



REQUEST FOR QUOTATION (RFQ) (Public Announcement)

DATE: July 24, 2016

REFERENCE: RFQ-YEM-0050-2016

Dear Sir / Madam:

We kindly request you to submit your quotation for **Vehicle tracking system (software and devises)** as detailed in Annex 1 of this RFQ. When preparing your quotation, please be guided by the form attached hereto as Annex 1.

Quotations may be submitted on or before COB, before or on August 04, 2016, 14: 00hours Sana'a time in sealed envelope with remark RFQ-YEM-0050-2016 to the address below:

United Nations Development Programme
Siteen Street near to Ministry of Human Rights
P.O Box 551 Sana'a, Republic of Yemen
Attn. Procurement Unit
Telephone: +967 1 448605 Fax: +967 1 448892

Offers proposal may be submitted electronically in PDF format to procurement.yemen@undp.org. The email shall be virus free. As the maximum size of email is 2MB, the offer may be divided into more than one email, if needed. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the proposal and responsiveness with the requirements of the RFQ and all other annexes providing details of UNDP requirements.

Delivery Terms [INCOTERMS] (Pls. link this to price schedule)	X DAP UNDP office in Sana'a
Customs clearance, if needed, shall be done by:	X Supplier
Exact Address of Delivery Location.	UNDP office
UNDP Preferred Freight Forwarder, if any ¹	Land
Distribution of shipping documents (if using freight forwarder)	N/A
Latest Expected Delivery Date and Time	X 2 weeks from the date of signing the PO
Delivery Schedule	X N/A
Packing Requirements	X N/A
Mode of Transport	X Land
Preferred Currency of Quotation	X United States Dollars (UN exchange rate) X Yemeni Riyals.
Value Added Tax on Price Quotation	X Must be exclusive of VAT and other applicable indirect taxes
After-sales services required	X N/A
Deadline for the Submission of Quotation	X COB, August 04, 2016 at: 14:00hours
All documentations, including catalogs, shall be in this language	X English OR ARABIC
Documents to be submitted	X Duly Accomplished Form as provided in Annex 2, and in accordance with the list of requirements in Annex 1; X Quality Certificates (ISO, etc.) (if applicable); X Latest Business Registration Certificate ; <input type="checkbox"/> Latest Internal Revenue Certificate / Tax Clearance; x Manufacturer's Authorization of the Company as a Sales Agent (if Supplier is not the manufacturer); <input type="checkbox"/> Certificate of Exclusive Distributorship in the country (if applicable, and if Supplier is not the manufacturer); <input type="checkbox"/> Evidence/Certification of Environmental Sustainability if applicable ("Green" Standards) of the Company or the Product being supplied ;

¹ Depends on INCO Terms. The suggestion to use a UNDP preferred courier is only for purposes of familiarity with procedures and documentary requirements applicable to the UNDP when clearing with customs.

	<input type="checkbox"/> Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods". <input type="checkbox"/> Patent Registration Certificates (if any of technologies submitted in the quotation is patented by the Supplier); <input type="checkbox"/> Written Self-Declaration of not being included in the UN Security Council 1267/1989 list, UN Procurement Division List or other UN Ineligibility List;
Period of Validity of Quotes starting the Submission Date	X 60 days In exceptional circumstances, UNDP may request the Vendor to extend the validity of the Quotation beyond what has been initially indicated in this RFQ. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Quotation.
Partial Quotes	X not Permitted
Payment Terms	X 100% upon complete delivery and installation of PA
Liquidated Damages	0.5% penalty from total price for each day of delay. Up to a maximum of 10%. Thereafter, the contract will terminate.
Evaluation Criteria	X Technical responsiveness/Full compliance to requirements and lowest price X Passing Inspection for the quantity and the quality X Full acceptance of the PO/Contract General Terms and Conditions
UNDP will award to:	X One Supplier
Special conditions of Contract	X Cancellation of PO/Contract if the delivery/completion is delayed by 30 days
Type of Contract to be Signed	X Purchase Order
Conditions for Release of Payment	X Written Acceptance of Goods based on full compliance with RFQ requirements. X Original Invoice
Annexes to this RFQ	Specifications of the Goods Required & Form for Submission of Quotation (Annex 1) X Form for Submission of Quotation (Annex 2) X General Terms and Conditions / Special Conditions (Annex 3). Non-acceptance of the terms of the General Terms and Conditions (GTC) shall be grounds for disqualification from this procurement process.
Contact Person for Inquiries	<u>Samira ALFARAH</u> <u>Procurement Analyst</u> Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

Goods offered shall be reviewed based on completeness and compliance of the quotation with the minimum specifications described above and any other annexes providing details of UNDP requirements.

The quotation that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by UNDP. The unit price shall prevail and the total price shall be corrected. If the supplier does not accept the final price based on UNDP's re-computation and correction of errors, its quotation will be rejected.

