

**WDFC FIELD UNIT-VADODARA-S AND T/WDFC
TENDER DOCUMENT**

Tender No: DFC-BRC-SnT-AFDAS-25-314

Closing Date/Time: 13/08/2025 15:00

GM/Co/BRC acting for and on behalf of The President of India invites E-Tenders against Tender No **DFC-BRC-SnT-AFDAS-25-314** Closing Date/Time 13/08/2025 15:00 Hrs. Bidders will be able to submit their original/revised bids upto closing date and time only. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

1. NIT HEADER

| | | | |
|--------------------------------------|---|--|----------------------|
| Name of Work | Supply, Installation, Testing and Commissioning of Automatic Fire Detection and Alarm system (AFDAS) including networking with RTU/Data logger at all 22 ALHs and 5 THs of CGM BRC Unit jurisdiction. | | |
| Bidding type | Normal Tender | | |
| Tender Type | Open | Bidding System | Single Packet System |
| Tender Closing Date Time | 13/08/2025 15:00 | Date Time Of Uploading Tender | 19/07/2025 12:19 |
| Pre-Bid Conference Required | No | Pre-Bid Conference Date Time | Not Applicable |
| Advertised Value | 35057649.98 | Tendering Section | SNT |
| Bidding Style | Single Rate for Each Schedule | Bidding Unit | |
| Earnest Money (Rs.) | 325300.00 | Validity of Offer (Days) | 90 |
| Tender Doc. Cost (Rs.) | 11800.00 | Period of Completion | 6 Months |
| Contract Type | Works - General | Contract Category | Expenditure |
| Bidding Start Date | 30/07/2025 | | |
| Are JV allowed to bid | No | Number of JV Member Allowed | 0 |
| Are Consortium allowed to bid | No | Number of Consortium Member Allowed | 0 |
| Ranking Order For Bids | Lowest to Highest | Expenditure Type | Revenue |

2. SCHEDULE

| S.No. | Item Code | Item Qty | Qty Unit | Unit Rate | Basic Value | Escl.(%) | Amount | Bidding Unit |
|---------------------------------------|---|----------|---------------|-----------|-------------|----------|------------|---------------------|
| Schedule () A-Supply of items | | | | | | | 2364918.53 | Above/ Below/Par |
| 1 | 1 | 10.00 | Kilometre | 60417.00 | 604170.00 | AT Par | 604170.00 | |
| | Description:- Supply of HDPE duct 40/33 mm as per TEC GR No. G/CDS08/02 NOV-2004 with latest amendments as available. For each Km of HDPE duct following items are to be supplied a) End Plugs-2 Nos b) Cable sealing plugs - 2 Nos. c) Plastic couplers slip fit/push fit type - 2 Nos d) End plugs to be provided along with drum-2 nos. | | | | | | | |
| 2 | 2 | 10.00 | Kilometre | 95580.00 | 955800.00 | AT Par | 955800.00 | |
| | Description:- Supply of OFC CABLE 24 FIBER AS PER RDSO SPEC IRS/TC 55/2006 REV.1 WITH LATEST AMDT (Inspection:- RDSO) | | | | | | | |
| 3 | 3 | 100.00 | Running Metre | 764.03 | 76403.25 | AT Par | 76403.25 | |
| | Description:- Medium Class G.I. Pipes to IS : 1239 (Pt. I)-2004 or latest; 100mm dia. (int. dia) 3.65 mm+/- 10% thick with coupling. G.I. pipes shall have ISI mark on it and the contractor should submit the manufacturer's test certificate of G.I. pipes. | | | | | | | |
| 4 | 4 | 5.00 | Set | 1804.97 | 9024.85 | AT Par | 9024.85 | |
| | Description:- Warning Flasher kit for ALH /TH as per circuit design | | | | | | | |
| 5 | 5 | 5.00 | Set | 8694.23 | 43471.13 | AT Par | 43471.13 | |
| | Description:- Dual tone bell / buzzer with flasher arrangement 25W horn, (Make of any ISI approved firm) working voltage as per circuit design. | | | | | | | |
| 6 | 6 | 10.00 | Numbers | 34012.87 | 340128.75 | AT Par | 340128.75 | |
| | Description:- Automatic Media changeover of Modems working on redundant channels for data transmission on OFC / Quad / Microwave Radio. | | | | | | | |
| 7 | 7 | 7.00 | Kilometre | 47988.65 | 335920.55 | AT Par | 335920.55 | |
| | Description:- Flexible cable (Power wire), multi-strand copper conductors' cross section 1x6 Sq.mm. (85 conductors each diameter 0.30 +/- 0.01) as per IS 694/1990 with insulation thickness of 0.80 mm nominal conductor resistance 3.30 ohms/km and test parameters are as per IRS(S)76/89. | | | | | | | |

