

START OF TENDER DOCUMENT



**CENTRAL RAILWAY
BHUSAVAL DIVISION
(MECHANICAL DEPARTMENT)
TENDER DOCUMENT
OF**

E -TENDER NOTICE NO.: Mech-01-06-2026 (Open E-Tender) dated 11.06.2026

Name of the Work: Design, supply, installation and commissioning of Hot Axle Box Detector with 3 years warranty and 3 years CAMC at Bhusawal Division

Tender closing date and time: 03.07.2026 at 15:00 Hrs.

System of Tendering: Single Packet System

Office of the Sr. Divisional Mechanical Engineer,
Divisional Railway Manager Office,
Mechanical Department, Central Railway
Bhusaval - 425 201

INDEX

Sr. No.	Contents	Page No.
1	Tender Cover Page	1
2	Index	2
3	Instruction to Tenderers	3-7
4	Brief Details of the Tender	8
5	General Instructions To Tenderers	9
6	Instructions for Tender Documents downloaded from Internet / Website	10-11
7	Special Conditions of Contract	12-23
8	Scope of Work	24-32
9	General conditions and Penalties	33-40
10	Schedule of Approximate Quantities& rates Annexure - A	41
12	Annexure - B: Format of Identity Card	42
13	Annexure - C: The Sample GST Compliant Invoice	43
14	Annexure - D: Form of Declaration to be given by the tenderer before tender negotiations	44
15	Annexure - E: Format for Bank Guarantee Bond	45
16	Annexure - F: Format of Declaration regarding association of the tenderer with serving/retired Gazetted Railway Officer(s)	46
17	Annexure - G: Format of Details of the Tenderer	47
18	Annexure - H: Format of MANDATE FORM FOR EFT/NEFT	48
19	Annexure - I: Format of ACCEPTANCE / DEVIATION SCHEDULE	49

Instruction to Tenderers

Note - Detailed information of the works & conditions may be seen in the Tender documents.			
INSTRUCTIONS TO THE TENDERERS-			
I	MINIMUM ELIGIBILITY CRITERIA-(As per clause 10 of GCC for works April 2022)		
	(A)	Technical Eligibility Criteria:	<p>The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:</p> <p>(i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.</p> <p>Note: Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organization, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates. In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.</p>
	(B)	Financial Eligibility Criteria:	<p>The tenderer must have minimum average annual contractual turnover of V/N or V whichever is less; where V= Advertised value of the tender in crores of Rupees N= Number of years prescribed for completion of work for which bids have been invited.</p> <p>The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. The tenderers shall submit requisite information as per Annexure-VIB (AS per GCC), along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.</p>

	(C)	Similar Nature of work:	<p>“Successfully supply and commissioning of Automatic Hot Axle Box Detector for measuring temperature of bearing of Rolling stock to any Zonal Railway”</p> <p>OR</p> <p>“Manufacturing of Automatic Hot Axle Box Detector for measuring temperature of bearing of Rolling stock to any Zonal Railway”</p> <p>OR</p> <p>“Successfully supply and commissioning of way side monitoring system of Rolling Stock, like Wheel Impact Load Detector/ Online Rolling Stock Monitoring System”</p>
II.	(A)	Documents to be Submitted Along with Tender	<p>(i) The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.</p> <p>(ii) Following documents shall be submitted by the tenderer:</p> <p>(a) Sole Proprietorship Firm: (i) All documents in terms of Para 10 of GCC for works April 2022.</p> <p>(b) HUF: (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of ‘Karta’ of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.</p> <p>(ii) All other documents in terms of Para 10 of GCC for works April 2022.</p> <p>(c) Partnership Firm: (i) All documents as mentioned in para18 of GCC for works April 2022.</p> <p>(d) Joint Venture (JV): All documents as mentioned in para 17 of the GCC for works April 2022.</p> <p>(e) Company registered under Companies Act2013: (i) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company</p> <p>(ii) A copy of Certificate of Incorporation</p> <p>(iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favor of the individual to sign the tender on behalf of the company and create liability against the company.</p> <p>(iv) All other documents in terms Para 10 of GCC for works April 2022.</p>

		<p>(f) LLP (Limited Liability Partnership): (i) A copy of LLP Agreement (ii) A copy of Certificate of Incorporation (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP. (iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract. (v) All other documents in terms of Para 10 of the GCC for works April 2022.</p> <p>(g) Registered Society & Registered Trust: (i) A copy of Certificate of Registration (ii) A copy of Memorandum of Association of Society/Trust Deed (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust. (iv) A copy of Rules & Regulations of the Society (v) All other documents in terms of Para 10 of the GCC for works April 2022.</p> <p>(iii) If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.</p> <p>(iv) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suo-moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.</p> <p>(v) A tender from JV shall be considered only where permissible as per the tender conditions.</p> <p>(vi) The Railway will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize</p>
--	--	---

		<p>such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.</p> <p>The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / registered society / registered trust / HUF / LLP etc if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, specifically authorizing him/them to sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association /Board resolution, failing which tender shall be summarily rejected.</p>
III.	(A)	<p>As Per GCC – April 2022 for works contract Part – I (Advance Correction Slip No. 2), Item No. 6 care in submission of tender item No. 6.1</p> <p>The tenderers shall submit a copy of certificate stating that all their statements/documents submitted along with bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as Annexure-V (Advance Correction Slip No. 2). In addition to Annexure-V, in case of other than Company /Proprietary firm Annexure -V(A) shall also be submitted by the each member of a Partnership Firm/ Joint Venture (JV) / Hindu Undivided Family (HUF / Limited Liability Partnership (LLP) etc., as the case may be. Non submission of above certificate(s) by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify state and submit the supporting documents duly self-attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.</p>
IV.		Railway Board Letter No.2017/Trans/01/Policy Date 08/02/2018 is as under- Item No.3.0-System of verification of tenders credentials-
	(a)	<p>The Railway reserve the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification.</p> <p>Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.</p>
	(b)	<p>In Case any wrong information submitted by the tenderer, the contract shall be terminated, Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security Deposit(SD) of contract forfeited and agency barred for doing business on entire Indian Railways for 5 (Five) years.</p>
	(c)	<p>With such a system of self –certification of credential, tender finalization should also be speeded up. It has accordingly been decided that the tender validity period should be reduced to 45 Days for Single Packet System of tendering for tenders having credentials verification.</p>
V.		<p>Multiple L-1-</p> <p>In case of more than one L-1 bidders, tender may be awarded to tenderer having higher Bid Capacity.</p> <p>In case Bid Capacity is also the same, tenderer having done more value of similar</p>

		work in the last three financial years and in the current financial year upto the date of opening of the tender, may be selected for the award.
--	--	---

	Other Information:-
1	Tenderer shall participate electronically in E- tender through website www.ireps.gov.in & submission of manual offers against E-tender are not allowed & if any manual offers has been submitted which will neither be opened nor considered.
2	<u>Cost of Tender Booklet/Document-</u> As per GCC for works April 2022, E-Tender document is to be provided free of cost to tenderers.
3	<u>Cost of Bid Security-</u> The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender. Subject to exemptions provided under para 5(1) (a) of Part-1 of GCC for works April 2022 of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
4	The tenderer (s) should attach their credentials along with their offer.
5	The prospective tenderers are advised to visit website www.ireps.gov.in before One week of the date of closing of submission of tender to note any changes/corrigenda of any tender.
6	Joint Venture is NOT applicable to this tender.
7	Mobilization advance clause not applicable.
8	The all documents submitted should not be corrupted, if at the time of tender opening. The document submitted are not opened being corrupted, offer shall be summarily rejected.
9	Wherever the Central/State makes it obligatory for the Railway to deduct any amount towards Income Tax and as per provisions of GST Act 2017, the same will be deducted as per rule accordingly.
10	Indian Railways Standard General Conditions of Contract, April 2022 (with all correction slip including Slip No.11 of dated 13.03.26) will be applicable. Contractor should submit all the required Annexures (including formats of financial & Technical Eligibility) as mentioned in GCC April-2022 and its latest correction slips.

Brief Details of the Tender

Tender Notice No.	Mech-01-06-2026 (Open E-Tender) dated 11.06.2026
Name of the work	Design, supply, installation and commissioning of Hot Axle Box Detector with 3 years warranty and 3 years CAMC at Bhusawal Division
Location of the work	Jurisdiction of Bhusawal Division of Central Railway.
Completion period	12 Months
Approx. cost of the work	Rs. 1,76,42,928.00 (Rs. One Crore Seventy Six Lakhs Forty Two Thousand Nine Hundred Twenty Eight Only)
Bid Security	Rs. 3,52,900.00 (Rs. Three Lakhs Fifty Two Thousand Nine Hundred Only)
Tender Document Cost	Free of cost
Tender closing date and time	03.07.2026 at 15:00 hrs
Validity of offer	60 Days
System of Tendering	Single Packet system

GENERAL INSTRUCTIONS TO TENDERERS

- Tender Committee may at their discretion call for the originals of the credentials for verification from the tenderers or any clarification/confirmation on the contents of the documents submitted. The details of the uploaded documents should be produced whenever demanded by Railway for verification on written request at any point of time of the tender and contract within 7 days. Otherwise, Railway reserves the right to reject/accept such tender/offer without any reference to the tenderer.
- Tenderer(s) may carefully note that his/their Contract Agreement for this work is liable to be terminated at any time later, in case any of the information furnished by them is found to be untrue or any adverse point come to light subsequently. The decision of Railway in this regard shall be final and binding.
- Opening of e-tender: The e-tender will be opened online on the IREPS portal any time after the tender closing date and time. Railways reserve the right to open the tender any time after the time of closing of tender.
- The tenderer(s) must keep themselves updated through the website www.ireps.gov.in and newspapers regarding corrigenda, if any, to the Notice Inviting Tender or tender document, which shall be uploaded on the same website and also published in the newspapers. It is the responsibility of the tenderer to check any correction or any modification published subsequently on the website and the same shall be taken into account while submitting the tender.
- This tender is governed by General Condition of Contract for works April-2022 issued by Railway Board with latest amendments up to tender publishing date and Special Condition of Contract. Wherever the terms of GCC contradicts the Special Condition of Contract, in such case Special Condition of Contract will prevail. Tenderer must go through General Conditions of Contract and Special Conditions of Contract before quoting the rates.
- When work is tendered for by a firm or a company of contractors, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- **The tenderer shall clearly specify whether the tender is submitted on his own or on behalf of a partnership concern. If the tender is submitted on behalf of a partnership concern, he should submit the certified copy of partnership deed along with the tender and authorization/Power of Attorney to sign the tender documents on behalf of partnership firm.**
- The schedule of approximate quantities shown on **Page No. 41** of the tender document is only for the information of the tenderer. The tenderer has to offer his rates in the format of e-tender module on website www.ireps.gov.in duly noting down the conditions and instructions on this page. The tenderer should not submit his offered rates on this page.

