**TERMS OF REFERENCE FOR VEHICLE MANAGEMENT & TRACKING TOOL**

Contents

[Fleet Management Solution Technical Requirements 1](#_Toc877517975)

[1. Introduction 2](#_Toc582905653)

[2. Overview 2](#_Toc1043452443)

[The average number of vehicles - East Africa 2](#_Toc276210674)

[Vehicle Ownership 2](#_Toc1326684637)

[Vehicle Types 2](#_Toc435644696)

[3. Data Management (Input) 3](#_Toc935021623)

[Vehicles 3](#_Toc1650398330)

[Users 3](#_Toc1993984790)

[Projects 3](#_Toc798421774)

[Languages 3](#_Toc1650199300)

[4. EAR Fleet Management Platform – IT requirements 3](#_Toc1560025012)

[Browser 3](#_Toc1736564365)

[Architecture - cloud 3](#_Toc1146624111)

[Architecture – SSO 4](#_Toc756144649)

[Security 4](#_Toc868221064)

[Regulatory (GDPR) 4](#_Toc1042511202)

[Devices 4](#_Toc1883921252)

[5. Business Processes / Modules 4](#_Toc776587135)

[GPS Module 4](#_Toc792493858)

[GPS Data 5](#_Toc1255479242)

[Vehicle Request 5](#_Toc950335471)

[Trip Management 5](#_Toc2043338514)

[Vehicle Inspection 6](#_Toc1749495546)

[Urgent Maintenance 7](#_Toc117608524)

[Preventive Maintenance 7](#_Toc1734885132)

[Vehicle Refueling 7](#_Toc1312544225)

[Incident Accident 7](#_Toc1182484088)

[6. Reporting and Data Analytics 8](#_Toc372925605)

[IRC standard forms 8](#_Toc1230004740)

[KPI Dashboard 11](#_Toc1987444866)

[7. Maintenance and Support Services. 12](#_Toc1258382722)

[Maintenance Automation: 12](#_Toc945593687)

[Technical Support post roll out. 12](#_Toc103514690)

[Consumer Onboarding 12](#_Toc1209780948)

[Vendor Answers Sheet 12](#_Toc972243570)

1. Fleet Management Solution Technical Requirements
2. Introduction

The International Rescue Committee invites proposals from qualified service providers to supply, roll-out, and support an automated fleet management solution.

1. Overview

The objective of this Request for Proposal (RFP) is to identify a Fleet Management System service provider capable of delivering a cloud-based, automated Fleet Management Software Solution. This solution should enhance operational efficiency, improve vehicle utilization, ensure regulatory compliance, reduce overall fleet costs, ensure data security, and provide real-time tracking and analytics of fleet performance.

The scope of the service would be the East Africa Region.

*For further Information around IRC Operations Visit* [*https://www.rescue.org*](https://www.rescue.org)

* The average number of vehicles - East Africa

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Kenya** | **Somalia** | **South Sudan** | **Sudan** | **Uganda** | **Total** |
| **Number per Country** | **49** | **8** | **78** | **6** | **67** | **206** |

* Vehicle Ownership

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Kenya** | **Somalia** | **South Sudan** | **Sudan** | **Uganda** | **Total** |
| IRC Owned Vehicles | **36** | **5** | **49** | **6** | **28** | **114** |
| Rented Vehicle from Private Individuals | **0** | **0** | **0** | **0** | **0** | **0** |
| Rented Vehicle from Third Party Companies | **0** | **3** | **0** | **0** | **0** | **10** |
| Right of Use Vehicles – UNHCR, other donors | **13** | **0** | **29** | **0** | **39** | **82** |
| **Grand Total** | **49** | **8** | **78** | **6** | **67** | **206** |

* Vehicle Types

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Kenya** | **Somalia** | **South Sudan** | **Sudan** | **Uganda** | **Total** |
| Mini Van/Coaster | **01** |  | **4** |  |  |  |
| Sedan | **04** |  | **0** |  |  |  |
| SUV | **0** |  | **0** |  |  |  |
| Motorbikes | **0** |  | **92** |  |  |  |
| Landcruiser (Wagons, pick-ups) | **44** |  | **45** |  |  |  |
| Other/Tractor/Quadbikes/Motorcycles | **6** |  | **16** |  |  |  |
| **Grand Total** |  |  | **157** |  |  |  |