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| S.No. | Item Code | Item Qty | Qty Unit | Unit Rate | Basic Value | Escl.(%) | Amount | Bidding Unit |
|--|---|----------|--------------------------------|-----------|-------------|----------|-------------|---------------------|
| Schedule () B-Execution of Indoor & Outdoor works | | | | | | | 12455570.60 | Above/ Below/Par |
| 8 | 8 | 27.00 | Per Goomty/IBH/ Auto Hut | 7076.33 | 191060.91 | AT Par | 191060.91 | |
| | Description:- Design of circuits and plans to suit layout given in the building plan of ALH/ TH/ HUT. All plans and wiring diagrams shall be prepared on Auto cad Drawing and supplied with CD. This will include supply of Control cum Indication panel diagram, NOTE: a) Guaranteed performance data. b) One copy of Installation and maintenance manual. This should include the following information - (ii) Schematic block diagram showing mounting arrangement of various modules/PCB. (iii) Details of Hardware e.g. schematic diagrams of the system details for each type of assembled PCB and part list. (iv) Mechanical drawings of every unit. (v) Details/procedure of trouble shooting of AFDAS. (vi) Dos & Don'ts (Pocket size laminated cards); (vii) The vendor shall arrange for pre-installation, pre-commissioning and maintenance check lists for successful installation, commissioning, and maintenance of the AFDAS system. | | | | | | | |
| 9 | 9 | 100.00 | Running Metre | 1053.90 | 105390.18 | AT Par | 105390.18 | |
| | Description:- Manual Horizontal Auger boring for crossing of Road at depth of 1.0m/1.02m from ground level including insertion of 100mm dia (with thickness 3.65mm) GI pipes/coupling etc. all complete as per direction of engineer in charge. supply of GI pipes is covered separately in schedule 'A' | | | | | | | |
| 10 | 10 | 20.00 | cum | 501.95 | 10038.92 | AT Par | 10038.92 | |
| | Description:- Cutting of Hard rock in trenches /Preparation of cable way/Chase 150mm wide at the bottom and 300 mm deep in hard rock (Drg prepared by contactor & approved by Engineer In charge) for laying of S&T cables where minimum required depth not possible, which is verified and agreed by Engineer In charge of the work or his representative. refilling the same with concrete mixture of 1:3:6 from top of the cable way/ chase. Payment of concrete will be made separately through a separate item in the schedule of work. | | | | | | | |
| 11 | 11 | 3.00 | Kilometre | 10187.10 | 30561.30 | AT Par | 30561.30 | |
| | Description:- Laying of S&T Cables of various cores/ pairs/ quads in trenches/ GI pipes/ RCC pipes/ DWC pipes/ Trunking. This also includes laying cables in track crossings & road crossings. Item includes provision of labels of coloured plastic adhesive tapes or any other identifiable material on each cable to give the cable number at each G.P. (Cables will be meagered before and after its laying by contractor under supervision of DFCCIL Representative and he will submit the meagering report of each testing). Length of the cable laid includes the length of the cable coiled for termination purposes. | | | | | | | |
| 12 | 12 | 100.00 | Running Metre | 34.27 | 3426.57 | AT Par | 3426.57 | |
| | Description:- Placing DWC/RCC/GI pipes along with collars in trenches at places of track and road crossings, platform cuttings etc. | | | | | | | |
| 13 | 13 | 100.00 | Running Metre | 203.74 | 20374.20 | AT Par | 20374.20 | |
| | Description:- Fixing of GI pipes for crossing the culverts, bridges etc. and concreting of ends with brick masonry at both ends as per the instruction of DFCCIL engineer at site. | | | | | | | |
| 14 | 14 | 50.00 | Numbers | 401.00 | 20050.07 | AT Par | 20050.07 | |
| | Description:- Supply and installation of RCC cable route marker engraved and painted on both sides along the route every 50mm and route diversion as per approved drawing or latest/ Stone marker. | | | | | | | |
| 15 | 15 | 1080.00 | cum | 298.21 | 322066.80 | AT Par | 322066.80 | |
| | Description:- Excavation of cable trench as per cable route plan,1.2 Mtr. deep and of 0.3 Mtr. to 0.6 Mtrs wide advised by Engineer-in-charge alongside the track in normal (all type) soil/strata, conforming to distances as per cable route plan and refilling. This work includes clearing of route from bushes etc, covering cable laid in trench by loose soil for a layer of 50mm thickness approximately before covering by bricks. The work shall be done as per the extant practice on DFCCIL and instructions of Railway Engineer at site. In case 1.2m depth of trench is not achievable due to site conditions, specific approval of DFCCIL will be required for each site where trench depth of 1.2m is not possible. Without the approval of DFCCIL, no payment for trenching will be made for trench depth less than 1.2m. | | | | | | | |
| 16 | 16 | 100.00 | Running Metre | 306.54 | 30653.91 | AT Par | 30653.91 | |
| | Description:- Digging of trench 1.2 M deep from rail flange/ road level and, 0.3 Mtrs to 0.6 Mtrs wide and back filling after placing of DWC/ RCC/GI pipe. (Placing of DWC/RCC/GI pipe covered separately). The ballast disturbed be screened and dressed as required by Engineer-in-charge or his representatives and road tarred immediately. For track crossing and Road Crossing approved drawings are to be followed. | | | | | | | |

