

East Central Railway
(Signal & Telecom Department)

No. - ECR/S&T/Correspondence/Con/Div/2023

Date: 12.03.2024

Policy No.- 04/2024

Sr. DSTE,
DDU/DHN/DNR/SEE/SPJ

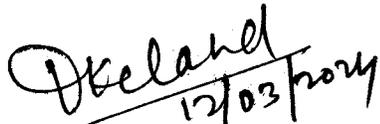
Sub: Policy regarding AMC of Efftronics make data loggers in ECR

ECR has data loggers of Efftronics make at most of its stations and the divisions undertake the AMC for the same for its proper upkeep and healthy working with better availability.

Divisions may undertake this AMC with the OEM through single tender as per provisions available in MSOP 2018. The special terms and conditions for the tender is enclosed herewith. The OEM has been authorized to either participate directly or through one of its authorized partner.

This has the approval of PCSTE/ECR.

Encl: Special Terms and Conditions for the AMC.


12/03/2024

(Dharmarand Kumar Chand)

Dy. CSTE/Signal/HQ

for Principal Chief Signal & Telecom Engineer

Special conditions for Annual maintenance Contract of Efftronics make datalogger

1	General
1.1	All the rules and conditions governed by Indian Railway standard General conditions of Contract April, 2022 with up to date correction slips will apply for this tender.
1.2	All the regulations, general obligations, all the special condition of contract mentioned in the tender document applicable for this tender.
1.3	The special conditions of contract quoted herein in the Tender shall be supplement to the General Conditions. In the event of any conflict or inconsistency between them the special conditions of the contract, contained herein shall prevail.
1.4	The OEM may either participate in this tender directly or authorize one of its partners/dealers to participate on its behalf. The responsibility for the overall maintenance shall however rest with the OEM. Further, trained manpower for the purpose of AMC shall be provided by the OEM.
2	Scope of Work
	The scope of work as per the tender is " Comprehensive Annual Maintenance Contract of Efftronics make data-logger along with all accessories like FEP, FAS & Server installed in division for a period of 3 years. The contract covers a comprehensive Annual maintenance contract of data Loggers system which include following:-
2.1	Preventive Maintenance: Service Engineer shall be required to undertake periodical maintenance of data loggers once every quarter to clean, test, adjust & checking up of all parameters for proper working of modules, parts & complete systems. The service engineer shall carry with him all necessary tools (i.e. screw driver, multimeter, programming kit etc.) and equipment for the maintenance activity. The preventive maintenance include network monitoring of datalogger/RTU, networking and all works related to dataloggers/RTU installed at all locations including control office equipments. During the schedule maintenance, complete technical audit of the system as per Pre-commissioning check list should be done jointly with the Railway representative. Parameter of items test/maintenance shall be recorded against standard/nominal values/range. Record of periodical maintenance shall be made available at the station concerned under the custody of the technician posted at that station.
2.2	Breakdown Maintenance: Repair/ Replacement of defective cards/ modules/ sub-systems/ parts/ components in either in hardware or software or in any form. The repaired and replaced modules shall have same performance as that of original.
2.3	Modification/ upgrade: Modification/ up gradation of Hardware/Software as per policy guidelines issued from time to time by Railway Board/RDSO/HQ to overcome any deficiency noticed in the working of the system to improve reliability of the installation shall be in the scope of the AMC. This includes programming for additional inputs already available in the data logger that railways may plan to use subsequently. Wiring arrangements shall be done by Railways.