After UNDP has identified the lowest price offer, UNDP reserves the right to award the contract based only on the prices of the goods in the event that the transportation cost (freight and insurance) is found to be higher than UNDP's own estimated cost if sourced from its own freight forwarder and insurance provider.

At any time during the validity of the quotation, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the quotation. At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Purchase Order that will be issued as a result of this RFQ shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a quotation implies that the vendor accepts without question the General Terms and Conditions of UNDP herein attached as Annex 3.

UNDP is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.


Please be advised that UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a purchase order or contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link: <http://www.undp.org/procurement/protest.shtml>.

UNDP encourages every prospective Vendor to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its suppliers to adhere to the UN Supplier Code of Conduct found in this link : http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your quotation.

Sincerely yours,



Samira Alfarah
Procurement Analyst
July 24, 2016

Annex 1

Please refer to the attached Scope of Work indicates the devices specifications, software, and current device installed for the UN vehicles

Annex 2

• FORM FOR SUBMITTING SUPPLIER'S QUOTATION

- We, the undersigned, hereby accept in full the UNDP General Terms and Conditions, and hereby offer to supply the items listed below in conformity with the specification and requirements of UNDP as per RFQ Reference No. RFQ-YEM-050-2016:

• TABLE 1 : Offer to Supply Vehicle tracking system (software and devises)

Item No.	Description/Specification of Goods	Quantity	Latest Delivery Date	Unit Price	Total Price per Item
1	Please use the above Annex 1 description	16 (could increase or decrease)	2 weeks from the date of receiving the PO		
Total Prices of Goods²					
Add : Cost of Software and necessary things to run the system					
Total Final and All-Inclusive Price Quotation					

• TABLE 2 : Offer to Comply with Other Conditions and Related Requirements

Other Information pertaining to our Quotation are as follows :	Your Responses		
	<i>Yes, we will comply</i>	<i>No, we cannot comply</i>	<i>If you cannot comply, pls. indicate counter proposal</i>
Delivery Lead Time			
Estimated weight/volume/dimension of the Consignment:			
Country/ies Of Origin:			

- All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFQ.
- *[Name and Signature of the Supplier's Authorized Person]*
- *[Designation]*
- *[Date]*

² Pricing of goods should be consistent with the INCO Terms indicated in the RFQ

General Terms and Conditions

1. ACCEPTANCE OF THE PURCHASE ORDER

This Purchase Order may only be accepted by the Supplier's signing and returning an acknowledgement copy of it or by timely delivery of the goods in accordance with the terms of this Purchase Order, as herein specified. Acceptance of this Purchase Order shall effect a contract between the Parties under which the rights and obligations of the Parties shall be governed solely by the terms and conditions of this Purchase Order, including these General Conditions. No additional or inconsistent provisions proposed by the Supplier shall bind UNDP unless agreed to in writing by a duly authorized official of UNDP.

2. PAYMENT

- 2.1 UNDP shall, on fulfillment of the Delivery Terms, unless otherwise provided in this Purchase Order, make payment within 30 days of receipt of the Supplier's invoice for the goods and copies of the shipping documents specified in this Purchase Order.
- 2.2 Payment against the invoice referred to above will reflect any discount shown under the payment terms of this Purchase Order, provided payment is made within the period required by such payment terms.
- 2.3 Unless authorized by UNDP, the Supplier shall submit one invoice in respect of this Purchase Order, and such invoice must indicate the Purchase Order's identification number.
- 2.4 The prices shown in this Purchase Order may not be increased except by express written agreement of UNDP.

3. TAX EXEMPTION

- 3.1 Section 7 of the Convention on the Privileges and Immunities of the United Nations provides, inter alia, that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for utilities services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize UNDP's exemption from such taxes, duties or charges, the Supplier shall immediately consult with UNDP to determine a mutually acceptable procedure.
- 3.2 Accordingly, the Supplier authorizes UNDP to deduct from the Supplier's invoice any amount representing such taxes, duties or charges, unless the Supplier has consulted with UNDP before the payment thereof and UNDP has, in each instance, specifically authorized the Supplier to pay such taxes, duties or charges under protest. In that event, the Supplier shall provide UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

4. RISK OF LOSS

Risk of loss, damage to or destruction of the goods shall be governed in accordance with Incoterms 2010, unless otherwise agreed upon by the Parties on the front side of this Purchase Order.

5. EXPORT LICENCES

Notwithstanding any INCOTERM 2010 used in this Purchase Order, the Supplier shall obtain any export licences required for the goods.

6. FITNESS OF GOODS/PACKAGING

The Supplier warrants that the goods, including packaging, conform to the specifications for the goods ordered under this Purchase Order and are fit for the purposes for which such goods are ordinarily used and for purposes expressly made known to the Supplier by UNDP, and are free from defects in workmanship and materials. The Supplier also warrants that the goods are contained or packaged adequately to protect the goods.