Precautions to be observed for downloading of Tender Document from Internet/Website/Additional Special Conditions:

- I.** These additional special conditions are applicable to tender document and considered as part of it, which is downloaded from Internet / website.
- II.** Tenderer(s) may note that, in case of download failure or delay or, if incomplete tender document is downloaded, whatsoever, Railways shall not be responsible in any way. Railways shall not be responsible for any direct / indirect loss of business / profit resulting from inability to use this facility.
- III.** Tenderer(s) shall download and print the tender document solely for the purpose of bidding for the above work and downloaded document shall not be used, copied or reproduced for any other purpose.
- IV.** The end of tender document is indicated by “END OF TENDER DOCUMENT” marker. Tenderer(s) should carefully see that above marker appears on the last page of downloaded tender document so as to ensure that downloaded document is complete. Tenderer(s) are suggested to check the integrity and completeness of document before submission.
- V.** Tenderer(s) while submitting their offer must sign all pages of the tender document.
- VI.** The downloaded and printed tender document along with the various other documents should be submitted as per details mentioned in the tender document.
- VII.** Tenderer(s) shall maintain the integrity of downloaded tender document and shall not make any change/addition/deletion/tampering, whatsoever, in the downloaded documents. The tenderer(s) offer shall be rejected and full earnest money shall be forfeited, in case it is detected after submission of offer, that they have made any modification in the downloaded document. In case such modification is noticed even after award of contract, Railways is liable to terminate the contract on contractor’s default. In addition Railways reserves the right to take other action against the contractor as deemed fit, which may include banning of business dealings with the firm and the firm is also liable to be prosecuted as per the Law. After award of work, agreement will be prepared based on the master copy of tender document available in the Railway’s office. In case, any discrepancy is noted in the tender document submitted by the tenderer(s), the Master document kept with Railways shall prevail and the decision of Railways thereon shall be final and binding on Tenderer/Contractor.
- VIII.** Further, tenderer(s) shall bear expenses of internet connection and telephone charges, if any, for downloading of the tender document and online submission of their offers.
- IX.** Tenderer(s) shall keep themselves updated about any modification in the tender notice and tender document, issued by Railways through newspapers, website or e-mail or any other means and shall act accordingly. It is the responsibility of the tenderer(s) to check if any corrections or modifications are published subsequently on the Website and the same shall be taken into account while submitting the tender. The offer of the tenderer(s) is liable to be rejected if they do not enclose all the corrections / corrigenda along with the downloaded tender documents.

- X. The “Additional Conditions for Tender Document downloaded from Website” must be signed by the Tenderer(s) and enclosed along with the Tender Document failing which the tender is liable to be rejected.
- XI. The following declaration should be given by the Tenderer(s) while submitting the tender.

Declaration

I/We
.....
..... have downloaded the tender document from the website. I/We have not tampered/ modified the tender forms in any manner. In case the document is found to be tampered/ modified, I/We understand that my/our tender is liable to be rejected and full earnest money deposit will be forfeited and I/We am/are liable to be banned from doing business with Railways and/or prosecuted.

Seal of Tenderer

Signature of Tenderer

SPECIAL CONDITIONS OF CONTRACT

The following conditions are included over and above the General Conditions for works contract, issued and amended from time to time. In case of any variation of these special conditions with GCC of Railways, these special conditions shall prevail. Also, the following special conditions are only indicative & not exhaustive. Tenderers are advised to keep themselves updated with the various instructions issued by the Railway Board that are usually uploaded in the Engineering Directorate section of the Indian Railway's website www.indianrailways.gov.in.

1. This contract will be governed under the provision of General Conditions of Contract – April-2022 for Works or its amendment issued from time to time up to tender publishing date and special terms and condition of contract. Contractor may download the same attached as separate document or from Railway Board site.

2. Minimum Eligibility Criteria: Technical Eligibility criteria & Financial Eligibility Criteria are as per General Conditions of Contract- April-2022 for Works or its amendment issued from time to time up to tender publishing date.

3. The following documents should be submitted by the tenderers along with the tender:

- i. Mandate form for EFT/NEFT
- ii. Acceptance/Deviation Schedule

4. Price Variation Clause (PVC): Applicability: Price Variation Clause (PVC) shall be applicable only in tender having advertised value above Rs.2 Crores and Price Variation Clause (PVC) of General Conditions of Contract (GCC) shall not apply to such a work contract which is either an Annual Maintenance Contract (AMC) or a Zonal Contract.

{Authority: Railway Board's Letter No. 2013/CE-I/CT/O/10PVC/Pt.I dated 27.01.2015}}

5. Deployment of manpower:

- i. **Identity Card:** The name/list of all the personnel along with supervisor(s) to be deployed for the work should be submitted by the contractor to the authorized Railway representative before starting the actual work. The Contractor should issue Identity Cards to all his staffs engaged to carry out the work. These Identity Cards should always be so carried by them at the place of work or during their presence on Railway Premises so that they can be identified by Railway Security/Mechanical Department Staff and Supervisors. The format of the Identity Card is placed at **Annexure - B**.
- ii. **Qualified Engineers:** In terms of provision of clause 26A.1 of the General Conditions of Contract (GCC), the tenderer shall also employ following qualified Engineers during execution of the allotted work:
 - a) One Qualified Graduate Engineer when cost of work to be executed is Rs. 200 Lakhs and above, and
 - b) One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs. 25 Lakhs but less than Rs.200 Lakhs.

Further, in case the contractor fails to employ the Qualified Engineer as aforesaid in para (ii) above, in terms of provisions of clause 26A.2 of the General Conditions of Contract, he shall be liable to pay penalty for the default period for the provisions, as contained in para (ii) (a) and (ii) (b) above.

Provisions in respect of the Contract Workers on Indian Railways:

- i. Contractor should pay his labour through bank and the payment sheet showing the amount paid to each labourer should be countersigned by the nominated Railway representative.
- ii. Contractor should issue Identity Card to his labour.
- iii. Contractor should deduct PF of the Contract Labourers and should comply with other provisions of the EPF and Misc. Provisions Act 1952.
- iv. Contractor should make deductions towards ESI, if applicable, from the payment paid to his labour and should remit the same to the appropriate authority under the ESI Act along with his own contribution.
- v. Railway officials, including Welfare Inspectors shall have the right to inspect the books of the contractor to ensure compliance of the above provisions.
{Authority: Railway Board's Letter No.E(LL) 2015/PNM/AIRF/1 dated 20.10.2015
Dy.CPO (IR)/CR's Letter No. CR/P-HQ/I/530/Policy dated 04.12.2015}
6. Mode of payment of Bid security Cost: Tenderers are allowed to make payments against this tender towards Bid security only through payment modes available on IREPS portal like net banking, debit card, credit card etc. Manual payments through Demand draft, Banker cheque, Deposit receipts, FDR etc. are not allowed.

Bidder has to mandatorily submit Bid Security.

7. The contractor should not violate '**The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013**' and accordingly should take all measures during the working as per the provisions of the Act.
8. **Negotiations:** Railways may hold negotiations with a tenderer during the course of finalization of the tender. However, before the negotiations are held, the tenderer should sign and submit the Form of Declaration as placed at **Annexure-D**.
{Authority: Railway Board's Letter No. 2008/CE-I/CT/1 dated 12.09.2008}
9. **Procedure for payment of Contractual bill:** With GST in force, it will be the responsibility of service providers (i.e. contractors) to submit the invoice (bill) duly segregating the GST component from the Gross amount of work executed. The procedure as mentioned below will be followed while dealing with contractor's payment, once GST is applicable.
 - (A) (i) All works contracts are to be provided with goods/service code based on the type of contract. In case contract consists of both goods and service, then interpretation regarding nature of contract shall be done as per clause 8, Chapter III of CGST Act, 2017. The goods/service code is notified by Ministry of Finance and can be downloaded from the website www.cbec.gov.in.
 - (ii) The 'on account / final contract certificate' shall be prepared by the Railway on the basis of quantity of work executed and agreement rates, duly segregating the GST component as detailed in Para (iii) below.
 - (iii) Since the agreement rates of contracts are inclusive of all taxes as per clause 37 of GCC-2014, the calculation of 'Gross amount of work executed', 'amount of work executed excluding GST amount' and 'GST amount' in the 'on account / final contract certificate' shall be done as under.

Let Z = Gross amount of work executed on the basis of quantum of work executed on agreement rates

X = Amount of work executed excluding GST amount.

Y = GST amount as per applicable GST rate for that goods/service code.