1. Data Management (Input)

* Vehicles

The system should be able to capture the information available in Form V12 related to each Vehicle

Ability to add a preventive maintenance Schedule

Vehicle Rental information Start Date / End Dates, Service provider

Fuel Card Information

Vehicle Insurance Details

Ability add List of equipment and tools installed or issued to the vehicle (including serial numbers of equipment)

Ability to upload Documents and Pictures

* Users

The system should be able to capture the information available in Form V11 related to each driver

IRC Staff data: Name, IRC Code, department, charging Codes.

Ability to upload Documents and Pictures

The system should be user-friendly interface customization tools.

* Projects

The system should be able to capture the information related to each Project

D1, Title, Donor, Sector(s), Start Date, End Date & Fleet Charging Codes

* Languages

The System should be able to operate in English.

1. EAR Fleet Management Platform – IT requirements

* Browser

All IRC Windows 10 computers have Chrome, Internet Explorer 11 and Edge installed – any browser-based interfaces need to be compatible with Chrome and IE11.

* Architecture - cloud

Any solution cannot be designed so that it requires hosting in an IRC location. Our requirement matches the [NIST](https://www.nist.gov/) definition of Software as a Service: *The capability provided to the consumer is to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, except for limited user specific application configuration settings.*

The system shall have high uptime, availability, secure data hosting, and should be able to; accommodate fleet growth or downsizing depending on IRC fleet right-sizing outcomes, scalable to support multiple locations and functionality using similar parameters, and should have capabilities for importing and exporting data in various formats (Excel, PDF, other) to facilitate data exchange, reporting, and decision-making.

* Architecture – SSO

The IRC uses Single Sign On functionality from [OneLogin](https://www.onelogin.com/). It is desirable that any portal or platform is integrated such that the IRC user and administrators can login with their IRC Active Directory credentials; this functionality should include both single and multi-factor authentication. The cost of this integration should be included within your proposal.

Additionally, the system should provide for mobile application support through USSD function and mobile apps to enable functionality including fuel recording, mileage capture, transportation requests, inspection, incident reporting, and this should support various devices, including smartphones and tablets, across different operating systems.

* Security

The IRC uses a suite of security applications from Qualys Enterprise to detect vulnerabilities in the following areas:

* + Network Perimeter Vulnerabilities
  + Data Center Vulnerabilities
  + Web Application Security

Your platform will be scanned with regard to the second two areas and will need to achieve a score deemed acceptable by the IRC’s Global Information Security team. Upon go-live your platform will be scanned weekly, and any remediation will need to take place within an agreed timescale.

The system should have capability to define user roles and permissions to ensure appropriate access levels for different users, e.g. requesters of trips, drivers, fleet officers, field security leads, and others (transport managers or supply chain managers).

* Regulatory (GDPR)

The IRC employs staff who are EU citizens and therefore has a requirement to comply with the General Data Protection Regulation. Personally identifiable information needs to be hosted within the European Union; if this is not the case then you must explain how any alternative hosting arrangements achieve GDPR compliance.

* Devices

Mobile devices used within the IRC include the following operating systems: IOS, Android, Windows 10. Your mobile apps must support these OS.

1. Business Processes / Modules

* GPS Module

The system should include the following functionality

* Real-time tracking of IRC vehicles and assets
* Real-time tracking for personnel with tracking devices
* Availability of multiple map views
* Ability to upload IRC Points of Interest (POIs)
* Geofence features
* Fuel level monitoring (fixed hardware units)
* Driver behavior monitoring (speeding, harsh braking, cornering)
* Notification alerts (speeding, panic button, geofence alerts)
* Historical data analysis for trend analysis and reporting
* Maintenance scheduling with automated reminders based on usage and mileage
* Integration with other systems (ERP, HR) for seamless data exchange
* Customizable reporting based on specific metrics and KPIs
* Mobile app access for on-the-go monitoring and management
* Driver identification using RFID or other methods
* Environmental impact monitoring (emissions and fuel consumption tracking)
* GPS Data