7. INSPECTION

7.1 UNDP shall have a reasonable time after delivery of the goods to inspect them and to reject and refuse acceptance of goods not conforming to this Purchase Order; payment for goods pursuant to this Purchase Order shall not be deemed an acceptance of the goods.

7.2 Inspection prior to shipment does not relieve the Supplier from any of its contractual obligations.

8. INTELLECTUAL PROPERTY INFRINGEMENT

The Supplier warrants that the use or supply by UNDP of the goods sold under this Purchase Order does not infringe any patent, design, trade-name or trade-mark. In addition, the Supplier shall, pursuant to this warranty, indemnify, defend and hold UNDP and the United Nations harmless from any actions or claims brought against UNDP or the United Nations pertaining to the alleged infringement of a patent, design, trade-name or trade-mark arising in connection with the goods sold under this Purchase Order.

9. RIGHTS OF UNDP

In case of failure by the Supplier to fulfil its obligations under the terms and conditions of this Purchase Order, including but not limited to failure to obtain necessary export licences, or to make delivery of all or part of the goods by the agreed delivery date or dates, UNDP may, after giving the Supplier reasonable notice to perform and without prejudice to any other rights or remedies, exercise one or more of the following rights:

- 9.1 Procure all or part of the goods from other sources, in which event UNDP may hold the Supplier responsible for any excess cost occasioned thereby.
- 9.2 Refuse to accept delivery of all or part of the goods.
- 9.3 Cancel this Purchase Order without any liability for termination charges or any other liability of any kind of UNDP.

10. LATE DELIVERY

Without limiting any other rights or obligations of the parties hereunder, if the Supplier will be unable to deliver the goods by the delivery date(s) stipulated in this Purchase Order, the Supplier shall (i) immediately consult with UNDP to determine the most expeditious means for delivering the goods and (ii) use an expedited means of delivery, at the Supplier's cost (unless the delay is due to Force Majeure), if reasonably so requested by UNDP.

11. ASSIGNMENT AND INSOLVENCY

- 11.1. The Supplier shall not, except after obtaining the written consent of UNDP, assign, transfer, pledge or make other disposition of this Purchase Order, or any part thereof, or any of the Supplier's rights or obligations under this Purchase Order.

- 11.2. Should the Supplier become insolvent or should control of the Supplier change by virtue of insolvency, UNDP may, without prejudice to any other rights or remedies, immediately terminate this Purchase Order by giving the Supplier written notice of termination.

12. USE OF UNDP OR UNITED NATIONS NAME OR EMBLEM

The Supplier shall not use the name, emblem or official seal of UNDP or the United Nations for any purpose.

13. PROHIBITION ON ADVERTISING

The Supplier shall not advertise or otherwise make public that it is furnishing goods or services to UNDP without specific permission of UNDP in each instance.

14. CHILD LABOUR

The Supplier represents and warrants that neither it nor any of its affiliates is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

Any breach of this representation and warranty shall entitle UNDP to terminate this Purchase Order immediately upon notice to the Supplier, without any liability for termination charges or any other liability of any kind of UNDP.

15. MINES

The Supplier represents and warrants that neither it nor any of its affiliates is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.

Any breach of this representation and warranty shall entitle UNDP to terminate this Purchase Order immediately upon notice to the Supplier, without any liability for termination charges or any other liability of any kind of UNDP.

16. SETTLEMENT OF DISPUTES

16.1 Amicable Settlement. The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of, or relating to this Purchase Order or the breach, termination or invalidity thereof. Where the Parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation Rules then obtaining, or according to such other procedure as may be agreed between the Parties.

16.2 Arbitration. Unless, any such dispute, controversy or claim between the Parties arising out of or relating to this Purchase Order or the breach, termination or invalidity thereof is settled amicably under the preceding paragraph of this Section within sixty (60) days after receipt by one Party of the

other Party's request for such amicable settlement, such dispute, controversy or claim shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining, including its provisions on applicable law. The arbitral tribunal shall have no authority to award punitive damages. The Parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy, claim or dispute.

17. PRIVILEGES AND IMMUNITIES

Nothing in or related to these General Terms and Conditions or this Purchase Order shall be deemed a waiver of any of the privileges and immunities of the United Nations, including its subsidiary organs.

18. SEXUAL EXPLOITATION:

18.1 The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by it or by any of its employees or any other persons who may be engaged by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all appropriate measures to prohibit its employees or other persons engaged by it from, exchanging any money, goods, services, offers of employment or other things of value, for sexual favors or activities, or from engaging in any sexual activities that are exploitive or degrading to any person. The Contractor acknowledges and agrees that the provisions hereof constitute an essential term of the Contract and that any breach of this representation and warranty shall entitle UNDP to terminate the Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind.

18.2 UNDP shall not apply the foregoing standard relating to age in any case in which the Contractor's personnel or any other person who may be engaged by the Contractor to perform any services under the Contract is married to the person less than the age of eighteen years with whom sexual activity has occurred and in which such marriage is recognized as valid under the laws of the country of citizenship of such Contractor's personnel or such other person who may be engaged by the Contractor to perform any services under the Contract.