R = Percentage rate of GST for that goods/service code

Then, $Z = X + Y$, $Y = X \cdot R/100$

- (i) Percentage rate of GST for various types of goods/services as finalized by GST council can be downloaded from the website www.cbec.gov.in.
- (B) (i) Once the 'on account / final contract certificate' is prepared by railway and communicated to contractor, the contractor shall submit invoice (bill) on his Letter head duly segregating the 'Amount of work executed excluding GST amount' and 'GST amount' (i.e. "X" & "Y" as mentioned in para 3(A)(iii) above) along with Invoice No. (bill No.) and all other details required under GST Act. The sample GST compliant invoice is annexed herewith as **Annexure - D**.
- (ii) In case contractor is liable to be registered under GST Act, Railway shall pay to the Contractor 'Gross amount of work executed' (i.e. "Z" as mentioned in para 3A (iii) above) duly deducting all other leviable taxes like I/Tax, labour cess, royalty etc. as applicable. Contractor shall be liable to pay 'GST amount' to respective authority himself. Whereas, railway shall deposit all other taxes deducted to concerned authority as is being done presently.
- (iii) In case contractor is not liable to be registered under GST Act, contractor shall be paid "Amount of work executed excluding GST amount" (i.e. "X" as mentioned in para 3A (iii) above) duly deducting all other leviable taxes like I/Tax, labour cess, royalty etc. as applicable. Railway shall deposit 'GST amount' as well as all other taxes deducted to concerned authority.
- (iv) In case any need arises to modify the Invoice (Bill) due to any reason, contractor shall submit amended fresh invoice for processing the payment.

{Authority: Railway Board's Letter No. 2016/CE-I/CT/12/GST/Pt.I dated 29.06.2017}

- 10. The Clause 17 to GCC for "Joint Venture Firm" shall be applicable to the works tenders of value more than Rs. 10 crore (Rupees 10 Crore) only. Joint ventures are not allowed for this tender.**

{Authority: Railway Board's Letter No. 2002/CE-I/CT/37 JV Pt. VIII dated 14.12.2012}

- 11. Commencement of Work:** The Contractor will have to commence the work **within 90 days** from the date of receipt of the Letter of Acceptance.
- 12.** The contractor has to start all the works within the stipulated time (partly commencement of the work will not be allowed) else the penalty will be imposed on that account. However, before the work is started, the infrastructural and other facilities must be developed by the contractor.
- 13. Inspection:** The inspection of each work executed by the contractor will be done by Sr. Section Engineer (C&W)/BSL. Apart from the above Sr. Divisional Mechanical Engineer BSL or his authorized representative may inspect the work executed by contractor as and when required. Contractor will co-operate with the inspecting official at the time of inspection and produce all relevant documents demanded by the inspecting official.

14. If any drawing is required with the Tender Form, Rs.200/- per drawing will be levied extra. {Authority: Railway Board's Letter No. 94/CE-I/CT/53 dated 18.05.2007}
15. The drawings for the works can be seen in the office of the Sr. Divisional Mechanical Engineer, Central Railway, Bhusawal Division at any time during office hours.
16. The quantities shown in attached schedules are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway accepts no responsibility for their accuracy; the Railway does not guarantee work under each item of the Schedule.
17. Tenders containing erasures and alterations of the tender documents are liable to be rejected. Any corrections made by the Tenderer/Tenderers in his/their entries must be attested by him/them.
18. The Tenderer(s) are required to quote item rates and must tender for all the items shown in the Schedule of approximate quantities.
19. Bidders will be able to submit their original/revised bids up to closing date and time only on www.ireps.gov.in. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored. Tender will be closed at **15:00 hours on 03.07.2026**. Tender will be opened online on the IREPS portal any time after the tender closing date and time. Railways reserve the right to open the tender any time after the time of closing of the tender.

(Ref: Clause 12 of Tender Form (Second Sheet) in Annexure-II of GCC Part-I)

20. **Water:** The Railway will supply water free of cost required for the execution of work. (Ref: Clause 31.(1), 31.(2) & 31.(3) of GCC Part-II).
21. **ELECTRICAL POWER:**

Electricity has been supplied without any charges for operation of HABD during the contract period however cables, supply arrangements, switches, digging for cables etc is to be done by contractor.

22. Clarifications regarding Eligibility Criteria

23. **The Performance Guarantee should be in favour of Sr. Divisional Finance Manager, Central Railway, Bhusawal. (Ref: Clause 16. (4) of GCC Part-II)**
24. **Scope of Work:** As mentioned on **Page No. 24-32.**
25. **Schedule of estimated quantities and estimated rates:** As mentioned on **Page No. 41**
26. **The procedure of the refund of Bid Security to unsuccessful tenderers would be as follows:**
 - i. In case of single packet system of tendering, the Bid security submitted by all the tenderers except L1, would be released after the acceptance of the offer of L1.
 - ii. In case of negotiations are proposed to be held, the Bid security submitted by all the tenderers other than the tenderer with whom negotiation has been proposed, would be released after the acceptance of the recommendations of the tender committee by the accepting authority for holding negotiations.
 - iii. If the tender is not finalized within the original validity period, the Bid security of the tenderers who do not agree to extend the validity of their offers would be

released. This would, however, be done only after the receipt of refusal from the tenderers for any further extension, in writing.

- iv. In two packet system of tendering, the Bid security of tenderers not found technically suitable (for opening of the price bid), would be released after acceptance of recommendations of the Tender Committee by the accepting authority on the first packet.

{Authority: Railway Board's Letter No. 2007/CE-I/CT/18(Pt.I) dated 10.09.2008}

27. If any drawing is required Rs.200/- per drawing will be levied extra. {Authority: Railway Board's Letter No. 94/CE-I/CT/53 dated 18.05.2007}
28. The drawings for the works can be seen in the office of the Sr. Divisional Mechanical Engineer, Central Railway, Bhusawal Division at any time during office hours.
29. The quantities shown in attached schedules are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway accepts no responsibility for their accuracy; the Railway does not guarantee work under each item of the Schedule.
30. Tenders containing erasures and alterations of the tender documents are liable to be rejected. Any corrections made by the Tenderer/Tenderers in his/their entries must be attested by him/them.
31. Contractor should obtain work permit from concerned Labour Commissioner for engaging labours for the advertised work.
32. **Measurement of work by Contractor in Works Contract:** The Clause 45(ii) of Part-II of GCC regarding measurement of works by Contractor's authorized representative shall be applicable to the **works tenders having value Rs.20Crore or more.**

{Authority: Railway Board's Letter No. 2016/CE-I/CT/14/Measurement/3 dated 21.09.2017}

Note: Since the value of this tender is less than Rs.20Crore, the Clause No. 45(ii) of GCC shall not be applicable to this tender.

33. The Contractor will nominate a representative/supervisor-in-charge who will maintain liaison with the Railway's nominated representative(s) regarding execution of the contract. He shall liaise with Railway for any instruction, clarification etc. He should maintain adequate communication with Railway Representative at all times for which he should carry mobile phone at all times, the number of which shall be given to Railway Administration and depot-in-charge.
34. The contractor shall note that no compensation due to any loss of life or material or on any other account shall be made by the Railway Administration. Contractor shall be fully responsible for compensation in case of any accident, injury to their labour and on any other account.
35. The Contractor should take utmost care to ensure that no damage to the rake/wagon/coaches/Railway property takes place due to any act of workmen, while carrying out the work under this Contract. If any damage is caused to rake/coaches/Railway property due to any act of negligence of contractor's staff, such damage will be recorded by the Engineer/ Supervisor of that particular depot and amount will be assessed by him which will be approved by competent authority and will be binding on the contractor. Such amounts will be deducted

from running bills, security deposit or any other amount available with the Railways.

36. Damage/Losses to Railways on account of bad workmanship: Contractor has to bear the loss incurred to Railways on account of bad workmanship or damages to Railway material/equipment/premises on account of negligence of Contractor.
37. The contractor shall not use or allow any body to use the premises for any purpose other than that he was allowed under the contract. The contractor shall ensure that the personal belongings and valuables are safe.
38. No accommodation shall be given to any contractor(s) staff/supervisors for the purpose of stay.
39. The contractor shall warn all his workmen to be careful while crossing the tracks against the movement of trains. The Railway will not accept any claims in regard to any loss due to the accident in the Railway premises.
40. Any misuse of Railway property will be viewed seriously and the actual cost with penalty will be recovered from the contractor's bill.
41. The contractor shall ensure that he himself or his nominated supervisor is available within short notice of the railway representative or whenever required by Railway.
42. The stationery required for maintaining the work and other registers are to be supplied by the contractor.
43. The contractor is responsible for the quality of work, discipline of the contractor's staff and safety of the contractor's staff.
44. The contractor shall follow the instructions of depot in charge/his representative in execution of the services.
45. Instructions of Engineer's Representative:-

Any instructions or approval given by the Engineers' representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the engineer provided always as follows:-

- a) Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power Engineer thereafter to disapprove such work or material and to order the removal or rectification thereof.
- b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm every such decision.

46. **(a) Adherence to Specifications and Drawings:** -The whole of the works shall be executed in perfect conformity with the specifications, drawings, scope of work and special term and condition of the contract. If Contractor performs any works in a manner contrary to the specifications and drawings or any of them and without such reference to the Divisional Railway Manager (Mechanical), Central Railway, Bhusawal. He shall bear all the costs arising or ensuing there from and shall be responsible for all losses of the Railway.
- (b) Drawings and Specifications of the Works:** - The Contractor shall keep copy of drawings and specifications at the site, in good order and such contract documents as may be necessary, available to the Engineer's Representative.
- (c) Ownership of drawings and specifications:** -All drawings and specifications and copies thereof furnished by the Railway to the Contractor are deemed to be the property of the Railway. They shall not be used on other works and with the exception of the signed contract set, shall be returned by the contractor to the Railway on completion of the work or termination of the contract.
- (d) Compliance with contract request for details :-**The Engineer shall furnish with reasonable promptness, after receipt of the contractor's request for the same, additional instructions by means of drawing and instructions shall be consistent with the contract documents are reasonably inferable therefore.
- (e) Meaning and intent of specifications and drawings:** -If any ambiguity arises as to the meaning and intent of any portion of the specifications and Drawings or as to execution or quality of any work or material, or as to the measurements or the works the decision of the Divisional Railway Manager (Mechanical), Central Railway, Bhusawal, thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the DRM (Mech)/BSL who shall have the power to correct any error, omissions or discrepancies in aforementioned items and whose decisions in the matter in dispute or doubt shall be final and conclusive.
47. **Payment:** The contractor will have to submit the bill to the office of Sr.DME, Bhusawal for each quarter duly verified and signed by the Authorized Railway Representative along with the record of Work Evaluation sheets, details of penalty calculations and other documents as deemed necessary by the Railways. The bill will be scrutinized by the office of Sr.DME, Bhusawal and will be forwarded to the office of Sr.DFM, Bhusawal for arranging the payment. The Paying authority will be Sr. DFM, Bhusawal. The payment to the contractor will be made through EFT/NEFT.
48. The contractor shall get certification of the actual work done along with penalty details, if any, from the representatives of the respective consignee. The contractor shall submit one copy of all the certified details to consignee. The 'Measurement Book' shall be prepared by the engineer or the nominated representative by Sr.DME, BSL. Bill for actual work done shall be signed & forwarded by nominated Officer or his nominated representative, who will certify the bill & forward the bill to the **"Bill Passing Officer (i.e. Sr.DME/BSL or his authorized representative).**

49. Mandatory Updation of Labour Data on Railway's Shramik Kalyan Portal

- A) Contractor is to abide by the provisions of payment of wages act & minimum wages act in terms of Clause-54 and 55 of Indian Railways General condition of contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in the portal. These details shall be available in public domain. The Registration/updation of portal shall be done as under:
- Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
 - Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LoAs issued in his favour.
 - The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LOA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LOA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request.
 - After approval of LOA by engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
 - It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- B) While processing payment of any 'On Account Bill' or 'Final Bill' or release of 'Advances' or 'Performance Guarantee / Security Deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramik Kalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till ____ Month, ____ Year."

