Gb/s interface optimizes burst performance • Free software in hard drives allows installation without UEFI BIOS.		10
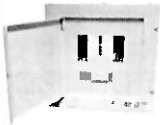
#	Item	Description	Image	Qty
14	HARD DISK FOR VIDEO RECORDING - 4TB	• 4TB Storage • SATA 6Gb/s interface optimizes burst performance • Free software in hard drives allows installation to Windows, including XP, Windows 7, Windows 8, Windows 10 without UEFI BIOS.		01
15	Monitoring Screen - 43 Inch	43 Inch HD Monitoring Wall Screen for CCTV Monitoring; -1080P Resolution -3 HDMI -1 VGA Port -2 USB Ports *Wall mounting brackets to be supplied at no extra charge in case required to complete installation*		05
16	Monitoring Screen - 32 Inch	32 Inch HD Monitoring Wall Screen for CCTV Monitoring; -1080P Resolution -1 HDMI -1 VGA Port -1 USB Ports *Wall mounting brackets to be supplied at no extra charge in case required to complete installation*		30
17	HDMI cable	HDMI cable, Male-Male, 20m		01
16		HDMI cable, Male-Male, 10m		01
18		HDMI cable, Male-Male, 5m		30
19	Rack	Rack: Wall mounted 4U size		01
20	Uninterruptible power supply (UPS)	Uninterruptible power supply (UPS) - 1500 Va for Backup Power		02

21	Uninterruptible power	Uninterruptible power supply (UPS) - 750 Va for Backup Power		30
22	Wireless Router	Wi-Fi Standard (802.11 a/b/g/n/ac) Wireless frequency (5GHz) Speed of the router up to 300Mbps 128 bit encryption, and WPA2 standard compatibility		05
23		CAT-6e FTP: Foil Twisted Pair provided in 100Ω with 4 twisted pairs surrounded by a metallized foil wrapper. + Less rigid... almost as flexible as traditional UTP + Enhanced Shield termination makes it easily connectorized + Enhanced Shield termination provides isolation between devices + Enhanced Shield termination eliminates "ground loops" + With FTP, alien next can be reduced to almost zero + With FTP, RJ-45 and field termination can be used *RJ45 connectors for the supplied cable to be supplied within the same price if needed*	(Roll)	1
24	4G ACCESS POINT ROUTER	● Providing reliable, seamless connectivity for M2M & IoT applications ● Support PPTP L2TP IPSEC OPENVPN GRE ● Support 2 10/100Base-T(X) self-adaptive Ethernet interface ● Support 802.11 b/g/n WLAN ● sim card slot		01
25	4G LTE Mobile WiFi Hotspot	4G LTE Mobile WiFi Hotspot Unlocked Wireless Internet Router Devices with SIM Card Slot for Travel Support B2/B4/B5/B12/B17 Network Band for AT&T/T-Mobile		01

26	AC Power Cable	AC Power Cable, 3*2.5mm2, Copper,pvc insulated, multi core,		01
27	Wall Trucking 100mm*50mm	Wall Trucking, Legrand, 100mm*50mm		01
28	Wall Trucking 40mm*40mm	Wall Trucking Legrand, 40mm*40mm		01
29	PVC Pipe, 3/4 inch	PVC Pipe, 3/4 inch		01
30	Cable Tray	Steel Cable Tray with Cover, 300mm*50mm		01
31	Un Managed POE Switch - 16 Port	**Specifications;** 16 PoE+ Ports at 10/100Mbps each, - Metal desktop or rack-mountable housing - Web GUI interface - Essential L2 Switching Features – VLAN, QoS, IGMP Snooping Security Functions – Static Mac, Storm Control		01
32	Un Managed POE Switch - 8 Port	**Specifications;** 8 PoE+ Ports at 10/100Mbps each, - Metal desktop or rack-mountable housing - Web GUI interface - Essential L2 Switching Features – VLAN, QoS, IGMP Snooping Security Functions – Static Mac, Storm Control		01

		Specifications;		01
3 3	Managed POE Switch - 24 Port	- 24 x 10/100/1000 ports (Gigabit Speeds) - Metal desktop or rack-mountable housing - Web GUI interface - Essential L2 Switching Features – VLAN, QoS, IGMP Snooping - Security Functions – Static Mac, Storm Control		