19.0 OFFICIALS NOT TO BENEFIT:

The Contractor warrants that no official of UNDP or the United Nations has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

20. AUTHORITY TO MODIFY:

Pursuant to the Financial Regulations and Rules of UNDP, only the UNDP Authorized Official possess the authority to agree on behalf of UNDP to any modification of or change in this Agreement, to a waiver of any of its provisions or to any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against UNDP unless provided by an amendment to this Agreement signed by the Contractor and jointly by the UNDP Authorized Official.

1. Introduction

Vehicle tracking system is technology tool which currently been used by UN-Security System to provide a turn- key solution for the safety and security of its staff and assists. Satellite/ GSM-GPRS supported network to ensure uninterrupted service throughout the area of interest UN-DSS has experience of using Tracking System covering UN- Fleet inside Republic of Yemen. Using Satellite/ GSM-GPRS mean of network to monitor the valuable assets, The Monitoring room will have the ability response to corresponding events or emergency. UN-Vehicles are dispatched around different cities of Republic performing and assisting the humanitarian duties to be deliver to all Yemeni needful, ensure the proper mean to monitor and manage the fleet Vehicle. Using the latest technology and improved services to achieve the goal, System should be delivered overall including all the requirement equipment and accessories to keep the system up and running 24/7/365.

2. Scope of Work

UN-Security Team seeks to improve the services and to follow the latest technology in this field as the service provider should provide the maximum capability to deliver the functions desired. System should be able to assist the following

- Synchronize and easy management for the fleet.
- Reduced response time and help you to take a correct decisions and gives good advice for desire vehicle.
- Avoid vehicle abuse (Entering unauthorized zones or using out of working hours).
- Improves Fleet Profitability by reduced fuel expenses & lower maintenance costs.
- Improves fleet security and safety by reduced accidents, increased driver safety & reduced the threat of theft & kidnapping.
- Know what is happening in the field.
- Control bad driving habits that may cause high maintenance cost and accidents.
- Stay in complete contact with your fleet by exchanged data with drivers.
- Unique solution to cut down the operational cost dramatically.

3. TECHNICAL SPECIFICATIONS/MANDATORY REQUIREMENTS:

The VTS must have and/or capture the following characteristics, functions and abilities:

3.1 Vehicle Tracking Software: The Vehicle Tracking Software (VTS) must utilize GPS in conjunction with vehicle location and mapping software to accurately identify the location the desired vehicle using different type of communication media (Satellite-GSM/GPRS)

3.1.1. Web Base - User should be able to access the system from anywhere at any time through web-connectivity without any extra excited file or OCX.

- 3.1.2. **Vehicle Location** - Each specific vehicle must be able to be located by users on the website screen using identifiers such as the vehicle identification number, selection from the legend, or querying by the street name or other known location using different communication network (Satellite or GPRS/GSM) which will assist to send GPS coordinate immediately.
- 3.1.3. **Speed of the Vehicle** - Must be captured by the GPS equipment and made available to administrators and users.
- 3.1.4. **Geofance** - User Must be able to set geofance and system will alert when the vehicle enter or leave the specific area (KM) within specific time (Min).
- 3.1.5. **Long action** - System should alert whenever the vehicle performed long time run / long time stop, Driver over speed/ Driver below speed.
- 3.1.6. **Connective**- System should be able to report immediately the vehicle disconnect.
- 3.1.7. **Mileage** - System will report the max and average speed per millage and will also report the mileage of the vehicle since it start moving.
- 3.1.8. **Mission setup**- Administrator or a user should be able to add vehicle(s) which will be on mission based on date and time, and names of the passengers traveling on the mission.
Information of the mission will be displayed on the mouse hover within online /Playback mode.
- 3.1.9. **Vehicle Logging/Playback Capability** – Must be capable of replay of vehicle location information from a log file. Vehicle location data including speed, direction of travel, time, and location must be captured in a daily log file for temporal analysis. The log file must be made available for display through the vehicle identification number and time frame. Data must be able to be archived to DAT tape via an external tape
- 3.1.10. **Vehicle Viewing Control** - The system administrator must have the ability to assign vehicles to groups. These groups can be established based on geographic location or some other logical relationship. System users shall have the ability to control the viewing of the vehicles based the vehicle fleets and groups.
- 3.1.11. **SMS and email Future**- System should be able to send all type of alert with location of the vehicle to mobile or email that the user set (Radio Room) in case of any violence of rule or emergency.
- 3.1.12. **Immediate action**- User can be able to communicate with specific vehicle at any time and send any command desired such as Stopping the vehicle, changing the parameter set earlier of the speed lime ...etc.
- 3.1.13. **Map**-
- Satellite and hybrid map
 - Ability to use different map for each monitor
 - Simply able to create a regular and unregularly geo-fance
 - Multiscreen to monitor different zones within the same time.
 - Ability for zoom (out/in)
 - Control of playback speed and time-jump in a wide range
 - User must be able to create regular routes
 - Road and addresses must support both languages (Arabic and English)
- 3.1.14. **System Integration:**

- System must be compatible with multiple types of AVL at the same time.
- Able to accommodate a wide range of DBMS, MS Access to Oracle.
- Use your Mobile to control and command the system.
- Multi Fleets in One Monitor Screen as much as needed.
- Ability to monitor one fleet by various monitors from different places.