IRC should be able to upload the Offices and Project Locations to the system

* Vehicle Request



* System to consolidate multiple Requests and optimize Dispatch Options for the Driver
* Trip Management



* Fleet Officer Has the ability to combine Multiple Requests in one trip
* Driver Has the Ability to collect the Requester electronic Trip Acknowledgment
* Driver and requester has the option to access Incident, maintenance and fueling and attach to trip Vehicle Inspection
* Vehicle Inspection



* The system should allow for inspection checklists via browser or phone app.
* Inspection can be scheduled and completed in different frequency on a daily, weekly and Monthly basis with multiple check requirements and different staff levels (Drivers, Fleet Officers)
* System to consolidate multiple Inspection Reports results and provides a status overview to the fleet officer.
* Urgent Maintenance



* Preventive Maintenance



* Vehicle Refueling



* Incident Accident



* Incident Report will be attached to a specific Trip Request.
* System to send notifications to assigned contacts for incident reporting.
* Authorized users have the ability to start a new incident / accident report.
* Ability to attach documentation, visualize incidents accidents on Maps.
* Incident Accidents remains open until closed by the authorized staff member.

1. Reporting and Data Analytics

The solution should include a dynamic reporting system that allows users to generate reports from all data input on the system and has the possibility to download and review reports in different formats: XLS, PDF, CSV, others. In addition, provide customizable dashboards tailored to different users or jobs roles, and real-time data analysis, and graphical report generation for decision-making.

IRC has standard reports and forms that should be integrated into the solution. The system should allow for customization to adopt the IRC standard forms and automation of IRC business processes with input from different users and job roles. The forms are included below

IRC standard forms/templates – refer to Standard Forms folder (**Annex F**) containing the forms listed below.

V10 - Vehicle Log Sheet

V11 - Driver File Card

V12 - Vehicle / Equipment File Card

V13 - Transport Request

V16 - Journey Schedule

V18 - Passenger Waiver Form

V25 – Road Traffic Accident Report

V28 - Daily Vehicle Checklist

V29 – Daily Motorbike Checklist

V33 - Vehicle Routine Service Guide A, B, C, D

V34 - Motorbike Service Schedule

V35 - Fuel and Lubricants Voucher

V36 - Monthly Vehicle Cost and Usage Report

*Forms are used for referencing the information that needs to be captured by the system*

**Standard Reports to be generated for selected time interval**

* Vehicles Movement Report
* Driving Behavior Report
* Vehicles usage report
* Request Report
* Position of Interest (POI) Report
* Fuel refill report
* CO2 Emission report
* Accident Report
* Incident Report
* Vehicle Maintenance Report
* Vehicle Inspection Report
* Alerts Report
* Fleet utilization reports
* Other relevant system generated reports

**Additional Information on reporting**

|  |  |  |
| --- | --- | --- |
| **Title** | **Description or conceptualization** | **Other Requirements & references** |
| Vehicle inspection | Ability to generate reports on the Number of Vehicles who completed the Daily Inspection and to analyze vehicle inspection data | Refer to the **IRC References.** Daily checklists for Vehicle/ Motorbike: [**V28**](https://rescue.app.box.com/s/wbxtp8jbltqv7b9sqkxkqcqhp7631dtr)**,** [**V29**](https://rescue.app.box.com/s/7wl99jn26ml7osujhrlo3zt1rq3ezuj2) |
| Maintenance / Repair Costs | Ability to track and report on preventive and actual maintenance costs | Kindly Refer to the **IRC References.** Service schedule Vehicle/ Motorbike: [**V33**](https://rescue.app.box.com/s/td75ppkxjyqn43j379lcjp2gsqlswe4n)**,** [**V34**](https://rescue.app.box.com/s/nobbytzn2uiafgqhrnl5niuiy6dz5kgc) |
| Incident, Accident | Ability to Report on Incident Accidents | **IRC References** vehicle incident report: **V25** |
| Fuel Management | Ability to report on fuel Costs per KM per Vehicle  Ability to set Fuel consumptions alerts  Ability to view Fuel Refills on Maps |  |
| Vehicle /Asset metrics, costs, and usage reports | Monthly Utilization report V36 Form | [**Monthly Vehicle Cost and Usage Report**](https://rescue.box.com/s/62n4pjwg57t8mmu4kz2ra2vjvrshx54j) [V36](https://rescue.app.box.com/s/62n4pjwg57t8mmu4kz2ra2vjvrshx54j) |
| Drivers Performance Report | The System should report on Driver Performance   |  |  | | --- | --- | | **GPS Input** | **Over Speeding** | | **Harsh Breaking** | | **Harsh Acceleration** | | **Cornering** | | **Accidents** | **Minor Accidents** | | **Major Accidents** | | **Fine /Ticket** | **Road Tickets/Fines** | |  |
| Cost allocation / Utilization | Ability to Report on fleet utilization per Project code, vehicle, user, location….  Total costs of Ownership Calculation |  |
| CO2 Emissions | Ability to Generate CO2 Emission for Fleet | CO2 Emission calculation will be provided by IRC |