2.4	Validation and exception report generation: Complete validation of analog and digital inputs, simulation software, verification of exception report generation as per RDSO/RB's guidelines will be done at the in commencement of AMC before passing of first on account bill and thereafter once in each year. Validation of data logger input to be carried out during any alteration work done in Relay room and replacement/addition of any signaling equipment's at stations, which includes wiring of new relays/ miscellaneous works at site as directed by supervisor. Also fault logics pertaining to any alteration work shall also be part of the AMC. At FEP/CMU location the application software should be checked for its proper functioning. The cases of false triggering of alarms should be analyzed and corrective action should be taken to curb their appearances.
2.5	The scope of AMC covers keeping adequate spare modules with each service engineer.
2.6	This AMC also covers the training about basic maintenance and also first line of fault rectification to Railway maintenance personnel.
2.7	The contractor shall hand over trouble-free system back to railways after expiring of AMC. Final payment shall be made after certification of no defect in the system.
2.8	The effectiveness of RTU port in concerned datalogger to be checked as part of this AMC. The backup data of 3months to be created in external storage drive by the OEM. The external storage drive shall be arranged by the OEM/contractor.
2.9	The Contractor/OEM shall replace certain components such as EPROM batteries, fuses, Condenser etc. having limited Life as part of preventive Maintenance.
2.10	During AMC period, if any policy guidelines regarding datalogger is issued by Railway Boards/RDSO/HQ, then that must be followed for this AMC as well.
3	Pre-site Inspection: Before starting the maintenance contract, full working condition of Data Logger system, FEP and FAS should be jointly checked by firm's Authorized Engineer and JE/SSE (Signal) from division. If any servicing /replacement have to be undertaken for full functionality of the equipment, the same will be carried out at additional cost except the Data Logger system, FEP and FAS which went defective during the currency of previous AMC.
4	Items Covered under AMC
4.1	Complete DLE/FEP/FAS/Server hardware and Efftronics make battery chargers will be covered under AMC. Any defective unserviceable component/card of the above said equipment shall be replaced by new one, old card/components will be taken by firm. This also includes third party items, modems and other items as per schedule.
4.2	Efftronics yard viewer software, Reloading of Data base etc. to support data logger in failure analysis system. The damage due to high voltage/lightening shall be covered under AMC. The OEM should take due care in providing required protection equipment before starting AMC.
4.3	In case of system shutdown, the software required for restarting the system along with any other accessories shall be made available by the firm.
4.4	Installation of Additional software such as MS office, SOI, 2000, Antivirus, Operating system etc. required for proper working of the data loggers.
4.5	The software changes or upgrades required due to change in signaling system or yard layout during AMC period will be carried out by the OEM in case the capacity exists in the data logger for the same.
5	Items not covered under AMC
5.1	The list of equipment/peripheral which are outside the purview of AMC are batteries, external cables terminals, Relays, Communication Channel, Earthing and interface equipment.

5.2	The AMC shall not cover any damage to the equipment either whole or part of the system due to external reason such as flood, earthquake, miscreant/terrorist activities, fire.
6	Preventive Maintenance checks The following preventive maintenance checks are to be carried at the specified periodicity (every quarter) to keep the equipment in good working condition:
6.1	The General cleaning of the chassis should be done using blower to remove dust from intake and exhaust points of the chassis.
6.2	The general condition of PCBs should be checked. The components should be checked for excessive heating. The proper connectivity of heat sink and its effectiveness should also be checked. The electrical contacts should be cleaned with a cloth dampened in carbon tetrachloride.
6.3	The loose electrical connections should be identified and attended. The condition of wiring to be checked to identify peeled insulation and general deterioration. If any wiring changes are to be done then the proper lugs should be used.
6.4	If any part is found defective or not working up to the satisfaction or over aged then the repair or replacement should be done.
6.5	The activities specific to the systems are mentioned in which should be carried out during periodic visits.
7	Breakdown Maintenance
7.1	Breakdown Maintenance of the complete System including software for the problems experience and as reported by Railways including defects, immediate replacement of faulty cards of any type, are to be carried out by the contractor.
7.2	On experiencing a problem in the equipment, the Railways shall inform about the problem to the contractor through Telephone/FAX/Post/E-mail/WhatsApp or any other means. The contractor shall register the complaint and confirm it by issuance of suitable case number.
7.3	The breakdown calls shall be attended on beyond office hours, Sundays and other Holidays including National Holidays.
7.4	Major Breakdown The failure of datalogger, Mother Board, Processor Card, Digital and Analog Card, Software or any other firmware including Battery Charger (if connected) resulting in the total failure of the data logger, RTU or CMU is considered "Major". Major Break down calls shall be attended within 4 hours of getting the complaint from railways. The contractor should note that the penalty as per penalty clause given in the above Paragraph would be imposed as per penalty clause if such a Major breakdown call is not attended within 4 hours of getting the complaint. The meaning of attending the breakdown call is visiting the station, attending the failure and rectifying it by replacing the faulty module/card/firmware/software.