3.1.15. Protocol and Network usage:

The tracking process between the server and the vehicle is based on satellite systems use (GPS) and the communication process on sending and receiving messages. For communications, Fleet Management System uses. GPRS, SATELLITE OR GSM SMS based on the cheapest protocol and the most reliable to deliver the message

3.1.16. Emergency alters - System should be to alert the radio room and also promote an action within the screen to alert the user for the type of emergency such as (Panic alert- Monitor unauthorized zones –Speed limit violence and Monitor Seatbelt)

3.1.17. System Reports: system must have the ability to provide reports as the following

- Daily movement log
- Customize movement log
- Summary log
- GSM/GPRS- Satellite network usage.
- Violated vehicle reports based on the specified rules
- Road mission report based on customized period
- Customize report base on the business need.

3.1.18. System Growth - The system must have the ability to expand and adapt as requirements change

3.1.19. Licenses - Vendor must purchase and provide all required licenses for all software furnished under this contract

3.2 Device Specification-

(1) Future Device Specification

Specs	Details
<u>SATELLITE COMMUNICATION</u>	<ul style="list-style-type: none"> • Satellite service: Two-way, Global, IsatData Pro <ul style="list-style-type: none"> • From-mobile message: 6,400 bytes • To-mobile message: 10,000 bytes • Typical latency: <15 sec, 100

	<p>bytes</p> <ul style="list-style-type: none"> • Elevation angle: +20° to +90° (remote antenna); -15° to +90° (low elevation antenna) • Frequency: Rx: 1525.0 to 1559.0 MHz; Tx: 1626.5 to 1660.5 MHz • EIRP: <7.0 dBW
<u>CELLULAR COMMUNICATION</u>	<ul style="list-style-type: none"> • GPRS frequencies: 850/900/1800/1900 MHz • HSPA frequencies: 800/850/900/1900/2100 MHz • SIM: 3.3V/1.8V SIM • Security: jamming detection
GPS	<ul style="list-style-type: none"> • Acquisition time: hot: 1 second; cold: 27 seconds • Accuracy: 2.5m CEP-horizontal • Sensitivity: acquisition: -148 dBm; tracking: -159 dBm • Security: GPS signal jamming detection
<u>CERTIFICATION</u>	Regulatory: CE (R&TTE, RoHS 2), FCC, IC, PTCRB (HSPA only) • Other: Inmarsat type approval
EXTERNAL INTERFACES	<ul style="list-style-type: none"> • Inputs/outputs: 4 x config. Analog/digital inputs/outputs 2 x dedicated outputs (sink-ground) • Serial: 2 x RS-232; 1 x RS-485; 1-CAN bus; 1-Wire • Accelerometer: 3 axis
ELECTRICAL	<ul style="list-style-type: none"> • Input voltage: 9 to 32V; load dump protection: +150V; SAE J1455 (Sec. 4.13); • Battery backup: >12 hours operation with 1-minute cellular reporting or 10-minute satellite reporting

ENVIRONMENTAL	<p>Operating temperature: transceiver and antenna: -40°C to +85°C; back-up battery: -10°C to +60°C; • Dust and water ingress: transceiver: IP40 (IP65 with optional shroud); satellite antenna: IP67; GPS antenna: IP67 • Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G • Shock: MIL-STD-810G (Sec 516.6)</p>
PROGRAMMING	<p>Lua scripting engine with core services. SDK with GUI development tools available. Lua software application upgradable over the air (SOTA). • Geofencing: 128 Polygons • Data Logger: 50,000 position reports; auto-upload in cellular coverage • Optional, configurable device-level applications: • AVL agent - facilitates integration of IDP terminals into fleet management solutions. • Garmin Dispatch Agent - tracking, navigation, driver communication and dispatch using Garmin devices. • J1939 Agent - vehicle CAN bus connectivity for monitoring driver behavior and vehicle/asset performance. • ARC Agent - asset alarms, periodic reports and remote control. • Analytics Agent - notifications and reports for driver behaviour and vehicle/asset performance</p>

(2) Current Device Specifications installed (company must make sure that their devices are equal to OR combatable to work with the current devices

Name: skywave

Model :surelinx 8100

Input Voltage	• 9 VDC to 32 VDC
Power Consumption (typical @ 12VDC)	<ul style="list-style-type: none"> • Transmit mode: 7.6W (satellite) • Tracking mode (GPS on, GPRS on): 1.5W • Sleep mode: 3.6mW