{Authority: Railway Board's Letter No. 2018/CE-I/CT/4 dated 17.10.18}

50. Mode of payment from Railways through a 'Letter of Credit' (LC) arrangement: Inclusion of 'Letter of Credit' as Mode of Payment in Works Tenders or Service Tenders having advertising Tenders value of Rs.10 Lakh and above.

{Authority: Railway Board Letter No.2018/CE-I/CT/9 Date 04/06/2018}.

- A) For all works tenders or service tenders Contractor shall have the option to take payment from Railways through a 'Letter of Credit' (LC) arrangement with the following conditions.
- For all the tenders having advertised cost of Rs.10Lakh or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement

- ii) This option of taking payment through LC arrangement has to be exercised in IREPS (Indian Railway Electronic Procurement System – the e-application on which tenders are called by Railways) by the tenderer at the time of bidding itself and the tenderer shall affirm having read over and agreed to the terms and conditions of the LC option .
- iii) The option so exercised shall be an integral part of the bidder's offer.
- iv) The above option of taking payment through Letter of Credit (LC) arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract.
- v) In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC:
 - (a) The LC shall be a sight LC.
 - (b) The contractor shall select his Advising/Negotiating bank for LC. The incidental cost towards issue of LC and its operation thereof shall be borne by the contractor.
 - (c) SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from Railway Accounts Units for tenders opened in financial year 2019-20. SBI branches where the respective Railway Accounts Office has its Account (Local SBI branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @0.15 % per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills.
 - (d) The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalized by the engineer in consultation with the contractor on the basis of expected progress of work.
 - (e) The LC terms and conditions shall inter-alia indemnify and save harmless the Railway from and against all Losses, claims and demands of every nature and description brought or recovered against the Railways by reason of any act or omission of the contractor, his agents or employees, in relation to the Letter of Credit (LC). All sums payable/borne by Railways on this account shall be considered as reasonable compensation and paid by contractor.
 - (f) The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorization (format enclosed as Annexure-2) after passing the bill for completed work , to enable contractor to claim the authorized amount from their bank .
 - (g) The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorization.
 - (h) The Document of Authorization shall be issued by Railway Accounts Office against each bill passed by Railways.
 - (i) On issuance of Document of Authorization copy of Document of Authorization shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorization shall also be sent by Railway Accounts Office to Railway's bank (Local SBI Branch).
 - (j) The contractor shall take print out of the Document of Authorization available on IREPS and present his claim to his bank (advising Bank) for necessary payments

as per LC terms and conditions. The claim shall comprise of copy of Document of Authorization, Bill of exchange and Bill.

- (k) The payments against LC shall be subject to verification from Railway's Bank (Local SBI Branch).
- (l) The contractor's bank (advising Bank) shall submit the documents to the Railway's Bank (Local SBI Branch).
- (m) The Railway's Bank(issuing bank) shall , after verifying the claim so received w.r.t the digitally signed Document of Authorization received from Railway Accounts Office, release the payment to The contractor's bank (advising Bank) for crediting the same to contractor's account.
- (n) Any number of bills can be dealt within one LC, provided the sum total of payments to contractor is within the amount for which LC has been opened.
- (o) The LC shall be closed after the release of final payment including PVC amount, if any to the Contractor.
- (p) The release of performance guarantee or security deposit shall be dealt directly by Railway with the Contractor i.e. not through LC.
- B)** For opening of LC, executive department shall make a request letter to concerned Accounts Department on a format placed as Annexure-1.
- C)** Necessary changes in IREPS and IPAS e-application have already been carried out for having option for payment to contractors through LC.

Annexure – 1(a)

Request letter from Executive branch to Accounts Office for opening of LC

**Office of -----
----- Railway**

No. -----

Dated -----

**The PEA/Sr.DFM/Dy.FA
HQ/Division/Workshop/Cost**

Sub: Opening of LC

Ref: Supply Order/Contract Agreement No.

**_*_*_

It is requested to open a sight LC against above referred
Order/Agreement in favour of ----- The details of beneficiary are as
under:

- (i)** Name of the Contractor/Supplier:
- (ii)** Vendor code:
- (iii)** Address:
- (iv)** Tender No. :
- (v)** Contract Agreement No.:
- (vi)** Description of Goods/Service:
- (vii)** Value of Contract:
- (viii)** Stages of Payment:
- (ix)** Expected payment within 06 Months (LC amount)
- (x)** Beneficiary bank details:
 - a) Bank Name
 - b) Address
 - c) Account No.
 - d) IFSC Code
- (xi)** Validity/period for which LC is to be opened

It is certified that supplier/contractor has exercised the option of taking payment
due against the tender, through LC arrangement in IREPS portal at the time of
bidding itself and the option has been flagged in the IREPS. This has the
approval of -----

(Signature)

Name -----
Designation ----
(Official seal)

LCDA No. (18 DIGIT IPAS Generated No.)

Dated: _____

DOCUMENT OF AUTHORIZATION**Reference:** (i) Works Contract/Supply Contract No. _____ Dated _____

(ii) Inland Letter Of Credit No. _____ Dated _____

This document is issued against contract No. ---- (From IREPS) ---- dated ---- for supply/work of ---- (Description of goods/work from IREPS) - -----

The beneficiary of the aforementioned Letter of Credit M/s. --- (Name And Vendor Code --) --- (Vender Code --- as per IREPS ---) is entitled to receive payment aggregating INR --- \$\$\$ -- (FROM ABSTRACT OF BILL PASSED) ----- out of a total LC amount of --- INR --- (FROM MASTER TABLE OF LC OPENED) ----- against the first/second* commercial Invoice No. (FROM IPAS) ----- Dated ----- FROM IPAS ----- for INR (From IPAS) ----- raised against the above contract from State Bank Of India ----- (branch) --- (FROM LC MASTER TABLE) --- on the strength of this Certificate.

The details of payment already made to the beneficiary under this Letter of Credit are as follows:

S. No.	Invoice No.	Invoice date	Invoice amount (INR)	LCDA No.	LCDA date	Amount paid (INR)
Total paid						

THIS PAYMENT: ----- \$\$\$ -----

LC BALANCE AFTER THIS PAYMENT: -----

(Signature of authorized Railway authority)

Name
Designation
Official Seal

SCOPE OF WORK

1. General Scope

The contractor shall undertake turnkey design, supply, installation, testing, commissioning, warranty and Comprehensive Annual Maintenance Contract (CAMC) of Hot Axle Box Detector (HABD) systems at multiple locations over Bhusawal Division, Central Railway, as enumerated in the agreement/PO. The contract shall cover:

- Schedule 'A': Design, supply, installation, testing, commissioning of HABD equipment.
- Schedule 'B': 03-year comprehensive warranty period.
- Schedule 'C': 03-year Comprehensive Annual Maintenance Contract (CAMC).

The system shall be fully operational, compliant with Indian Railways standards, and suitable for train speeds up to 160 kmph (compatible up to 180 kmph in future) and all-weather conditions of Bhusawal Division.

Delivery Schedule & Activity Chart

SN	Activity	Days	Remarks
1	Issue of LOA	D1	--
2	Submission of PBG	D1+ 21 days	Submission of PBG as per GCC
3	Submission of design, document including design details/ drawings of HABD	D1+30 days	Contractor to submit design documents including details of installation drawings of HABDs, specification of components, GA drawings etc. Work start will be assumed from this activity.
4	Approval of design documents of HABD, GA drawings as submitted	D1+45 days	Railways will approve submitted design documents of HABD, GA drawings etc
5	RITES inspection of HABD and installation to start at site	D1+90 days	Actual field work of HABD installation to start by contractor in D1+90 days after RITES inspection

2. System Objectives

The HABD system shall:

1. Automatically detect axle box bearing temperature and identify hot axle conditions in real time.
2. Generate real-time alerts with data logging and analytics, including cloud-based data storage for at least 02 years.
3. Provide SMS alerts, web portal, and mobile application based real-time monitoring and reporting.
4. Operate with 03 years warranty and 03 years CAMC from the date of successful commissioning and acceptance by the consignee.