3 4	Unmanaged POE Switch - 24 Port	Number of Ports
		• DGS-1016D: Sixteen 10/100/1000 Gigabit ports
		• DGS-1024D: Twenty-four 10/100/1000 Gigabit ports
		Standards
		• IEEE 802.3 10BASE-T Ethernet
		• IEEE 802.3u 100BASE-TX Fast Ethernet
		• IEEE 802.3ab 1000BASE-T Gigabit Ethernet
		• ANSI/IEEE 802.3 NWay auto-negotiation
		• IEEE 802.3x Flow Control
		Data Transfer Rates
		• Ethernet:
		  • 10 Mbps (half duplex)
		  • 20 Mbps (full duplex)
		• Fast Ethernet:
		  • 100 Mbps (half duplex)
		  • 200 Mbps (full duplex)
		• Gigabit Ethernet:
		  • 2000 Mbps (full duplex)
				01

35	Unmanaged POE Switch - 32 Port	• 32 PoE+ Ports at 10/100Mbps each, with 32 Dipswitches • 2 Gigabit Ethernet Uplink Ports at 10/100/1000Mbps each • 380W Max Power (up to 48W per port port by using dip switches) • 19" Rack-Mountable with Internal Power Supply		01
36	Unmanaged POE Switch - 48 Port	• Complies with IEEE 802.3x full-duplex and flow control • Provides 48 10/100Mbps Auto-Negotiation Ethernet LAN ports • Auto MDI/MDIX • NMA auto-negotiation • Supports UPnP • Non-blocking • Store-and-forward switching • Integrated 8,000 MAC address table • Internal power supply • Standard 19" rack-mountable metal case		01

37	Power Distributio n Board	Power Distribution Board (6 Way)		01

3.1.2 ADDITIONAL INFORMATIONS

a) Bidders may wish to attach a separate list of other items/accessories not listed here but may be required during installation. Not this will not be considered during evaluation

b) This will be a framework contract. The contract will be awarded based on UNIT prices. The successful bidder will sign a one-year renewable contract upon satisfaction by the client.

c) The provided unit price per item will be used for purpose of evaluation. Quantities to be supplied will be determined upon issue of Local Purchase Order by the Client during the contract implementation.

d) Consumption will depend on need in the ground. Every issued purchase order will always be specifying the quantity of needed items

e) The quotations must be inclusive of all taxes.

f) Quotations must consider the transport up to the final destination which is RMS head Office, Masoro Free Trade Zone Branch and all 30 RMS Branches-One per each district of Rwanda

g) All prices should include mounting and installation fees.

h) **Equipment falling under the category of "Covered telecommunications equipment" will not Accepted**

3.1.3 Qualification and Experience of the Company:

i) National registered companies in Rwanda with appropriate tax and other administrative documents. Including Tax Registration/ VAT Registration; RRA tax clearance certificate and RSSB certificate

j) The Vendor must have registered as local firm in Rwanda and as well established in the area of Security Surveillance System, Vendors may associate with other firms in order to enhance their capacity and qualifications. However, joint ventures should attach a memorandum of understanding.

k) The Company should have sufficient experience & technical expertise in similar projects (at least three projects executed in 6 years). Similar project shall mean work of supply, installation and commissioning of IP Based CCTV Cameras and its Accessories (Security Surveillance System) in the major organizations of similar nature.

3.2 LOT2. Technical Specifications for the Supply, Installation of Door Access Control & GSM wireless alarm system

A. Door Access Control Specifications

1. Allow or deny the unlocking of a locked entrance based on criteria established in the software for individual cardholders.

2. Record a log file of all system activity, including door access granted, access denied, alarms, system messages, and data maintenance.

3. Allow monitoring of the overall system for functionality and alarms from multiple points. System will require and record alarm acknowledgments by operator.

4. Utilize TCP/IP network for communications between controllers and the central database.

5. Provide interfaces with other systems, including CCTV systems etc.

6. Provide security of the door, even in the event communication is lost to the main database, allowing the door to continue to recognize which cards to grant access to, and continuing to record access transactions.

7. Allow proper egress in emergency situations such that no special knowledge or card is required to exit a space.

8. Must allow for central administration of the access control database for purposes of populating and maintaining the overall database, while allowing numerous secured users to grant or deny access for individuals from multiple workstations.

9. Allow for unattended scheduled unlocking of individual doors for a sustained period of public access.

10. Hardware must be durable enough to withstand high traffic locations without frequent failure.

11. Hardware must continue to fully function in the event that communication to the central database is lost.

12. All access control system equipment (controllers and readers) must be fully warranted against defects in workmanship for a minimum of one year from date of installation, with an optional four-year extended warranty quote. All hardware must be fully supported for a

minimum of five years from date of installation (non-obsolescent), or replaced at no cost to RMS with supported hardware.