Mating Connector	<ul style="list-style-type: none"> • Transceiver I/O: JAE IL-AG5-30S-D3C1 • Satellite Antenna: Fakra FAI-NARP-PCB-M • GPRS Antenna: SMA female
SATELLITE COMMUNICATION	
Frequency	<ul style="list-style-type: none"> • Rx: 1525.0 to 1559.0 MHz • Tx: 1626.5 to 1660.5 MHz
EIRP	• 9 dBW max
Elevation Angle	• 0 to +90 degrees
GSM/GPRS COMMUNICATIONS	
Frequency	• 850/900/1800/1900 MHz
GPRS data	<ul style="list-style-type: none"> • Class 12 multislot; Coding scheme 1 to 4 • Class B mobile station; Full PBCCH support • Supports NMEA formatted output from GPS
Output Power	<ul style="list-style-type: none"> • Class 4 – 33dBm \pm 2dB for EGSM 850/900 • Class 1 – 30dBm \pm 2dB for GSM 1800/1900
SIM Card	• 3.3 V SIM (Customer Supplied)
GPS	
Channels	• 16 channels; 1575.42 MHz
Acquisition	• Cold-start 34s • SuperSense®: -148dBm
Accuracy	• 3 m CEP; 5 m SEP
CERTIFICATIONS & COMPLIANCE	
Satellite	• Inmarsat D+/Satellite Network Type Approval
GPRS	• PTCRB
Regulatory	• FCC, RoHS, IC pending, CE Mark (R&TTE),Anatel
DATA LOG	
Extraction	• GPRS Satellite or RS232 "
Capacity	• 320 kB; Up to 17200 points "
PROGRAMMING CAPABILITIES	
Script Logic	<ul style="list-style-type: none"> • 128 Actions; 64 Alarms; 64 Timers; 32 Data transformers • 128 Geofences (circular rectangular polygons
EXTERNAL INTERFACES	
Serial	• RS232: 1 console interface Supports optional NMEA output " Password-protected access
Analog/Digital	• Up to 18 software-configurable inputs or outputs " 4 wake-up enabled "
FROM-TERMINAL MESSAGING	
Satellite Network	• Up to 25.5-byte payload "
GPRS	• Up to 200-byte payload "
TO-TERMINAL MESSAGING	

Satellite Network	• 4 alert codes + Up to 100 bytes "
GPRS	• Up to 200 bytes "
ORDERING CODES	
SM200235-G55	• AVL Box terminal " Side-mount satellite antenna (5m cable Fakra) " GPRS antenna (2.5m cable SMA)
SM200235-GM5	• AVL Box terminal " Side/magnet-mount sat. antenna (5m cable Fakra)" GPRS antenna (2.5m cable SMA)
SM200235-GR5	• AVL Box terminal " Satellite antenna bottom-mount SMA female " 5m cable Fakra to right-angle SMA " GPRS antenna (2.5m cable SMA)
SM200269	• Evaluation Kit for AVL Box; includes terminal SM200235-GM5 airtime support & training

1. Introduction

Vehicle tracking system is technology tool which currently been used by UN-Security System to provide a turn- key solution for the safety and security of its staff and assists. Satellite/ GSM-GPRS supported network to ensure uninterrupted service throughout the area of interest UNDSS has experience of using Tracking System covering UN- Fleet inside Republic of Yemen. Using Satellite/ GSM-GPRS mean of network to monitor the valuable assets, The Monitoring room will have the ability response to corresponding events or emergency. UN-Vehicles are dispatched around different cities of Republic performing and assisting the humanitarian duties to be deliver to all Yemeni needful, ensure the proper mean to monitor and manage the fleet Vehicle. Using the latest technology and improved services to achieve the goal, System should be delivered overall including all the requirement equipment and accessories to keep the system up and running 24/7/365.

2. Scope of Work

UN-Security Team seeks to improve the services and to follow the latest technology in this field as the service provider should provide the maximum capability to deliver the functions desired. System should be able to assist the following

- Synchronize and easy management for the fleet.
- Reduced response time and help you to take a correct decisions and gives good advice for desire vehicle.
- Avoid vehicle abuse (Entering unauthorized zones or using out of working hours).
- Improves Fleet Profitability by reduced fuel expenses & lower maintenance costs.
- Improves fleet security and safety by reduced accidents, increased driver safety & reduced the threat of theft & kidnapping.
- Know what is happening in the field.
- Control bad driving habits that may cause high maintenance cost and accidents.
- Stay in complete contact with your fleet by exchanged data with drivers.
- Unique solution to cut down the operational cost dramatically.