3. Scope under Schedule 'A' – Design, Supply, Installation & Commissioning

3.1 Design & Supply

- i. The contractor shall design in-house the HABD system, including sensor layout, control cabinet, communication, power, and data-hosting architecture meeting Indian Railways operational and safety requirements.
- ii. Complete supply of all materials, equipment, software, tools, tackles, and consumables required for the HABD system at each location, including:
 - a. Infrared (IR) temperature sensors, proximity sensors, control cabinet, embedded PC/DAQ, UPS, power conditioner, communication modem, cabling, protective enclosures, deflector plates, and all interconnecting hardware.
 - b. Probable installation locations with consignees and quantity are summarized as follows location subject to change as per site feasibility
 - c. The HABD equipment/material should be RITES inspected and certificates to be provided.
 - d. List of Locations:

S.N.	Consignee	Section	Probable Installation Location with Km	Quantity
01	SSE/C&W/BSL	IGP-BSL	ABS BDI-BSL UP 438.14	01
02	SSE/C&W/BSL	IGP-BSL	ABS BDI-BSL UP 3rd Line 438.14	01
03	SSE/C&W/MMR	IGP-BSL	PACHORA UP 372.40 & PACHORA DN 372.40	02
04	SSE/C&W/MMR	IGP-BSL	Nandgaon UP 285.27 & Nandgaon DN 285.27	02
05	SSE/C&W/MMR	IGP-BSL	Lasalgaon UP 235.38	01
06	SSE/C&W/MMR	IGP-BSL	Asvali DN 161.47	01
07	SSE/C&W/BSL	BSL-BD	C CABIN DN 448/1005	01
08	SSE/C&W/BSL	BSL-BD	Malkapur UP 497.3 & Malkapur DN 497.0	02
09	SSE/C&W/BD	BSL-BD	Paras UP 563.93 & Paras DN 563.93	02
10	SSE/C&W/BD	BSL-BD	Borgaon UP 602.17 & Borgaon DN 602.17	02
11	SSE/C&W/BSL	BSL-KNW	B CABIN DN 448.25	01
12	SSE/C&W/KNW	BSL-KNW	Burhanpur UP 498.69 & Burhanpur DN 498.69	02
		Total	Total New HABD Locations	18

Note: Above location may change or quantity may decrease or delete as per Railways requirement

3.1.1 Peripheral equipment:

- i. 65” LED display at Control Room – 02 Nos
- ii. Viewing console (Lightweight laptop, i5 or latest, 16 GB RAM, 512 GB SSD or more) – 03 Nos
- iii. Black-body calibration source (6–9 inch or more plate, reputed make) – 03 Nos
- iv. Compact, ultra-durable, and waterproof action cameras designed to capture high-quality photos and videos in extreme environments like GoPro Cameras (5.3K video, HDR recording, and an interchangeable lens or higher) – 02 Nos

All hardware shall carry standard OEM warranty and be covered under CAMC for the entire contract period.

3.2 System Functional Requirements

The HABD system shall:

- i. Perform continuous non-contact temperature measurement of axle boxes and wheels of all types of rolling stock, including ICF, LHB, Vande Bharat (Train-18), MEMU, BOXXN and similar wagons, BLC and similar wagons, etc.
- ii. Record wheel-wise axle-wise temperature with wheel counting from both sides of the train.
- iii. Detect hot axle conditions based on user-defined thresholds:
 - a. Axle box temperature difference between adjacent boxes.
 - b. Absolute axle box temperature.
- iv. Provide multi-channel alerts:
 - a. SMS alerts to minimum 10 mobile numbers per HABD equipment within 15 minutes of detection.
 - b. Web portal and mobile application with audio-visual alerts within 05 minutes of train passage.
- v. Store data in cloud-based Tier-IV Level Data Centre for minimum 05 years, with secure login and role-based access for all consignee and admin users.
- vi. Allow generation and download of daily, weekly, monthly, and yearly reports in Excel and PDF formats via web/mobile interface.

3.3 Hardware Specifications

(a) Infrared Temperature Sensor

- i. Capable of measuring CTRB/Bearing temperature of all types of rolling stock with different wheel diameters, including ICF, LHB, Vande Bharat, MEMU coaches & BOXXN, BLC etc wagons running presently in fleet of Indian Railways.
- ii. Model: Any suitable model of M/s Optris, Raytek, Micro-Epsilon or equivalent with proven field performance on Indian Railways.
- iii. Measurement range: 0°C to +500°C with accuracy $\pm 2^\circ\text{C}$ and response time ≤ 6 ms.
- iv. Suitable for measurement at safe distances so as not to infringe IRSOD & Engineering-specified conditions.

(b) Train Presence Detectors (Proximity Sensors)

- i. Robust Inductive rectangular sensors, flush-mountable, sensing range ≥ 50 mm.
- ii. Operating voltage: 10–30 V DC; NO/NC selectable output with factory-fitted cable of suitable length.
- iii. Deflector plates as per railway drawing of axle box counter used in Signaling Department painted with retro reflective paints.

(c) Embedded PC / DAQ & Control Cabinet

- i. Industrial-grade fanless PC with Core 2 Duo / Celeron or better, 8 GB RAM, 250 GB SSD or higher, dual-display (HDMI/VGA).
- ii. Support for Ethernet, Wi-Fi/3G/4G SIM-based communications.
- iii. Control cabinet:
 - a. Weather-proof, IP65, with dust & water protection, proper earthing and surge protection.
 - b. Grey powder-coated, vandal-proof design with legend “Hot Axle Box Detector System”.
 - c. Panel locking with 03-key set.
 - d. One cabinet light with door sensor.

(d) Power System

- i. UPS with battery providing minimum 08 hours backup.
- ii. In-built stabilizer and MCB of suitable rating.
- iii. Auto-changeover between AT supply / Local supply / UPS.
- iv. Additional 02 sockets with protection for connecting black-body calibration device and laptop.

(e) Communication & Networking

- i. Modem of suitable capacity with Ethernet and wireless (Wi-Fi) connectivity.
- ii. Suitable Modern devices 4G/5G to be selected
- iii. Secured VPN connectivity to control office as required.

4. Installation & Commissioning

4.1 Turnkey Execution

The contractor shall be responsible for complete turnkey execution at all locations, including:

- i. Supply, logistics, transportation, loading/unloading, and handling of all equipment, tools, and consumables from delivery to consignee stores till taking to site for installation with no extra cost to Railways.
- ii. Deployment of adequate manpower and resources to meet project timelines and accommodate minor schedule deviations in mutual consultation with the consignee.

4.2 Trackside Works

- i. Civil and electrical works including:
 - a. Trenching for cabling (trackside and cross-track) as per Indian Railways standards.
 - b. Trenching for electrical supply cable for approximately 150 m per site (or as per drawing) from nearest AT supply/power installation.
- ii. Fabrication, mounting, and precise alignment of all sensors with protection from hanging parts of rolling stock.
- iii. Integration of sensors, control cabinet, Wi-Fi modem, display units, and all communication links.

4.3 Testing & Commissioning

- i. Submission of Site Sketch and detailed drawings for each HABD site showing:
 - a. Exact location of each component (rail km, GPS coordinates – latitude & longitude).
 - b. Civil and electrical layout, cable routing, and protection arrangements.
 - c. Complete system map in framed poster suitable size showing existing and new installed devices over BSL division.
- ii. Pre-commencement approval from SSE/C&W or Sr.DME/BSL/CR representative before any trackside work to ensure zero disruption to railway operations.
- iii. Testing with trial trains (including loaded/empty, passenger, freight, ICF, LHB, MEMU, etc.) for validation of:
 - a. Axle-wise temperature recording.
 - b. Hot-axle detection, alert generation, SMS/web/mobile alerts, and data logging.
- iv. Final acceptance by the consignee after successful demonstration and trial running.

5. Scope under Schedule 'B' – 3-Year Warranty

5.1 Warranty Coverage

- i. Comprehensive on-site warranty for 03 years from the date of successful commissioning and system acceptance.
- ii. Warranty shall cover all supplied equipment, software, installation works, IR sensors, proximity sensors, embedded PCs, control cabinets, UPS, display units, communication equipment, etc.

5.2 Preventive Maintenance & Spares

- i. Quarterly preventive maintenance visits (4 visits per year) during the warranty period including:
 - a. Half yearly Calibration of IR sensors using black-body source.
 - b. Alignment verification, cleaning of control cabinet, removal of dust from sensors, and checking of all electrical connections.
 - c. Clearing vegetation in 5 m × 5 m area surrounding the equipment.
 - d. System health checks and software updates (bug fixes, performance improvements).
- ii. Minimum 10% spares of critical components (e.g., IR sensors, proximity sensors, microcontroller cards, etc.) to be kept at SSE/C&W/BSL premises for immediate breakdown rectification.
- iii. SIM card recharging for GPRS data connectivity and cloud-hosting charges borne by the contractor during warranty and CAMC.

5.3 Breakdown Response

- i. Breakdown complaint response time:
 - a. Within 48 hours from date/time of intimation.
 - b. Restoration of normal working within 72 hours of intimation.
- ii. Penalty clause applicable as per the contract (e.g., per-system per-day penalty for delay in commissioning or excessive downtime).

5.4 Removal & reinstallation of HABD:

The contractor shall remove and refit HABD equipment (sensors etc.) free of cost during tamping/BCM/other engineering works as and when required during the warranty period, and ensure proper functioning of the system post-refit.

6. Scope under Schedule ‘C’ – 3-Year CAMC

6.1 General Scope

- i. Comprehensive Annual Maintenance Contract (CAMC) for 3 years from the end of the warranty period. CAMC of all HABDs installed in this work will start after 3 years (warranty period) counted from work completion date of this work.
- ii. CAMC shall cover all electronic and electrical equipment associated with the HABD system, except IR temperature sensors and proximity sensors, which the contractor shall stock as spares and replace on payment by Railways as and when required.

6.2 Preventive Maintenance & Calibration

- i. Four (04) preventive maintenance visits per year (quarterly).
- ii. Works during each visit:
 - a. Overall checking of the entire HABD system (sensors, control cabinet, power, communication, software).
 - b. Checking and alignment of proximity sensors and IR temperature sensors for proper functioning.
 - c. Removal of dust from sensors and control cabinet.
 - d. Clearing vegetation in 5 m × 5 m area around the equipment.
 - e. Inspection of electrical wiring, power supply, voltage levels, UPS, and battery condition.
 - f. Battery replacement if defective or life expired; repair/replacement of other faulty components.
 - g. Calibration of each HABD system in every quarterly visit if needed or required by Railways and issuing Separate Certificate dually noting calibration device validation information if required by Railways. Calibration should be done as per quantity mentioned at SN-5 of ‘Schedule of rates and quantities’.
 - h. Ensuring proper functioning of SMS alerts, web portal, mobile app, and cloud-based data storage.
- iii. Joint inspection report prepared by the service engineer in two copies, signed by the consignee / Sr.DME-CR representative, and submitted to Railway for record.