B. Alarm Control System Specifications

The alarm system adopts touch keypad and LCD display design, it should have at least (4) four wireless security sensors, the alarm panel should built-in GSM cellular communicator. Once an alarm occurs, the system will dial phone call and send text message to phone numbers. Additionally, it can also be linked into local alarm monitoring center.

The system should built-in microphone and speaker, it not only supports 2-way voice intercom, but also allows user to make hand-free phone call. It includes built-in rechargeable battery.
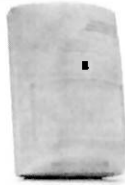
PRODUCT HIGHLIGHTS

- Smart touch keypad with message LCD display

- Working with SIM card and telephone line, automatically switch

- Calendar, five personal emergency phone numbers

- One central monitoring station phone number

- Alarm notification via phone call or SMS.

- Extra SMS phone number for system's status.

- Alarm memo, entry delay, exit delay

- Hybrid alarm, 30 wireless zones, 4-wired zones.

- Advanced zone attribute, user-friendly zone names.

- Temperature display and signal output

- Relay output can be controlled by SMS or APP.

- Automatically Arm/Stay Arm/Disarm

- Support user code and installer code

- 100 alarm log

- Reset factory design

- Built-in speaker and Microphone

- Remote two-way intercom

- Built-in siren

- SMS alert, when system: Arm/Disarmed, sensor's low battery, AC power failure, phone line disconnects.

- Backup rechargeable battery, last more than 8 hours

- Work with CCTV system, IP camera

TECHNICAL INFORMATION

- Power supply: AC=100 ~ 230V 50Hz/60Hz

- Working voltage: DC12V 1A

- Static current: < 35mA (when not in charging)

- Alarm current: < 120mA

- Backup Battery: 3.7V 800mA

- Standby time: Around 24 hours

- Charging time: 8 hours

- GSM frequency: 850/900/1800/1900MHz

- GSM Transmission power: 2W

- Receiving and emitting frequency: 433MHz

- Wireless transmission distance: ≤100 m (Open space)

- Working temperature: -10°C ~ 50°C Humidity:5% ~ 80%

3.1.2 Equipment & Accessories Specifications

		Specifications	Image	Quantity
1	Intruder Alarm Panel	Touchscreen keypads ,Advanced communication – with integrated dual-path IP and GSM/GPRS.dual-path IP and GSM/GPRS communication, Access Control, Voice Module or Wireless		30
2	Intruder Alarm LCD Keypad	LCD Keypad with 125KHz Proximity Reader + 2 keys, 16 x 2 characters with 4 special keys to arm / disarm. Main panel connection: 4-wire BUS.		05
3	intruders Alarm Detector	Bus detectors and sounders with remote control and diagnostics, zone expanders, installation and onsite maintenance. Barrier Beam detectors include an extra zone input, for addition of a door/window contact, or any detector, saving wiring back to the panel Unique external sounders with logo illuminator		30

4	Biometric Finger print reader,	fingerprint Capacity 3000 Templates Card Capacity 5,000 Transaction Capacity 30,000 Transactions Sensor. Optical Sensor Communication RS232/485, TCP/IP, USB-host Access Control Interface 3rd Party Electric Lock, Door Sensor, Exit Button, Alarm, Doorbell Wiegand Signal Input and Output Display LCD Color Screen Interface Styles Common, Matrix and Magic styles Standard Function Webserver, Anti-passback Optional Function Mifare Card, HID Prox		05
5	Panic Bar Lock	**Features;** Panic Bar Lock, Night Latch Mortice Lock Plate Furniture w/ Cylinder Hole & 25 Lever Cylinder Z Cam Maximum 1m length		01
6	Power Supply Unit for Access Control	Power Supply Unit for Access Control **Description** Output voltage: 12VDC, 5 Amp with timer board Input voltage: 220VAC – 50-60Hz Lockable enclosure, grey epoxy coated finish Output short-circuit protection Metal housing dimensions : 203mm (H) x 163mm (W) x 74mm (D) With battery back-up 7AH (Battery supplied separately)		01