3. TECHNICAL SPECIFICATIONS/MANDATORY REQUIREMENTS:

The VTS must have and/or capture the following characteristics, functions and abilities:

- 3.1 Vehicle Tracking Software:** The Vehicle Tracking Software (VTS) must utilize GPS in conjunction with vehicle location and mapping software to accurately identify the location the desired vehicle using different type of communication media (Satellite- GSM/GPRS)
- 3.1.1. Web Base -** User should be able to access the system from anywhere at any time through web-connectivity without any extra excited file or OCX.
- 3.1.2. Vehicle Location -** Each specific vehicle must be able to be located by users on the website screen using identifiers such as the vehicle identification number, selection from the legend, or querying by the street name or other known location using different communication network (Satellite or GPRS/GSM) which will assist to send GPS coordinate immediately.
- 3.1.3. Speed of the Vehicle -** Must be captured by the GPS equipment and made available to administrators and users.
- 3.1.4. Geofance -** User Must be able to set geofance and system will alert when the vehicle enter or leave the specific area (KM) within specific time (Min).
- 3.1.5. Long action -** System should alert whenever the vehicle performed long time run / long time stop, Driver over speed/ Driver below speed.

- 3.1.6. **Connective**- System should be able to report immediately the vehicle disconnect.
- 3.1.7. **Mileage** - System will report the max and average speed per millage and will also report the mileage of the vehicle since it start moving.
- 3.1.8. **Mission setup**- Administrator or a user should be able to add vehicle(s) which will be on mission based on date and time, and names of the passengers traveling on the mission. Information of the mission will be displayed on the mouse hover within online /Playback mode.
- 3.1.9. **Vehicle Logging/Playback Capability** – Must be capable of replay of vehicle location information from a log file. Vehicle location data including speed, direction of travel, time, and location must be captured in a daily log file for temporal analysis. The log file must be made available for display through the vehicle identification number and time frame. Data must be able to be archived to DAT tape via an external tape
- 3.1.10. **Vehicle Viewing Control** - The system administrator must have the ability to assign vehicles to groups. These groups can be established based on geographic location or some other logical relationship. System users shall have the ability to control the viewing of the vehicles based the vehicle fleets and groups.
- 3.1.11. **SMS and email Future**- System should be able to send all type of alert with location of the vehicle to mobile or email that the user set (Radio Room) in case of any violence of rule or emergency.
- 3.1.12. **Immediate action**- User can be able to communicate with specific vehicle at any time and send any command desired such as Stopping the vehicle, changing the parameter set earlier of the speed lime ...etc.
- 3.1.13. **Map**-
- Satellite and hybrid map
 - Ability to use different map for each monitor
 - Simply able to create a regular and unregularly geo-fance
 - Multiscreen to monitor different zones within the same time.
 - Ability for zoom (out/in)
 - Control of playback speed and time-jump in a wide range
 - User must be able to create regular routes
 - Road and addresses must support both languages (Arabic and English)

3.1.14. System Integration:

- System must be compatible with multiple types of AVL at the same time.
- Able to accommodate a wide range of DBMS, MS Access to Oracle.
- Use your Mobile to control and command the system.
- Multi Fleets in One Monitor Screen as much as needed.
- Ability to monitor one fleet by various monitors from different places.

3.1.15. Protocol and Network usage:

The tracking process between the server and the vehicle is based on satellite systems use (GPS) and the communication process on sending and receiving messages. For communications, Fleet Management System uses. GPRS, SATELLITE OR GSM SMS based on the cheapest protocol and the most reliable to deliver the message

- 3.1.16. **Emergency alters** - System should be to alert the radio room and also promote an action within the screen to alert the user for the type of emergency such as (Panic alert- Monitor unauthorized zones –Speed limit violence and Monitor Seatbelt)

3.1.17. **System Reports:** system must have the ability to provide reports as the following

- Daily movement log

- Customize movement log
- Summary log
- GSM/GPRS- Satellite network usage.
- Violated vehicle reports based on the specified rules
- Road mission report based on customized period
- Customize report base on the business need.

3.1.18. **System Growth** - The system must have the ability to expand and adapt as requirements change

3.1.19. **Licenses** - Vendor must purchase and provide all required licenses for all software furnished under this contract