6.3 Data, Cloud & Software Services

- i. Tier-IV Level Data Centre-based cloud application for Intelligent Field Devices with:
 - a. Unlimited role-based access over internet browser for monitoring, alerts, administration, and reporting.
 - b. 24×7 Tier-IV hosted data-centre management, SMS gateway, and control.
- ii. Annual subscription for:
 - a. Cloud application, data storage, and SMS-gateway-based alerts.

- b. Communication charges and SIM-based data connectivity.
- iii. Uninterrupted internet supply and SMS-alert services shall be ensured; old alerts data shall be downloadable and archived for future reference.

6.4 Software Updates & Reporting

- i. Free software updates, including bug fixes, performance improvements, and upgrades in line with technological advancements, to be provided by the contractor.
- ii. Monthly statement of alerts generated and relevant data recorded by the system to be sent to C&W Control, Bhusawal.
- iii. Colour-coded alerts (red/orange/yellow) in the interface, along with SMS and audio-visual alerts, shall function smoothly.

6.5 Near-Track Works & Protection

- i. Trenching and other works near the track shall be carried out manually; no machinery to be used near the track to avoid damage to cables and track.
- ii. All HABD cables shall be properly shielded, mounted, and protected as per IRS standards.
- iii. The contractor shall remove and refit HABD equipment (sensors, etc.) free of cost during tamping/BCM/other engineering works as and when required during the CAMC period, and ensure proper functioning of the system post-refit.

6.6 Spares, Warranty on Replaced Parts & Exclusions

- i. Stocking of critical spares (especially IR temperature sensors) at Railway premises for quick failure handling.
- ii. Parts replaced or supplied free of cost by the contractor during CAMC shall carry 2 years warranty as per standard IRS conditions.
- iii. Parts replaced on payment by Railways shall be covered by 06 months warranty or as per IRS conditions, whichever is more.
- iv. Physical damage to components not attributable to the contractor (e.g., vandalism, sabotage, third-party damage) shall be excluded from CAMC.
- v. List of material chargeable to railways due to physical damages to be submitted with bid showing material name, manufacturer, likely supplier, price & warranty period. Certification as OEM will be required if only one supplier exists for particular item (PAC item).
- vi. Chargeable spares also to be made available by firm within maximum of 05 working days.

7. Training & Documentation

- i. Annual training sessions for Railway staff and engineers at BTC-C&W, Bhusawal (BSL Division) and on-site as required.
- ii. Submission of Operation & Maintenance Manual (O&M) in both soft and hard copy (minimum 02 sets per consignee), including System description, operating procedures, troubleshooting, and inspection proforma.
- iii. Proper documentation of system design, site survey, and installation drawings separately for each site, showing rail km and GPS coordinates (latitude & longitude).

8. Safety, Earthing & Identification

- i. Sensors and field equipment shall be safeguarded to withstand hanging parts of rolling stock and dynamic track conditions.
- ii. Adequate surge and lightning protection, proper earthing, and CPVC conduits/protective covers shall be provided.
- iii. Deflector plates, retro reflective signboards, and name plates shall be installed for clear identification and safety.
- iv. Name of each equipment shall be tagged or painted for easy identification by Railway staff.

9. Damages to Railway Property

- i. The contractor shall be solely responsible for any damage or loss of Railway material during installation, maintenance, or CAMC period.
- ii. Cost of damages/loss shall be recovered from the contractor through running bills, security deposit, performance guarantee, or special security deposit as decided by Sr.DME/Bhusawal, whose decision shall be final and binding.

General Conditions

1. The contractor should submit the Police verifications certificate of the staff deployed by him to consignee at least before 7days of start of work.
2. Depositing of EPF and ESI of contractor's labour & all other taxes with concerned authorities is the liability of contractor and its challans should be submitted to railways.
3. Contractor shall be liable for payment of all statutory taxes, levies, charges etc.
4. Loss or injury: Railways shall not be responsible for any personal injury or loss to contractor's staff or any other loss to the firm while they are on the job at Railway Premises.
5. Measurement of the work activities of HABD supply, installation, CAMC will be done by authorized Railway representative of Sr.DME/BSL.
6. The contractor shall submit the detail of manpower (with particulars like, Name, Father's name, Address, Age, Passport size photo) that would be utilized for the work to the depot in-charge 7days before start of contract and any change in the manpower shall be communicated to the depot in- charge in writing. (This should be submitted before starting of the contract at Depot premises as well as in between as and when any of his employees is replaced with the new employee).
7. The contractor shall provide identity card to all those employees deputed for work who shall carry out the said work. The ID card shall carry the photograph, name, father's name, address, contact no.etc.The contractors name, address and contact no. Shall also be printed on the back side of the identity card and duly signed by the authorised representative of contractor. The contractor shall not allow anybody else to use the premises for any purpose other than that is permitted under the contract.
8. The contractor shall ensure that the workmen engaged by him do not indulge in any indecent behaviour or create disturbance in the work place during the course of work failing which the contract shall be liable to be terminated without assigning any reason.
9. No accommodation shall be given to any contractor(s) staff/supervisors for the purpose of stay. No Railway Pass/PTO shall be admissible to the men engaged by the contractor.
10. The Railway shall not be responsible for any accident that may occur to contractor's labours / servants for any reasons what so ever. The contractor will himself ensure the safety of his workers and shall be liable to pay claims, whatsoever if made by the contractor labours. Railway will not carry any responsibility of such payments. The contractor will be responsible to supply personal protection equipment's (PPE) to his staff and no additional charges are claimable for the same. Contractor should obtain the Insurance policy for his workers to comply with the Provision of workman compensation Act.
11. The cost of damage to the Railway property if caused by the contractor or his staff during the execution of work will be recovered from contractor's bills /SD/PG or any other contract running in Indian Railways.

12. Any misuse of Railway property will be viewed seriously and the actual cost with penalty will be recovered from the contractor's bills /SD/PG or any other contract running in Indian Railways and if railways deem fit contract is liable for termination also.
13. The contractor shall follow all the instructions of railway representative authorised for this work. Any rework or rectification that arises due to defective items or faulty application shall be done by contractor at no extra charge. Rework/Rectification work shall be completed by the contractor without affecting then Dispatch/service schedule.
14. The stationery required for maintaining the daily formats and other registers are to be supplied by the contractor.
15. The entire work area including the Railway track shall be kept free of any obstruction/debris released from the wagons repaired by the contractor (for placement and drawls of wagons) on the same day.
16. The contractor must ensure compliance of all labour laws and safety measures for his staff as applicable.
17. Contractor will be responsible for safety & security of stores/stored material to be used for repair of wagons.
18. The Contractor shall adhere to the Labour Rules, Workmen Compensation Act and Payment of minimum wages Act and all other Labour legislation's.
19. The contractor shall comply with the provision of the hours of the employment regulations in respect of the staff employed, by him in the manner decided upon by the appropriate authorities.
20. The Railway Administration reserves the right to decrease the quantity of HABD to install or workload and the decision of the Railway Administration in this respect shall be final and binding on the contractor. The contractor shall not claim any compensation for the decreasing of work load if any.
21. All direct or indirect costs and obligations pertaining to employment of specialized manpower if any will be borne by the contractor.
22. **Warranty:** *The contractor has to give warranty of 3 years of each HABD commissioned from the date of its commissioning as per joint certification by contractor/his representative and representative of Railways.*
23. **The contract will cover the following:**
 - a) Raw material such as MS/SS sheets, Doorway stiffening cross bar, New modified doors, Packing, door hinge, Door check spring, washer, pins, locking bolts, crib angle, middle coping, door frame etc. will be supplied by the contractor. (Only released doors will be supplied by the railways free of cost for alteration to reduced height)
 - b) Adequate number of Operators/ Labour & Supervisors shall be deployed by contractor and contractor has to abide by all "Statutory obligations" pertaining to Labour employment at work site and relevant labour laws.

- c) Complete maintenance of the contractor's Machines deployed for this work should be the responsibility of contractor and its should be maintained in safe working condition.
24. The Contractor will nominate a representative/supervisor-in-charge who will keep/maintain liaison with the Railway's nominated representative(s) regarding execution of the contract. He shall liaise with Railway for any instruction, clarification etc. He should maintain adequate communication with Railway Representative at all times for which he should carry mobile phone at all times, the number of which shall be given to Railway Administration and depot-in-charge. Additionally Contractor should deploy separate Site Supervisor in each shift.
25. The work is to be carried out on running lines; therefore, precaution shall be taken by the contractor to protect their labour and materials. The contractor must ensure before starting the work that the sick line is adequately protected and blocked for maintenance of the wagon. The contractor shall note that no compensation due to any loss of life or material or on any other account shall be made by the Railway Administration. Contractor shall be fully responsible for compensation in case of any accident, injury to their labour and on any other account.
26. The Contractor should take utmost care to ensure that no damage to the rake/coaches/Railway property takes place due to any act of workmen, while carrying out the work under this Contract. If any damage is caused to rake/coaches/Railway property due to any act of negligence of contractor's staff, such damage will be recorded by the Engineer/ Supervisor of that particular depot and amount will be assessed by him which will be approved by competent authority and will be binding on the contractor. Such amounts will be deducted from running bills, security deposit or any other amount available with the Railways.
27. The Contractor shall furnish complete details of the personnel to be deployed with supervisor(s).The name/list of all the employees along with supervisor should be submitted to Sr.DME/BSL or authorized Railway representative.
28. The tenderers may visit the HABD installation locations in Bhusawal Division of Central Railway in order to familiarize themselves with the conditions and availability of pathway/fixed installations before quoting the rates.
29. The Railways may provide open space (outside shed) where the contractor may fabricate temporary Room (or he can bring and place POTA cabin) at his own cost, office accommodation and storage area with independent lock & key for keeping the machines & material. The contractor shall be responsible for the safe custody of his machines and stores. The decision of the Railway administration with regard to Office accommodation and storage space shall be final and binding on the contractor.
30. The contractor should also maintain record of the attendance other records pertaining to compliance of labour laws of his employees and will ready to show it on demand for inspection.
31. Railway representatives shall be entitled to check at any time the equipment & consumables to be used by the contractor for executing this work as and when

required.

