## **Corrigendum-II**

## RFP for Selection of System Integrator (SI) on Fuel Utilization Monitoring System (FUMS) for OSRTC

RFP No. 69 Date: 21/03/2023

Date: 24.04.2023

No. 111/ OSRTC/ MIS-959/22,

S.No.	Section / Page No.	Existing Clause	Revised Clause
1.	Clause 2	Schedule bidding process	Schedule bidding process
	Page No. 5	Last date for Bid Submission - 21/04/2023 (03:00 PM)	Last date for Bid Submission - 02/05/2023 (03:00 PM)
2.	Background	-	220 Nos. BS-VI Buses out of 638 Nos of buses are equipped with
	Page no. 6		OBUs. Detailed specification for BDU/OBU is annexed below
			(Annexure B)
3.	Clause-6	-	Technical Specification of AIS-140 GPS Device is mentioned in
	Scope of		Annexure A.
	project		
4.	Clause-4.7,	The Bidder shall submit the hard copy and soft copy in Pen	Response document could be submitted by any courier service/
	Page no11	drive.	Govt. courier service/ hardcopy can be submitted directly at office.
			Pen drive containing the softcopy to be placed inside the sealed
			envelope.
5.	Clause PQ 7	Specific Requirement: The bidder must have successfully	Specific Requirement: The bidder must have successfully completed
	Technical	completed at least one IOT devices-based e-Governance	at least one IOT devices-based e-Governance / large digital project
	Capability	project for not less than 1 Cr for any Government Department	for not less than 1 Cr for any Government Department / Government
	Page no 16	/ Government Agency / PSU in India during the last 5 years as	Agency / PSU/ Large Private entity in India during the last 5 years as
		on 31st March 2022. The project should include supply &	on 31st March 2022. The project should include supply & installation
		installation or operations and maintenance of IOT devices.	or operations and maintenance of IOT devices.
		Documents required: Work Order and Project completion/Go-	Documents required: Work Order and Project completion/Go-live
		live certificate	certificate
6.	Clause 5.6	Number of years of operations in outsourcing manpower.	No. of years of commencement of operations.
	(Technical	• 1 year or lower – 3 marks	<ul> <li>1 year or lower – 3 marks</li> </ul>

S.No.	Section / Page No.	Existing Clause	Revised Clause
	Evaluation	• 3 years to 5 years – 4 marks	3 years to 5 years – 4 marks
	Criteria:	<ul> <li>More than 5 years – 5 marks</li> </ul>	More than 5 years – 5 marks
	TQ1)	Supporting Document: A copy of work orders / agreement /	Supporting Document: Incorporation Certificate / Registration
	Page No: 18	client certificate copy previously issued	Certificate commencement proof
7.	Clause TQ4	Evaluation Criterion: The bidder should have implemented	Evaluation Criterion: The bidder should have implemented
	Page no 19	successfully IOT based e-Governance solution for any	successfully IOT based e-Governance solution / digital projects for
		Government Department / Government Agency / PSU in India	any Government Department / Government Agency / PSU / Large
		with a minimum order value of Rs.1 Crore during the last 5	private entity in India with a minimum order value of Rs.1 Crore
		years as on 31st March 2022. The project should include	during the last 5 years as on 31st March 2022. The project should
		supply and installation or operations and maintenance of IOT	include supply and installation or operations and maintenance of IOT
		devices. [Each project will be awarded 5 marks max up to 10	devices. [Each project will be awarded 5 marks max up to 10 marks]
		marks]	Max Score: 10
		Max Score: 10	Documents Required: Work Order and completion certificate or Go-
		Documents Required: Work Order and completion certificate	Live certificate
		or Go-Live certificate	
8.	Clause TQ5	Bidder should have experience in Cloud based application	Bidder should have experience in Cloud based application
	Page no 19	development, deployment, O&M (having fuel management	development, deployment, O&M (having fuel management and
		and vehicle tracking modules) in Transport domain in	vehicle tracking modules) in Transport domain in catering to Govt
		Government / Private sector catering to Govt department	department /ULBs / State Road Transport/ Listed companies/ Large
		/ULBs / State Road Transport in India, in last 5 year. Minimum	private entity in India, in last 5 year. Minimum value of project not less
		value of project not less than 1 Crore.	than 1 Crore.