7	Electromagnetic Lock	Surface mounted ■ 270Kg force or more ■ Dry contact sensor for door condition indication (can be hooked up to an indication light or buzzer) ■ Functions on DC current for quiet operation ■ 12 volt or 24-volt option ■ Optional Flush mounted ■ Easy to install ■ Low current draw ■ Internally mounted solenoid CE approved		01
08	Door Closer	**Specifications** Door Weight: 60 kg Closer Type: Hydraulic Finish Type: Stainless Steel or Cast Metal Mounting Type: Overhead Valves: adjustable, independent, non-critical (sweep and latch), consistent closing speeds		01
09	Door Closer	**Specifications** Door Weight: 80-120 kg Closer Type: Hydraulic Finish Type: Stainless Steel or Cast Metal Mounting Type: Overhead Valves: adjustable, independent, non-critical (sweep and latch), consistent closing speeds		01
10	DC Power Cable	DC Power Cable, copper,pvc insulated, 3 core,		01

| 11 | Ethernet Cable | CAT-6e FTP: Foil Twisted Pair provided in 100Ω with 4 twisted pairs surrounded by a metallized foil wrapper.
+ Less rigid… almost as flexible as traditional UTP
+ Enhanced Shield termination makes it easily connectorized
+ Enhanced Shield termination provides isolation between devices
+ Enhanced Shield termination eliminates "ground loops"
+ With FTP, alien next can be reduced to almost zero
+ With FTP, RJ-45 and field termination can be used
RJ45 connectors for the supplied cable to be supplied within the same price if needed | | 01 |

3.2.2 ADDITIONAL INFORMATIONS

- Bidders may wish to attach a separate list of other items/accessories not listed here but may be required during installation. Not this will not be considered during evaluation

- This will be a framework contract. The contract will be awarded based on UNIT prices. The successful bidder will sign a one-year renewable contract upon satisfaction by the client.

- The provided unit price per item will be used for purpose of evaluation. Quantities to be supplied will be determined upon issue of Local Purchase Order by the Client during the contract implementation.

- Consumption will depend on need in the ground. Every issued purchase order will always be specifying the quantity of needed items

- The quotations must be inclusive of all taxes.

- Quotations must consider the transport up to the final destination which is RMS head Office, Masoro Free Trade Zone Branch and all 30 RMS Branches-One per each district of Rwanda

- All prices should include mounting and installation fees.

- Provide Technical training to technical staff in charge of access control and room

monitoring

- Warranty & free support services for a period of one year
- **Equipment falling under the category of "Covered telecommunications equipment" will not be Accepted**

3.2.3 Qualification and Experience of the Company:

- National registered companies in Rwanda with appropriate tax and other administrative documents. Including Tax Registration/ VAT Registration; RRA tax clearance certificate and RSSB certificate
- The Vendor must have registered as local firm in Rwanda and as well established in the area of Security Surveillance System, Vendors may associate with other firms in order to enhance their capacity and qualifications. However, joint ventures should attach a memorandum of understanding.
- The Company should have sufficient experience & technical expertise in similar projects (at least three projects executed in 6 years). Similar project shall mean work of supply, installation and commissioning of Access Controls systems & Alarm Monitoring System in the major organizations of similar nature

3. LT3. GPS VEHICLES TRACKING & FUEL CONSUMPTION AND REFUELING TRACKING IN VEHICLE

The platform will manage the fleet and the fuel consumption (refueling and fuel consumption). The device/platform will report the following features:

- Average fuel consumption,

- Fuel quantity in the tank,

- Alerts on suspected fluctuations in consumption,

- Refueling location and time,

- Data import from fuel cards,

- Fuel consumption charts.

In the event of unusual fluctuations in fuel consumption, the system will alert you to the situation immediately. This will help you prevent fuel theft (refueling into a canister car as well as removing fuel from the tank happen more often than you would think). The alert should sent directly an e-mail or SMS. By displaying the event position on the map, it is possible to find out whether the vehicle was at a fuel station at the time of the refueling.