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| 17 | 17 | 7845.00 | Metre | 1349.36 | 10585689.97 | AT Par | 10585689.97 | |
|--|--|----------|-----------|-----------|-------------|----------|-------------|---------------------|
| | Description:- Horizontal direction drilling/boring without damage of surface road using Auger Machine. The bore shall be 150 mm dia & shall be done at the depth of a minimum 1200 mm from the ground level. The ground level shall be considered ignoring the bank height of the bank of the road. The length of the bore shall be minimum 4 Mtrs long. this include insertion of different dia DWC pipe/ GI pipes coupling etc. as per direction of Engineer In charge. | | | | | | | |
| 18 | 18 | 9.00 | Kilometre | 15719.51 | 141475.57 | AT Par | 141475.57 | |
| | Description:- Blowing/drawing of OFC cable in the HDPE pipe duct already provided in the trench and protective work. All the equipment/machinery required shall be arranged by the contractor as per DFCC engineer instruction. | | | | | | | |
| 19 | 19 | 10.00 | Numbers | 19088.76 | 190887.60 | AT Par | 190887.60 | |
| | Description:- Splicing 24 core optic fibre cable and making the splicing joint with contractor's own machine and tools. Joint should be prepared in such a way that the top of the enclosure should be at a depth of a minimum of 1.2 mtr /1.6mtr including digging & extraction of OFC cut. Splice loss of each fibre should be within acceptable limits. | | | | | | | |
| 20 | 20 | 5420.00 | Metre | 4.63 | 25094.60 | AT Par | 25094.60 | |
| | Description:- Laying / drawing of various type of cables on PVC pipe /capping casing, or cable trays, ladder, shelter etc. as instructed by DFCIL engineer at site. (Indoor cables to be drawn through pipe, outdoor cables if required to be clamped on wall/FI) | | | | | | | |
| 21 | 21 | 22.00 | Lot | 35400.00 | 778800.00 | AT Par | 778800.00 | |
| | Description:- Alteration in RTU/ Datalogger and Software upgradation for Fire Alarm System (This includes integration of AFDAS system with Datalogger & configuration of SMS alerts & alarms etc.) | | | | | | | |
| S.No. | Item Code | Item Qty | Qty Unit | Unit Rate | Basic Value | Escl.(%) | Amount | Bidding Unit |
| Schedule () C-Supply and Execution | | | | | | | 20237160.85 | Above/ Below/Par |
| 22 | 22 | 27.00 | Numbers | 71318.23 | 1925592.21 | AT Par | 1925592.21 | |
| | Description:- Supply, Erection, Testing and Commissioning of UL/EN/FM/Vds/LPCB approved Microprocessor based Networkable Analog addressable and modular type of Fire Alarm Control panel with display, in built changing facility and provision of GSM module suitable to send SMS to configured mobile numbers. The panel should be equipped with sufficient nos. of loops and provision of expandability as per RDSO Specification No. RDSO/SPN/217/2021 ver 3.0 of latest. The Control Panel shall be the central processing unit of the system. receiving and analyzing signals from Probe type bimetallic heat detectors, UV & IR flame detectors, Heat and Smoke multi sensors, LHS Interface and Manual call Points, providing audible and visual information to the user. The panel shall have provision of connectivity of TCP-IP suitable for programming and remote monitoring. The panel shall have a dedicated RS-232 serial port for direct PC or MODEM connection, for interfacing with existing Data Logger optional remote printer. (As per RDSO Specification No. RDSO/SPN/217/2021 ver 3.0 or latest) (Inspection: - RDSO) | | | | | | | |
| 23 | 23 | 98.00 | Numbers | 3161.71 | 309847.13 | AT Par | 309847.13 | |
| | Description:- Supply, Installation, Testing & Commissioning of Analogue Addressable Multisensor Detector with multiple sensitivity (adjustable at site) levels e.g. smoke, heat, rate of rise heat etc., programmable for timed automatic sensitivity selection with base, and other accessories as required as per RDSO specification no. RDSO/SPN/217/2021 ver 3.0 or latest. (Inspection: - RDSO) | | | | | | | |
| 24 | 24 | 27.00 | Numbers | 4457.32 | 120347.62 | AT Par | 120347.62 | |
| | Description:- Supply, Installation, Testing & Commissioning of Manual call points, addressable & resettable, with Inbuilt isolator or alternate arrangement. Shall comply to the specification No. RDSO /SPN /217 /2021 ver 3.0 or latest. (Inspection: - RDSO) | | | | | | | |
| 25 | 25 | 1500.00 | Metre | 816.82 | 1225230.30 | AT Par | 1225230.30 | |
| | Description:- Supply, Installation, Testing and Commissioning of Analogue Type Linear Heat Sensing cable (LHS) as per the RDSO Specification RDSO/SPN/217/2021 ver 3.0 or latest (Inspection: - RDSO) | | | | | | | |
| 26 | 26 | 27.00 | Numbers | 94601.12 | 2554230.10 | AT Par | 2554230.10 | |
| | Description:- Supply, Installation, Testing and Commissioning of Interface modules for Linear Heat Sensing cable (LHS) and control panel along with one zone module as per the RDSO Specification RDSO/SPN /217/2021 ver 3.0 or latest (Inspection: - RDSO) | | | | | | | |
| 27 | 27 | 27.00 | Numbers | 181624.88 | 4903871.76 | AT Par | 4903871.76 | |
| | Description:- Supply, Installation, Testing and Commissioning of aspirating (Air Sampling) Type smoke detector with four zone interface module and isolator with power supply unit, back box and all other accessories, CPVC pipe as per actual requirement at site (required for aspirating (Air Sampling) Type smoke detector) and all other necessary accessories as per the RDSO Specification RDSO/SPN/217/2021 ver 3.0 or latest) (Inspection: - RDSO) | | | | | | | |
| 28 | 28 | 54.00 | Numbers | 81675.54 | 4410479.01 | AT Par | 4410479.01 | |
| 28 | | | | | | | | |