## **Annexure A: Technical specification for GPS Devices**

- GPS devices certified by Govt. of Odisha / ORSAC / ARAI Approved / ICAT Approved AIS-140 complied.
- Device shall be capable of obtaining position information using Global Navigation Satellite System (GNSS). GNSS receiver specifications are as follows:
  - Device shall be capable for operating in L and/or S band and include support for NAVIC/IRNSS (Indian Regional Navigation Satellite System) for devices installed on or after 1<sup>st</sup> April 2018.
  - The Device shall support GAGAN, the Indian SBAS (Satellite Based Augmentation System)
  - o Device shall have a position accuracy of minimum 2.5 m CEP or 6 m2 DRMS.
  - o Device shall have an acquisition sensitivity of minimum (-) 148 dBm.
  - o Device shall have and tracking sensitivity of minimum (-) 165 dBm.
  - Device shall have an internal antenna; however, if in case of Integrated systems with vehicle / aftermarket OEM approved kits if the fitment location prevents the internal antenna from functioning, then external antenna shall be provided.
- Device shall support standard minimum I/Os as mentioned: 4 Digital, 2 Analogue and 1 Serial Communication (e.g., RS232) for interfacing external systems (E.g., Digital input for Emergency request button interfacing).
- Device shall be capable of transmitting data to Backend Control Server (Government authorized server) via Wide Area (Mobile) Communications network (GSM/GPRS) as per Communication Protocol.
- Device shall be capable of transmitting Position, Velocity and Time (PVT data) along with heading (direction of travel) to a Backend Control Server (Government authorized server).
- The fixed frequency shall be user configurable, minimum frequency shall be 5 sec during vehicle operation and not less than 10 minutes in sleep/IGN OFF).
- Device shall be capable of transmitting data to minimum 2 different IP addresses (1 IP address for regulatory purpose (PVT data) and 1 IP address for Emergency response system other than the IP's required for Operational purpose.
- On pressing of Emergency button, the system implementing VLT function shall send emergency Alert to the configured IP address(s). In the absence of GPRS network, the emergency alert shall be sent as SMS message along with vehicle location data to configured control center number(s).
- Device shall have an internal back-up battery to support 4 hours of normal operations (to be tested for positional record transmission at a frequency of 60 sec)
- Device shall be capable of transmitting alerts to the Backend Control Server (Government authorized server) directly.
- Device shall support over the air software and configuration update.
- Device shall support basic standard configuration (Mobile communications network settings, Backend Control Server (Government authorized server) details, data frequencies, alert thresholds etc.)

- Device shall support store and forward mechanism for all type of data (periodic data and alerts) meant for backend transmission. The system shall store data in internal memory during communication network un- availability and transmit the data when the connection resumes in last in first out (LIFO) manner. The live data shall be given higher priority for transmission than back log (stored data) at any point in time.
- The Device shall have a unique identifier for identifying the VLT device and data. The unique ID shall be stored in a read-only memory area so that it cannot be altered or overwritten by any person. The unique identifier may be Vehicle Identification number or IMEI (International Mobile Station Equipment Identity) Number.
- Device shall store/write the registration number of the vehicle in the internal non-volatile memory.
- Device shall have an Embedded SIM.
- The device shall be designed to operate between 8VDC and 32VDC using vehicle battery input voltage range 12 /24Volts.
- Device shall have a sleep mode current ≤ 20 mA (If the function is implemented in a dedicated system/device).
- Device shall support any operational GNSS system with 12 (minimum) acquisition channels.
- The Device shall support:
  - Location on GPRS/SMS
  - o Non-volatile memory to store min 40,000 positional log.
  - o Configurable backup SMS facility in case of GPRS failure
  - Capability to send serving and adjacent cell ID as well as networkmeasurement report (NMR)
- The Device GNSS module shall have:
  - The capability of Hot start <5s</li>
  - The capability of Warm start : < 30s</li>
  - The capability of Cold start < 40 s</li>
  - Device shall support Outputs as per NMEA 0183
  - The Device GPRS module shall have:
  - Multi slot GPRS with In built Quad-band GPRS module/Modem.
  - o GPRS class 10 or above
  - Support Embedded SIM to cater to the automotive operational requirement such as vibration, temperature and humidity and provide long life span with at least 10 years life and more than 1 million read/write cycles.
- GPRS module & SIM shall be supported.
  - o SMS, Data (GPRS, TCP/IP) and
  - o Support multiple network OTA switching (on-demand/automatic) capabilities.
- Device shall be dust, temperature, vibration, water splash resistant, IP 65 rated or better, tamper proof.

- The device shall be manufactured using processes as per quality management standard for automotive industries i.e., ISO/TS 16949 updated from time to time.
- Device shall support A-GPS (Assisted GPS)
- Device shall have provision of secured data transmission to the Backend Control Centre from the devices through secured channel (e.g., secured dedicated APN).
- The device shall have 3 axis accelerometer and 3 axis gyroscopes for getting the alerts on harsh breaking harsh acceleration, and rash turning.

## **Annexure B: Specification for Bus Driver Unit**

Description	Specification
Power Supply	DC 8- 32 V, compatible with NVR Video out
Power consumption	< 7W
Temperature range	-25°C to +70°C
Protection class	IP 65
Screen size	7-inch TFT LCD
Size format	15:9 wide screen display
Video input	2 channels
Video system	PAL / NTSC
Viewing angle	80/80(L/R), 80/80(Up/Down)
Resolution	800 x 480 x RGB
Visible distance	15m
Luminance	800 mcd
Communication	RS485, CAN, GPIO
Compliance Standards	UBS-II, IS16833, AIS-004 Part III, UL-94
Brightness control Automatic	YES
Dimensions	195mm × 138mm × 42 mm
Weight	0.8 Kgs

General Manager (A)

OSRTC, Bhubaneswar