



डेडीकेटेड फ्रेट कोरीडोर कार्पोरेशन ऑफ़ इंडिया लि.  
Dedicated Freight Corridor Corporation of India Limited

(भारत सरकार का उपक्रम)

(A Govt. of India Enterprises)

5<sup>th</sup> Floor, Supreme court Metro Station Building Complex, New Delhi -  
110001

No. HQ/ML/WSE/HBD/FMTS No. 201502315

Date 15.09.2021

**Calling of Quotation for Work of Installation, Supply, Erection and Commissioning of Automatic axle box temperature recording system (Hot Box detector) on EDFC & WDFC**

1. For and on behalf of the President of India, DFCCIL is inviting sealed quotation on enclosed rate schedule for the work of Installation Supply, Erection and Commissioning of Automatic Axle box temperature recording system with associated accessories over three locations of Eastern Dedicated Freight Corridor (EDFC) & Four locations of Western Dedicated Freight Corridor (WDFC) as mentioned in scope of work and Terms and Conditions given in subsequent paragraphs.

Firms, who are willing, shall submit their offers in quotation form duly filled in all respect. Quotation form can be received free of cost from GGM/Mech/Corporate office/DFCCIL/Delhi upto 28.09.2021,11:00 hrs in any working day or can be downloaded from web site <https://dfccil.com/PublicNoticeWeb/Procurementinfo>.

2. **Last Date of Submission** Please ensure to offer your bid in favour of Dedicated Freight Corridor Corporation of India Ltd. 5th Floor, Supreme Court Metro Station Building Complex, New Delhi – 110001 on 29.09.2021 before 15.00 hrs. The quotations will be opened on 29.09.2021 at 15.30 hrs. Sealed Envelops having quotation bid to be dropped in the Quotation Box kept at 3rd Floor Reception Area at Corporate Office, DFCCIL. The Quotation will not be accepted after 15:00 Hrs. or by any other method.

3. **Instructions and general terms of quotation:**

- I. Before quoting your offer, General conditions, Scope of work & Special terms & conditions may be read carefully. Any violation of the terms & condition during execution of the work shall result in imposition of penalty.
- II. The contractor will follow all the instructions of DFC Supervisor/Representative authorized by GGM/GM/Mechanical/DFCCIL in this regard. All decisions taken by GGM/GM/Mech/DFCCIL shall be accepted by contractor.
- III. Security deposit: - Security deposit @ 10% of total contract value will be deducted from the bills and will be refundable after completion of warranty period.
- IV. Standard Deduction: All standard deduction shall be applicable as per Government norms and will be deducted from bills.
- V. Normal working/operation of DFCCIL work should not be affected during execution of work.
- VI. Period of Contract: The work shall be completed within 60 days (Sixty days) from the date of starting the work. The contract period can be reduced or

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increased due to administrative reasons. The contractor shall not make any claim for variation in contract period.

VII. The **warranty period** will be 12 months from the date of commissioning for operation & maintenance of the systems.

4. **Scope of Work** : Specification for Supply, Erection and Commissioning of each set of Automatic Axle box temperature recording system shall be as below:-

- i. Each location consists of 2 No. of Non-Contact Infrared Thermometer along with communication box and power supply unit with -
  - Temperature range: -50 to 975 °C
  - Optical resolution: 25:1
  - Spectral range: 8 - 14 per minute
  - System accuracy (at ambient temperature 23 +/-5 °C) : +/- 1 % or +/-2 °C
  - Environmental rating
    - Sensing head: IP65 (NEMA-4)
    - Electronic box: IP65 (NEMA-4)
  - Cable length : Min.15m
  - Power Supply : 8-36 VDC
  - Make: Optris, Raytek, Micro-Epsilon or equivalent
- ii. Each location consists of 2 Nos. Electronic rectangular inductive proximity sensor with 50 mm sensing range (flush mountable) with normally open/closed output function, e-voice connector and cable of 4 meter length, operating voltage: 10 to 30 v DC, Make: IFM No. 5058 or equivalent
- iii. Each location consist of One(1) Number of Fanless Embedded PC System with Dual Core / Core 2 Duo / Celeron Processor having HDMI &VGA INTERFACE, 8GB OF DDR3L1333 RAM, Minimum 2 COM PORT, 3.5" or 2.5" SATA FIDD, dongle card for 4G connectivity, minimum 4 USB, Model 10T-1900 with genuine softwares like windows etc or equivalent.
- iv. Each location consist of One(1) Number of Grey color powder coated Metal box (2ft X 3ft) for automatic computerized axle box temperature recorder with
  - a. Micro controller board with power supply.
  - b. Proximity sensor interface board with power supply
  - c. System with 8 hrs power back up for each location.