32. After successful installation of HABD at nominated location joint check note should be prepared covering all aspects of scope of work and satisfactory working of HABD as per Railways satisfaction, it should be jointly certified by both nominated railway representative and contractor's representative. The extracts of this joint notes will form part of the bill for verification. All such formats will have to be printed by the contractor at his own cost.
33. The contractor has to take full care to avoid any detention of trains, coaches, wagons or any other rolling stock or other railway work on any account.
34. All the works mentioned in the tender document have to be started within 90 days from the date of receipt of Letter of Acceptance. The contractor has to start all the works within the stipulated time else the penalty will be imposed as per penalty clause. However before the work is started the infrastructural and other facilities must be developed by the contractor.
35. The work dairy should be maintained by the contractor's supervisor.
36. It is the responsibility of the contractor to ensure his workmen at all times to attend the duties with retro-reflective jackets and Identity card during the contract period and should be good in behaviour. Any misbehaviour/misconduct by contractor staff is highly undesirable and such incidents if reported will be penalized as per penalty clause. The cost of the retro-reflective jackets and Identity card should be borne by the contractor.
37. No accommodation shall be given to any contractor(s) staff/supervisors for the purpose of stay.
38. The contractor shall warn all his workmen to be careful while crossing the tracks against the movement of trains. The Railway will not accept any claims in regard to any loss due to the accident in the Railway premises. The work should be carried out without damage to track and other fittings with due permission from respective departments.
39. The contractor shall ensure that he himself or his nominated supervisor is available within short notice of the SSE(C&W)/BSL or whenever required by Railway.
40. The stationery required for maintaining the daily formats/registers (Finalized by Railway Representative) and other registers are to be supplied by the contractor in advance before starting the work.
41. The contractor is responsible for the quality of work, discipline of the contractor's staff and safety of the contractor's staff.
42. The Railway administration shall not be responsible for any loss or damage to the contractor's materials, equipment, tools and plants due to fire, flood or any other cause whatsoever.

18. PAYMENT TERMS:

1. The contractor will have to submit the bill to the office of Sr.DME, Bhusawal for each quarter duly verified and signed by the authorized Railway representative along with the record of work evaluation sheet, details of penalty calculations, EPF & ESIC details & challans and other documents duly signed by contractor or his authorised representative as deemed necessary by the Railways. The bill will be scrutinized by the office of Sr.DME, Bhusawal and will be forwarded to the office of Sr.DFM, Bhusawal for arranging the payment. The Paying authority will be Sr. DFM, Bhusawal. The payment to the contractor will be made through EFT/NEFT.
2. The nominated consignee or his authorized nominated engineer or nominated Railway representative by Sr.DME is the certifying authorities for the monthly or as required period evaluation statements as mentioned in tender document.
3. The monthly bill shall be prepared by nominated consignee or authorized representative of Sr.DME/BSL, who is authorized to sign the Measurement Book based on the certified statements.
4. ADME/BSL is the authorized Officer for this contract to carry out the test checks as per the standard protocol.
5. Payment shall be made on quarterly basis on actual work done.

19. The following statutory deductions will be deducted from the payment to be made to the tenderer:

- i) Income Tax @ 2%.
- ii) Conservancy Cess as per the prevailing rate depending upon the no. of labour employed by the tenderer.
- iii) Any other tax as levied by Central and State Government from time to time.

The above taxes are indicative and may vary as per applicable tax laws from time to time. Any penalty if attracted, as indicated in the penalty clause, will also be deducted along with the rate of that item (if any) from the payments.

20. HOUSE KEEPING: The contractor should do regular housekeeping to keep HABD work site, space free of scraps, veg and litters. Scrap generated during fabrication and assembly work shall disposed-off by contractor.

In order to keep site free of scrap contractor will dispose scrap by his own arrangement to the nominated place/Bins on daily basis by contractor failing which penalty of Rs.2000/- per day will be imposed. *transportations vehicle/hand burros etc. is to be arranged by contractor.*

21. Railway is not liable for any loss or theft for the contractor's tools & plants, vehicles, machineries and materials. Contractor has to safeguard his own material at his own arrangement and cost. No compensation will be paid on this account. Railway representatives shall be entitled to check at any time the equipment & consumables to be used by the contractor for executing this work.
22. Instructions of Engineer's Representative:-Any instructions or approval given by the Engineers' representative to Contractor in connection with the works shall binding on the Contractor although it had been given by the Engineer provided always as follows:-

- a. Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power of Engineer thereafter to disapprove such work or material and to order the removal or rectification thereof.
- b. If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm every such decision.

23. Adherence to Specifications and Drawings: -

The whole of the works shall be executed in perfect conformity with the specifications, drawings, scope of work and special term and condition of the contract. If Contractor performs any works in a manner contrary to the specifications and drawings or any of them and without such reference to the Divisional Railway Manager (Mechanical), Central Railway, Bhusawal he shall bear all the costs arising or ensuing there from and shall be responsible for all losses of the Railway.

- a) Drawings and Specifications of the Works: - The Contractor shall keep copy of drawings and specifications at the site, in good order and such contract documents as may be necessary, available to the Engineer's Representative.
- b) Ownership of drawings and specifications: -All drawings and specifications and copies thereof furnished by the Railway to the Contractor are deemed to be the property of the Railway. They shall not be used on other works and with the exception of the signed contract set, shall be returned by the contractor to the Railway on completion of the work or termination of the contract.
- c) Compliance with contract request for details :-The Engineer shall furnish with reasonable promptness, after receipt of the contractor's request for the same, additional instructions by means of drawing and instructions shall be consistent with the contract documents are reasonably inferable therefore.
- d) Meaning and intent of specifications and drawings: -If any ambiguity arises as to the meaning and intent of any portion of the specifications and Drawings or as to execution or quality of any work or material, or as to the measurements or the works the decision of the Divisional Railway Manager (Mechanical), Central Railway, Bhusawal, thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the DRM (Mech)/BSL who shall have the power to correct any error, omissions or discrepancies in aforementioned items and whose decisions in the matter in dispute or doubt shall be final and conclusive.

- 24. Provision of Staff:** -The Contractor shall place and keep on the works at all times, efficient and competent Engineer, supervisor in all the shifts as per Railway Requirement to give necessary direction to Contractor's workmen and to see that they execute their work in sound and proper manner and shall employ only such supervisors, workmen and Labours in or about the execution of any these works as are careful and skilled in trades.

25. Inspection Registers and Records:

The Contractor shall maintain accurate records, plans and charts showing the dates and progress of all main operations and the Engineer or his Representative shall have access to this information at all times. Records of observations made shall be handed over to the Engineer's Representative. The Contractor's Representative will maintain the following registers at site.

i) Site Order Register: *-The Contractor shall promptly acknowledge orders given therein by Engineer or his representative and shall make all efforts to comply with them. The Contractor shall report to the Engineer the compliance so that it can be checked.*

ii) Labour Register: *-This register will be maintained to show daily strength of Labour in different categories employed by the contractor.*

Any Other Registers as instructed by the Railway Representative.

26. Penalty Clause:

1. Delay in commencement of work within 90 days from LOA: Penalty of ₹1,000 per day of delay.
2. After installation of First HABD, second HABD and similarly subsequent HABDs should be installed within 30 days of previous HABD installed otherwise penalty of Rs.1000 per balance HABD system per day will be imposed.
3. During warranty period, service engineer should attend the under repair HABD within 48 hours period after giving intimation and made functional it within 24 hours after reporting at site. Penalty of Rs.500/- per day imposed after 48 hour period and penalty of Rs.1500/- per day imposed if HABD not made functional within 72 hours of giving initial intimation.
4. Penalty during CAMC:
During CAMC period, service engineer should attend the under repair HABD within 48 hours period after giving intimation and made functional it within 24 hours after reporting at site. Penalty of Rs.500/- per day imposed after 48 hour period and penalty of Rs.1500/- per day imposed if HABD not made functional within 72 hours of giving initial intimation.
5. Other penalties (e.g., poor quality of work, data loss, repeated failures) as per the General Conditions of Contract (GCC) of Indian Railways or Rs. 1,500/- whichever is more.
6. A penalty of Rs.100/- per day per staff will be deducted as penalty for not wearing retro-reflective jacket during working across track by the contractor's staff.
7. A penalty of Rs.100/- per day per staff will be deducted as penalty for not carrying of Identity card by the contractor's staff.
8. Violation of any terms and condition of contract for which penalty has not mentioned in penalty clause a token penalty of Rs.2000/- per occasion can be imposed / any Adverse remark by Gazetted Officer of the Railways.
9. The workers should behave politely & maintain co-operation with Railway Officials/ Representative. Any misbehaviour/misconduct by contractor staff is highly undesirable and such incidents if reported will be penalized Rs.10000/- for each occasion. In addition to this that other actions as may deem fit by Railway Administration shall also

be taken including termination of contract. Decision of Sr.DME/BSL shall be final and binding on the contractor in this regard.

10. In case of any damage to the Railway property due to rough handling in the course of attention of repairs or fire on contractors fault the cost of damage will be recovered as per the extent of damage assessed by the SSE(C&W)/BSL or authorized representative of Sr.DME/BSL.
11. The decision of Senior Divisional Mechanical Engineer, Bhusawal Division, and Central Railway regarding the imposition of penalties is final and binding on the contractor.
12. **Employment of Graduate/Diploma Holders By Contractor:** Tenderer(s) Contractor(s) after award of the contract shall employ qualified Engineer on monthly salary basis and for duration as indicted below:

Contract Value	No. of Engineers/Diploma holders and Degree holders	Duration
200 lakh and above	One Qualified Graduate Engineer	During currency of Contract
Above Rs 25 lakhs and less than 200 lakh	One Qualified Diploma Holder	During currency of Contract

In case the contractor fails to employ the Qualified Graduate Engineer as mentioned above, he shall be liable to pay an amount of Rs.40,000/- per month or part thereof for the default period. If the contractor fails to employ qualified Diploma Engineer as mentioned above, he shall be liable to pay an amount of Rs.25,000/- per month or part thereof for the default period. (Railway Board's letter no.2012/CEI/CT/O/20, dated 10.5.2013).