SYSTEM FUNCTIONALITY
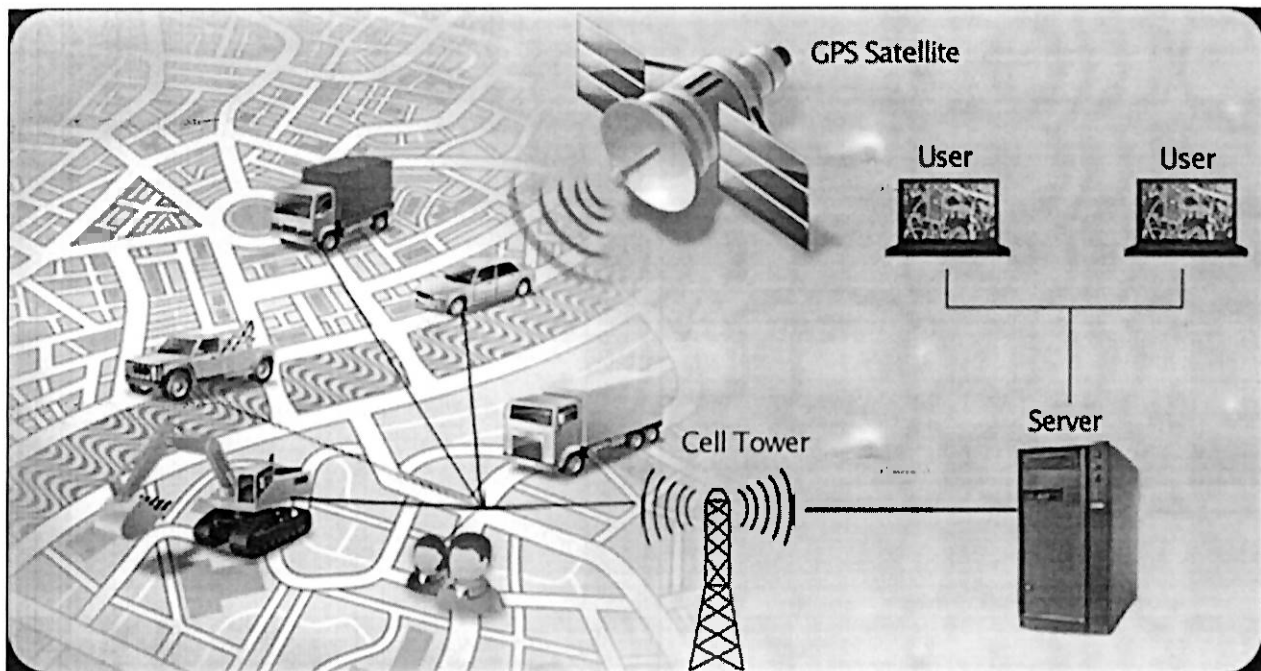
GPS TRACKING SYSTEM WORKS WITH FUEL SENSOR AND CALIBRATOR TABLE TO MONITOR FUEL USAGE

GPS tracking systems works with the cars sensor and calibration table to monitor fuel consumptions. While the calibration table/cars meter provides real time chart on fuel usage as directed and determine by the GPS tracking system, the sensor provides report on lowering or raising fuel levels.

GPS TRACKING SYSTEM PROVIDES ALERTS ON FUEL DRAINAGE AND FRAUD

GPS tracking systems obtains reports on fuel consumption from the fuel meter and provides fuel alerts through SMS on the rate of fuel usage. It can help track immediate the status and the consumption rate of a car to avoid drainage, fuel idling and excessive fuel burning.

GPS TRACKING SYSTEM HELP CONTROL DRIVER –FUEL BEHAVIOR

Drivers become very conscious of the fact that fuel levels are being monitored and tracked by the GPS tracking system. This controls driver behaviors and prevent unauthorized usage of the car and fuel to inappropriate places.

Often time drivers will use corporate vehicles for their private rounds and then go for the fuel fee from management. All this can be monitored and tracked by a GPS tracking system.

GPS TRACKING SYSTEM PROVIDES REPORT ON FUEL CONSUMPTION

In order for GPS tracking systems monitor fuel consumption well and provide real data for effective management, GPS tracking system provides real time report over time on engine fuel consumption. These reports can be read and anomalies can be tracked. The following are the main reports provided by GPS tracking systems:

- It shows normal fuel consumption. The fuel decreases slowly.
- It shows abnormal fuel consumption, and it decreases straightly. It may be fuel leak or fuel stolen.
- It shows the fuel increases straightly. It should be in fuel up.
- It shows the fuel without change. It should be in parking.

S/N	ITEM DESCRIPTION	TECHNICAL SPECIFICATION	QUANTITY
1	GPS vehicles tracking & fuel consumption and refueling tracking in vehicle	- Average fuel consumption, - Fuel quantity in the tank, - Alerts on suspected fluctuations in consumption, - Refueling location and time, - Data import from fuel cards,	38

4.1 Additional Information.

- Note that this LOT is lump sum based and it is expected that the successful bidder will provide technical training to the Officer in charge of fleet management on the usage vehicle tracking and fuel monitoring tools.
- Provision of one-year warranty to the supplied items and provision of free support services for a period of One year
- **Equipment falling under the category of "Covered telecommunications equipment" will not be Accepted**

4.2 Qualification and Experience of the Company:

- National registered companies in Rwanda with appropriate tax and other administrative documents. Including Tax Registration/ VAT Registration; RRA tax clearance certificate and RSSB certificate

- The Vendor must have registered as local firm in Rwanda and as well established in the area of Security Surveillance System, No Joint Venture Allowed

- The Company should have sufficient experience & technical expertise in similar projects (at least three projects executed in 6 years). Similar project shall mean Installation of GPS Vehicle Tracking System & Fuel Consumption Monitoring in the major organizations of similar nature.