3.2 Device Specification-

(1) Future Device Specification

Specs	Details
<u>SATELLITE COMMUNICATION</u>	<ul style="list-style-type: none"> • Satellite service: Two-way, Global, IsatData Pro • From-mobile message: 6,400 bytes • To-mobile message: 10,000 bytes • Typical latency: <15 sec, 100 bytes • Elevation angle: +20° to +90° (remote antenna); -15° to +90° (low elevation antenna) • Frequency: Rx: 1525.0 to 1559.0 MHz; Tx: 1626.5 to 1660.5 MHz • EIRP: <7.0 dBW
<u>CELLULAR COMMUNICATION</u>	<ul style="list-style-type: none"> • GPRS frequencies: 850/900/1800/1900 MHz • HSPA frequencies: 800/850/900/1900/2100 MHz • SIM: 3.3V/1.8V SIM • Security: jamming detection
GPS	<ul style="list-style-type: none"> • Acquisition time: hot: 1 second; cold: 27 seconds • Accuracy: 2.5m CEP-horizontal • Sensitivity: acquisition: -148 dBm; tracking: -159 dBm • Security: GPS signal jamming detection
<u>CERTIFICATION</u>	Regulatory: CE (R&TTE, RoHS 2), FCC, IC, PTCRB (HSPA only) • Other: Inmarsat type approval
EXTERNAL INTERFACES	<ul style="list-style-type: none"> • Inputs/outputs: 4 x config. Analog/digital inputs/outputs 2 x dedicated outputs (sink-ground) • Serial: 2 x RS-232; 1 x RS-485; 1-CAN bus; 1-Wire • Accelerometer: 3 axis
ELECTRICAL	<ul style="list-style-type: none"> • Input voltage: 9 to 32V; load dump protection: +150V; SAE J1455 (Sec. 4.13); • Battery backup: >12 hours operation with 1-minute cellular reporting or 10-minute satellite reporting

ENVIRONMENTAL	Operating temperature: transceiver and antenna: -40°C to +85°C; back-up battery: -10°C to +60°C; • Dust and water ingress: transceiver: IP40 (IP65 with optional shroud); satellite antenna: IP67; GPS antenna: IP67 • Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G • Shock: MIL-STD-810G (Sec 516.6)
PROGRAMMING	Lua scripting engine with core services. SDK with GUI development tools available. Lua software application upgradable over the air (SOTA). • Geofencing: 128 Polygons • Data Logger: 50,000 position reports; auto-upload in cellular coverage • Optional, configurable device-level applications: • AVL agent - facilitates integration of IDP terminals into fleet management solutions. • Garmin Dispatch Agent - tracking, navigation, driver communication and dispatch using Garmin devices. • J1939 Agent - vehicle CAN bus connectivity for monitoring driver behavior and vehicle/asset performance. • ARC Agent - asset alarms, periodic reports and remote control. • Analytics Agent - notifications and reports for driver behaviour and vehicle/asset performance

(2) Current Device Specifications installed (company must make sure that their devices are equal to OR combatable to work with the current devices 86 devices installed in difference locations within Yemen

Name: skywave

Model :surelinx 8100

Input Voltage	• 9 VDC to 32 VDC
Power Consumption (typical @ 12VDC)	• Transmit mode: 7.6W (satellite) • Tracking mode (GPS on, GPRS on): 1.5W • Sleep mode: 3.6mW
Mating Connector	• Transceiver I/O: JAE IL-AG5-30S-D3C1 • Satellite Antenna: Fakra FAI-NARP-PCB-M • GPRS Antenna: SMA female
SATELLITE COMMUNICATION	
Frequency	• Rx: 1525.0 to 1559.0 MHz • Tx: 1626.5 to 1660.5 MHz
EIRP	• 9 dBW max
Elevation Angle	• 0 to +90 degrees
GSM/GPRS COMMUNICATIONS	
Frequency	• 850/900/1800/1900 MHz
GPRS data	• Class 12 multislot; Coding scheme 1 to 4 • Class B mobile station; Full PBCCH support • Supports NMEA formatted output from GPS

Output Power	<ul style="list-style-type: none"> • Class 4 – 33dBm \pm 2dB for EGSM 850/900 • Class 1 – 30dBm \pm 2dB for GSM 1800/1900
SIM Card	<ul style="list-style-type: none"> • 3.3 V SIM (Customer Supplied)
GPS	
Channels	<ul style="list-style-type: none"> • 16 channels; 1575.42 MHz
Acquisition	<ul style="list-style-type: none"> • Cold-start 34s • SuperSense®: -148dBm
Accuracy	<ul style="list-style-type: none"> • 3 m CEP; 5 m SEP
CERTIFICATIONS & COMPLIANCE	
Satellite	<ul style="list-style-type: none"> • Inmarsat D+/Satellite Network Type Approval
GPRS	<ul style="list-style-type: none"> • PTCRB
Regulatory	<ul style="list-style-type: none"> • FCC, RoHS, IC pending, CE Mark (R&TTE),Anatel
DATA LOG	
Extraction	<ul style="list-style-type: none"> • GPRS Satellite or RS232 "
Capacity	<ul style="list-style-type: none"> • 320 kB; Up to 17200 points "
PROGRAMMING CAPABILITIES	
Script Logic	<ul style="list-style-type: none"> • 128 Actions; 64 Alarms; 64 Timers; 32 Data transformers • 128 Geofences (circular rectangular polygons
EXTERNAL INTERFACES	
Serial	<ul style="list-style-type: none"> • RS232: 1 console interface Supports optional NMEA output " Password-protected access
Analog/Digital	<ul style="list-style-type: none"> • Up to 18 software-configurable inputs or outputs " 4 wake-up enabled "
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