* KPI Dashboard

The system should include a dashboard to monitor the following fleet KPIs:

* KPI #1: Availability  
  Availability indicates the percentage of time the vehicle was in good condition and ready to use. Vehicles are not available if they are broken down, undergoing maintenance, or not roadworthy (lack of safety equipment, documents, insurance, etc.). Availability is calculated as a percentage of the total possible days in a reporting period.
* KPI #2: Utilization  
  Utilization indicates the actual use of a vehicle on the days that it is available. It is an indication of how effective the planning and scheduling of movements are.
* KPI #3: (Running) Cost per Kilometer  
  The cost per kilometer is the cost of moving a vehicle one kilometer during a period, and includes fuel, maintenance, repair, and insurance costs.
* KPI #4: Fuel Efficiency  
  Fuel efficiency is the number of kilometers traveled for each liter of fuel used. To determine fuel consumption, divide the total number of kilometers traveled by the quantity of fuel used during the period.
* KPI #5: Safety  
  The safety KPI indicates the number of road traffic accidents (RTAs) that have occurred per 100,000 kilometers driven.
* KPI #6: Needs Satisfaction  
  Needs satisfaction shows how transport contributes to meeting program delivery objectives. To determine needs satisfaction, divide the total number of trip requests received by the number of trip requests fulfilled.
* KPI #7: Maintenance Compliance  
  Maintenance compliance measures the percentage of scheduled maintenance activities completed on time. This KPI helps ensure that vehicles are maintained regularly to prevent breakdowns and extend their lifespan.
* KPI #8: Driver Performance  
  Driver performance tracks metrics such as adherence to speed limits, instances of harsh braking, and overall driving behavior. This KPI can help improve safety and reduce wear and tear on vehicles.
* KPI #9: Idle Time  
  Idle time measures the amount of time vehicles spend idling. Reducing idle time can lead to fuel savings and lower emissions.
* KPI #10: Trip Efficiency  
  Trip efficiency evaluates the effectiveness of route planning by measuring the average distance traveled per trip and the number of stops made. This KPI can help optimize routes and reduce fuel consumption.
* KPI #11: Vehicle Downtime  
  Vehicle downtime tracks the amount of time vehicles are out of service due to maintenance or repairs. Minimizing downtime can improve fleet availability and utilization.
* KPI #12: Environmental Impact  
  Environmental impact measures the fleet's carbon footprint by tracking emissions and fuel consumption. This KPI supports sustainability initiatives and regulatory compliance.

1. Maintenance and Support Services.

* Maintenance Automation:

The solution should be able to track maintenance history and flag upcoming service interventions to the respective users for action.

* Technical Support post roll out.

Clarify the availability of support services, response times, support channels, and costs if any.

1. Consumer Onboarding

Highlight the availability of training resources for all users of the solution, including manuals, or hands-on sessions to ensure a seamless roll out process across the region

1. Vendor Answers Sheet (Annex E)

Fill out the attached Excel table without making any changes to the wording, comments and an alternative solution can be provided.

Provide a signed and stamped PDF version.

Additional Information and supporting documentation can be provided.