Schedule of rates and quantities

S N	Description	Qty	Unit	Unit Cost in Rs.	Total Cost in Rs.
1	Supply Installation & Commissioning of HABD System	18	Nos.	6,33,169.42	1,13,97,049.56
Comprehensive Annual Maintenance Contract (CAMC) for three years					
2	CAMC Charges of HABD for first year quarterly visit (18 HABD * 4 visit per year)	72	Nos	14,139.46	10,18,041.12
3	CAMC Charges of HABD for second year quarterly visit (18 HABD * 4 visit per year)	72	Nos	18,123.20	13,04,870.40
4	CAMC Charges of HABD for third year quarterly visit (18 HABD * 4 visit per year)	72	Nos	22,499.70	16,19,978.40
Calibration of sensors of HABDs					
5	Calibration of sensors and field visit for each HABDs for three year	54	Nos	5,610.90	3,02,988.60
Spare items on need basis					
6	Spare items on need basis for three years	1	Lumpsum	20,00,000.0	20,00,000.00
Total cost in Rs.					1,76,42,928.00
Rs. One Crore Seventy Six Lakhs Forty Two Thousand Nine Hundred Twenty Eight Rupees only					
Note: 1. The above estimated rates are inclusive of all taxes including GST, levies charges etc. 2. Calibration of sensors and field visit for 18 nos. HABDs per year as required. 3. Total Lumpsum amount for spare items and unit cost of spares is fixed for 18 HABDs on need basis during CAMC period. Rates quoted by bidders above and below of the fixed amount of spares shall be disqualified.					

List of spares of HABD to be covered under CAMC along with fixed rates are as under:

SN	Item Description	Basic rate in Rs.
1	Infrared Temperature Sensor	94,500.00
2	Proximity Sensor	20,700.00
3	Mechanical fixture for mounting Proximity sensor	12,000.00
4	Microcontroller interfacing card	18,000.00
5	Embedded PC	40,000.00
6	Modem	3,600.00
7	UPS	20,000.00
8	Power supply card	3,600.00
9	Relay card	2,700.00
Above rates are including all taxes, GST, levies etc.		

Format of Identity Card

	<div data-bbox="1128 325 1336 552"><p>Photo</p></div> <div data-bbox="1143 560 1385 646"><p>(Signature of contractor on the photograph with his seal)</p></div>
<div data-bbox="414 783 782 1129"><ol style="list-style-type: none">1. Sr. No. of the employee2. Name of the Establishment3. Name of the Employee4. Address5. Age6. Sex7. Date of Entry in Service8. Designation/Nature of work9. Department10. Validity of date of Identity Card11. EPF No.12. ESIC No.</div>	
	<div data-bbox="1055 1268 1321 1302"><p>Signature of the Employee</p></div>
<div data-bbox="422 1379 764 1413"><p>Signature & stamp of the Contractor</p></div>	

Countersign & stamp of authorized Railway representative

The sample GST compliant invoice

1. Supplier Name
2. Supplier GSTIN
3. Invoice No.
4. Invoice Issue Date
5. Total value
6. Taxable Value
7. Goods A/c HSN, Service Accounting Code
8. Goods and Services Description
9. Unit Qty. Code
10. Quantity
11. Rate
12. Whether eligible for ITC – Partial/Full/NIL
13. IGST Rate
14. IGST Charged Amt.
15. CGST Rate
16. CGST Charged Amt.
17. SGST/UGST Rate
18. SGST Charged Amt.
19. Cess Rate
20. Cess Charged Amt.
21. Name/Recipient of Service/Goods
22. Place of Supply
23. Recipient GSTIN
24. Tax Payable on Reverse Charge Basis (Y/N)
25. TDS

Form of Declaration to be given by the tenderer before tender negotiations

Tender No. :

I _____ do declare that in the event of failure of the contemplated negotiations relating to the Tender No. _____ opened on _____ my original tender shall remain open for acceptance on its original terms and conditions. I also declare that I am aware that during this negotiation, **I cannot increase** the originally quoted rates against any of the individual items and that in the event of my doing so, the same would not be considered at all i.e. reduction in rates during negotiation alone would be considered and for some items if I increase the rates, the same would not be considered and in lieu my originally quoted rates alone would be considered and my offer would be evaluated accordingly.

Seal of the Contractor

Signature of the Contractor with date

FORMAT FOR BANK GUARANTEE BOND FOR PERFORMANCE GUARANTEE

To :-----

Central Railway

For and on behalf of the President of India

1. In consideration of the President of India (hereinafter called "the Government") having agreed to exempt M/s _____ (hereinafter called "the said Contractor(s)" from the demand, under the terms and conditions of an Agreement dtd. _____ made between _____ and _____ for _____ (hereinafter called "the said Agreement") the Performance Guarantee for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. _____ (Rupees. _____ only). We _____ (indicate the name of Bank hereinafter referred to as "The Bank") at the request of _____ contractor(s) do hereby undertake to pay to the Government an amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the Government by reason of any breach by the said contractor(s) of any of the terms and conditions contained in the said Agreement.
2. We _____ (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur merely on a demand from the Government stating their amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Government by reason of breach by the said contractor(s) of any of the terms and conditions contained in the said Agreement or by reason of the contractor's failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. _____.
3. We undertake to pay to the Government any money so demanded not outstanding any dispute or disputes raised by the contractor(s) in any suit for proceedings pending before any court of tribunal relating to our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s)/Supplier(s) shall have no claim against us for making such payment.
4. We _____ (indicate the name of the Bank) further agree that the Guarantee herein, contained shall remain in force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till Railways certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) and accordingly discharge this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the _____ we shall be discharged from all liability under this guarantee thereafter.
5. We, _____ Bank Ltd. further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations here-in-under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to the Sureties would, but for this provision have effect of so relieving us.
6. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the contractor(s).
7. We, _____ (indicate the name of the Bank) undertake not to revoke this Guarantee during its currency except with the previous consent of Government in writing.

Date this _____ day of _____ 2018.

For _____
(Indicate the name of the Bank.)

Annexure- F**Declaration regarding association of the tenderer with serving/retired Gazetted Railway Officer(s)**

Sr. No	Name of the Railway Officer	Relation ship with the tenderer	If serving, designatio n & place of working	If retired			
				Date of Retireme nt	Designation & place of working at time of retirement	Whether period of retirement is more than 1 year from the date of submission of tender	Particulars of permission taken for associating with the tenderer
1	2	3	4	5	6	7	8

Note: If no Railway Officer is associated with the tenderer, then write **NIL**.
(Please do not keep this page as blank.)

Tenderer's Seal

Signature of the tenderer

Details of the Tenderer

Sr. No.	Description	Details
1	Name of the tenderer	
2	Address	
	Mobile Number	
	Telephone Number	
	Fax No.	
	e-mail ID*	
3	Status of the tenderer: individual/proprietorship firm/ partnership firm/Joint Venture Firm/ private limited/public limited/Society/Autonomous body (Attach documentary evidence.)	
4	PAN No. (Attach documentary evidence.)	
5	GSTIN No. (If applicable) (Attach documentary evidence.)	
6	EPF Registration No. (Attach documentary evidence.)	
7	ESIC Registration No. (Attach documentary evidence.)	
8	Other Registration details under other applicable Laws (Attach documentary evidence.)	
9	Name of the person signing the tender	
10	Authority for signing the tender (Refer to Clause No. 6(b) of Part-I of General Conditions of Contract of Indian Railways)	

* The date of delivery of any letter by Railway to the contractor on the email address will be deemed to be the date of receipt of the same by the contractor. Therefore, contractor should regularly check his incoming emails. If there happens to be any change in the email ID and other contact details, the same should be communicated by the contractor to Railways immediately.

The above information should be necessarily submitted by the tenderer.

Tenderer's Seal

Signature of the Tenderer

MANDATE FORM FOR EFT/NEFT**1. PARTICULARS OF THE PARTY:**

- i. NAME: _____
- ii. ADDRESS: _____
- iii. PHONE NO: _____ MOBILE _____ FAXNO. _____
- iv. INCOME TAX PAN NO. _____ EMAIL ID. _____

2. PARTICULARS OF BANK ACCOUNT

- i. CITY: _____
- ii. BANK NAME: _____
- iii. BRANCH: _____
- iv. BANK ADDRESS: _____
- v. BANK TEL NO. _____ FAX NO. _____
- vi. BANK MICR CODE (9 DIGIT): _____
- vii. BANK IFS code: _____
- viii. BANK ACCOUNT NO: _____
(Please enclose a cancelled blank cheque)
- ix. ACCOUNT TYPE: (SAVINGS/CURRENT/CASH CREDIT): _____

3. Certified that the particulars furnished with reference to Bank Account are correct and the bank guarantees to honour all EFT/NEFT advices/reports as per RBI Regulations.

Bank's Seal

Signature of the authorized official of the bank**4. DECLARATION BY THE PARTY:**

- i) I hereby declare that the particulars given in this mandate form are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, the User institution i.e., FA & CAO, Central Railway, Mumbai or Sr.DFM, Central Railway, Bhusaval will not be held responsible.

Date _____

Signature of the Party with Stamp

ACCEPTANCE / DEVIATION SCHEDULE

Clause #	Accepted (yes/No)	If No, list Deviation(s)
Special Conditions of contract:		
Specifications of work:		

Note: If **no deviation**, then write **NIL**. (Please do not keep this page as blank.)

Tenderer's Seal

Signature of the tenderer

END of E -TENDER DOCUMENT No.: Mech-01-06-2026 (Open E-Tender) dated 11.06.2026.