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- v. The system should measure LH & RH Axle Box temperature of moving train along with Axle Number.
- vi. Three Number of 32" LED TV (One for EDFC OCC, One for WDFC OCC & One for Corporate Control office) Make: LG/SAMSUNG/Xiaomi (MI) or equivalent.
- vii. The system should be capable to measure Axle box temperature of train running at a speed upto 110 KMPH.
- viii. The system should capable of storing the measured data in field unit.
- ix. At the end of the train, the saved data should be transferred to centralized web server within 2min.
- x. Necessary domain name and web hosting with dedicated IP and internet (with 4G SIM) for a period of 1 year will lie with the contractor.
- xi. Tier-IV level secured Data Centre based cloud application with domain name and web hosting with dedicated IP and Internet (with 4G SIM) for a period of 1 year will lie with the contractor.
- xii.** The web based application software and services shall be hosted at a minimum of Tier IV level data center in India by the vendor at its own cost and the department shall have web browser interface based access to the application.  
**The Tier –IV level certificate has to be attached along with offer.**
- xiii. Development, installation and testing of microcontroller program, Field unit program and web application programs as per the satisfaction of Railway officials lies with the contractor.
- xiv. Bidders must have supplied and commissioned successfully at least one no of the same/similar item capable of measuring temperature at 110 kmph speed to any Zonal Railway. Documentary evidence for proof of supply along with performance of minimum 12 months should be submitted with offer.
- xv. Offers received without document mentioned at para no. (xv) will be summarily rejected.
- xvi. The System should have the following features
  - a. Display of the Individual axle speed with accuracy  $\pm 5\%$
  - b. Display of rolling stock type (ICF/WAGON/LHB)
  - c. System Diagnostics such as power status at remote site,etc
- xvii. The web application should have a login form.

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- xviii. The web application also should have forms for viewing
- xix. *Train wise details of all location with Minimum & Maximum temperature recorded on each train.*
- xx. *Train wise form should also have facilities to update actual train number, Train Name and remarks of Train Examiner.*
- xxi. *If the maximum temperature of the train is higher than 50°C (configurable) and difference between adjacent axles is more than 20°C (configurable) then the row will be highlighted with red/pink color (Color configurable). Also the system will generate an alarm and SMS to Phone numbers included in the system.*
- xxii. *A button should be provided on each row of the train to access a web page to display RH & LH Temperature with Axle number of the Train.*
- xxiii. *A web form also should be developed for entering Phone numbers for each location.*
- xxiv. *A report generation form also should be developed for display.*
- xxv. The contractor should carry out the work of fabrication & installation, temperature sensors, fixation of Proximity sensors, bracket to control panel and making connections etc.
- xxvi. Warranty / Guarantee of the whole system : one year.
- xxvii. Scope of DFC: (a) Providing free of cost electrical supply to the HBD equipments for operation  
(b) Suitable site for installation of HBD  
(c) Security of the equipments after successful installation of HBD

#### **5. Special Condition of Contract:-**

The contractor should carry out the work of fabrication & Installation, temperature sensors, fixation of proximity sensors, laying of cables, bracket to control panel and making systems in functional:

- I. The contractor's staff will have to take care of their safety in the DFC premises during the work. In case of any accident, DFC will not give any claim.
- II. The contractor shall be fully responsible in the event of breach / theft of any jurisdiction by himself or the employees appointed by him for the entire duration of the contract. If found to be involved in any such activity, that person will be handed over to Police for taking appropriate action.
- III. If at any time during the contract, it is found that the contractor has obtained the contract by giving false information / hiding the true information, the DFC Administration shall have the right to immediately cancel the contract at the contractor's expense.