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| 29 | Description:- Supply, Installation, Testing and Commissioning of UV/IR Flame detector with all required modules as per RDSO/SPN/217/2019 Ver.3.0 or latest (RDSO Specification RDSO/SPN/217/2021 ver 3.0 or latest.) (Inspection: - RDSO) | | | | | | |
| | 29 | 27.00 | Numbers | 6609.58 | 178458.54 | AT Par | 178458.54 |
| 30 | Description:- Supply, Installation, Testing & Commissioning of Hooter cum Strobe complying to the specification No. RDSO/SPN/217/2021 Ver.3.0 or latest. (Inspection: - RDSO) | | | | | | |
| | 30 | 5600.00 | Metre | 87.08 | 487648.00 | AT Par | 487648.00 |
| 31 | Description:- Supply, Installation, Testing & Commissioning of Fire survival integrity cable 2Cx 1.5sq mm twisted shielded armored copper cable with accessories as per the specification No. RDSO/SPN/217/2021 ver 3.0 or latest. (Inspection: - RDSO) | | | | | | |
| | 31 | 27.00 | Numbers | 4423.98 | 119447.46 | AT Par | 119447.46 |
| 32 | Description:- Supply, Installation, Testing & Commissioning relay module with back box and all other accessories as per the RDSO specification No. RDSO/SPN/217/2021 ver 3.0 or latest. (Inspection: - RDSO) | | | | | | |
| | 32 | 5420.00 | Metre | 39.82 | 215836.87 | AT Par | 215836.87 |
| 33 | Description:- Supply and fixing PVC pipe of 25 mm size of IS standards on wall/floor etc All necessary items like screws/nails required to be supplied by contractor. Inspection by representative. | | | | | | |
| | 33 | 162.00 | Numbers | 7289.33 | 1180871.96 | AT Par | 1180871.96 |
| 34 | Description:- Supply, Installation, Testing & Commissioning of analogue Addressable Loop Power monitor module with inbuilt isolator complying to RDSO/SPN/217/2021 ver 3.0 or latest (Inspection: - RDSO) | | | | | | |
| | 34 | 5.00 | Station | 521059.98 | 2605299.89 | AT Par | 2605299.89 |
| 34 | Description:- Supply, installation, wiring, testing and commissioning of embedded fanless PC or Server PC with required hardware and operating system (Including operating system software and SQL server license version etc.) It includes supply, installation, testing and commissioning of Graphic software (GUI) along with license for control panels to monitor the health of detectors and modules along with control panel. The software shall be accessible over TCP/IP module and shall comply to RDSO/SPN/217/2021 Ver 3.0 or latest. (GUI Software RDSO Inspection) | | | | | | |
| | 34 | | | | | | |