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- IV. The work will be executed under the supervision of GGM/GM/Mech/DFCCIL or his representatives at **three locations of EDFC (New Daudkhan –DN, New Makhanpur-DN & New Kanchausi –UP) and four locations of WDFC (New Dabla-UP, New Saradhana – UP & DN, New Shri Amirgarh-DN). The location may be changed as per DFC requirement.**
- V. Machine and tools - The arrangements will be made by the contractor at his own expense. The contractor has to protect their material and equipments at its own.
- VI. Power supply for the equipment will be within the scope of DFCCIL. However, cable digging work will be in the contractor's scope of work.
- VII. No tools & Equipments will be provided by DFC.
- VIII. The contractor must complete the work within stipulated time as mentioned in para 3 (VI). The firm will depute technical competent person at site for execution & supervision and co-ordination with DFCCIL on day to day basis. After completion of work, the firm's representative will get it verified by nominated representative of DFCCIL.
- IX. Contractor's personnel will have to keep the prescribed identity cards while on duty.
- X. The contractor shall pay wages to the labours engaged by him in accordance with the provisions of the aforesaid Act and Rules, in accordance with the provisions of the aforesaid minimum wage rates. The contractor shall not engage anyone under 18 years of age to work.
- XI. The DFC Administration reserves the right to cancel the contract at any time / stage due to unsatisfactory work or any other administrative reason.
- XII. **Inspection of the work** - The inspection of the work will be done by GGM/Mech/GM/Mech or his representative.
- XIII. **Breakdown and Penalty clauses:** - The contractor will have to ensure that the systems are fully operational during warranty period. If there is any defect during the warranty period, the contractor will have to rectify the same within 7 days, otherwise the penalty of Rs.250 / - per day will be deducted from the 8th day up to rectification of fault. If however, GGM/Mech/DFCCIL is convinced that the failure is not on account of contractor or conditions leading to failure are not in contractor's control, then no penalty will be imposed.

## 6. Payment Terms:

- a) After completion of location wise work, the Contractor shall submit the bill in 03 copies to GGM/GM/Mechanical/DFCCIL. The Contractor shall attach all the necessary documents for payment along with the bill. Payment will be released after successful completion of location wise installation and commissioning of HBD after deducting security deposit of 10 % of the bill.
- b) The payment will be done after satisfactory commissioning of the work.
- c) The contractor has to submit his bank account details and PAN number, GST No. etc. No compensation or interest shall be payable to the firm for any delay in payment.
- d) Commissioning means successful installation of the equipment and trouble free running of the equipment for 15 days.
- e) Paying authority : AGM/Finance/Corporate office/DFCCIL

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**7. Termination of Contract.** The DFCCIL shall have the right to terminate this Contract in part or in full in any of the following cases: -

- a. The delivery of the material is delayed for causes not attributable to Force Majeure for more than (03 months) after the scheduled date of delivery.
- b. The Bidder is declared bankrupt or becomes insolvent.
- c. The delivery of material is delayed due to causes of Force Majeure by more than (03 months) provided Force Majeure clause is included in contract.
- d. If it comes in the notice of DFCCIL that the Bidder has utilized the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.
- e. As per decision of the Arbitration Tribunal.

#### **8. SCHEDULE OF QUANTITIES AND RATES.**

<b>S.N.</b>	<b>Particulars of Work</b>	<b>Unit</b>	<b>Rate (in Rs. )</b>	<b>Qty.</b>	<b>Amount (in Rs.)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6 (4X5)</b>
1.	Supply, Erection & installation & commissioning of Automatic axle box temperature recording system (Hot Box detector) as per scope of work	Set		07	
2	GST and other taxes if any				
	<b>TOTAL</b>				

I/We have read all the details & hereby offer our rates for the subject work as follows and have signed all pages in confirmation thereof. I/We am / are ready to execute the work as per tender schedule, at the rates given below:-

**Note:**

- i. Quotationer(s) should quote their rates carefully; incomplete/ incorrect forms are liable to rejection.
- ii. Validity of offer will be 03 months.

\*\*\*\*\*End of document\*\*\*\*\*

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