3. ITEM BREAKUP

| | |
|------------------------|--|
| No item break up added | |
|------------------------|--|

4. ELIGIBILITY CONDITIONS

Special Financial Criteria

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|-------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document. | No | No | Allowed (Mandatory) |

Special Technical Criteria

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Allowed (Mandatory) |

5. COMPLIANCE

Check Lst

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Not Allowed |

Commercial-Compliance

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Allowed (Mandatory) |

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| | | | | |
|---|---|----|-----|--------------------|
| 2 | Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions. | No | Yes | Allowed (Optional) |
|---|---|----|-----|--------------------|

General Instructions

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Not Allowed |

Special Conditions

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Not Allowed |

Technical-Compliances

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Allowed (Mandatory) |

Undertakings

| S.No. | Description | Confirmation Required | Remarks Allowed | Documents Uploading |
|-------|------------------------|-----------------------|-----------------|---------------------|
| 1 | As per Tender Document | No | No | Not Allowed |

6. Documents attached with tender

| S.No. | Document Name | Document Description |
|-------|--------------------------|----------------------|
| 1 | FinalFireAlarmtender.pdf | Tender Document |

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017 and amendments/ revisions thereof.

As a Tender Inviting Authority, the undersigned has ensured that the issue of this tender does not violate provisions of GFR regarding procurement through GeM.

Signed By: VIPULKUMAR MAHESHPRASAD DAVE

Designation : DYPM/S T/BRC