7.5	<p>Minor Breakdown The failure of a Modem Card, Display unit, Printer Port, Single Digital /Analog port or minor item resulting in failure of networking mode, printing facility at a station are considered "Minor". Minor Breakdown calls shall be attended within 12 hours of getting the complaint from railways. The contractor should note that the penalty as per penalty clause would be imposed, if such a Minor breakdown call is not attended within 12hours of getting the complaint from railways. The meaning of attending the call is visiting the station, attending the failure and rectifying it by replacing the faulty module/card/firmware/software.</p>
7.6	<p>After attending each major break down, the joint break down report shall be prepared by contractor or his authorized Engineer/representative and Railways Representative not below the rank of JE (Signal). A copy of this report shall be submitted to DSTE/ADSTE or any other officer so nominated Sr. DSTE.</p>
8	<p>Training</p>
8.1	<p>This AMC also covers the training about basic maintenance and also first line of fault rectification to Railway staff/supervisor as nominated by Sr. DSTE. Contractor shall also prepare and make available maintenance and fault rectification manual at all sites. First training module should be arranged in each depot of SSE/Signal in-charges, in first quarter of AMC. After that one training module shall be held by the Contractor once in six months at all of the SSE depots over concerned division. It should be monitored by service Engineer in co-ordination of Railway supervisor. Record of the training imparted shall be maintained in a register whose format will be issued by Sr. DSTE of the division.</p>
9	<p>Change of site</p>
9.1	<p>The site of maintenance can be changed by railways during the course of AMC by notifying the contractor at least 15 days in advance of AMC visit without any change in the payment terms. However, the site will not be changed beyond the jurisdiction of Railway Division. It may be noted that such a situation may arise if the equipment is shifted at railways cost to any other station within division and no transportation or installation damage is caused by railways.</p>
10	<p>Site facilities</p>
10.1	<p>To enable the contractor to discharge their obligations under this contract, Railway shall provide required assistance to the contractor for free and easy access to equipment.</p>
10.2	<p>For necessary co-ordination during trouble shooting or faults, Railways shall make available to the contractor free of charge appropriate staff familiar with Railways.</p>
11	<p>Deployment of Service Engineer</p>
11.1	<p>Service Engineer deployed by the OEM shall be Technically Competent, Well Conversant and fully equipped for carrying out all activities as described in Scope of work so that he is able to attend various failures independently with optimum utilization of time and minimizing the duration for opening of relay room as well as impact on train operation in an expeditious and rational Manner.</p>

11.2	Maximum number of stations /system for AMC under one Service Engineer will be limited to 15, location and their jurisdiction will be decided mutually by Sr. DSTE and the firm depending on the time consumed in the periodical maintenance/breakdown maintenance and the geographical spread. The Service Engineer employed should be exclusively for the Purpose of Scope of Work as per AMC conditions and should not be utilized for any other purpose such as installation/maintenance of other Equipment/ locations.
11.3	Contractor shall provide details of Service Engineers of the OEM (name along with qualification, work experience and contact details) exclusively engaged for the said work in his AMC offer to Sr. DSTE/Engineer-in- Charge. Any change in Service Engineer shall be done with the consent of Sr. DSTE/Engineer-in-Charge.
11.4	The qualification of Service Engineer should be minimum Diploma/graduate Engineer in accordance with GCC. These service Engineers must possess adequate experience of not less than 02 years in the same field so that they are able to carry out effective preventive and predictive maintenance along with timely rectification of partial and complete system failure Engineer Should have Competency Certificate Issued by OEM.OEM competency certificate should cover the training imparted to AMC Engineer in Schedule maintenance, Troubleshooting of various types of failures by simulating them, programming, if any etc.
11.5	If at any point of time Railway finds, that the deputed Service Engineer/s lacks the requisite technical competence as is expected from them for efficient execution of AMC or finds the behavior of the Engineer/s as improper, indecent, the firm shall be bound to replace the Engineer promptly within a time period of not extending two weeks from the date of advice to the firm to this effect otherwise the Deputed Engineer shall be treated as absent from work and penalty/fine shall be imposed in accordance to contract condition and this may be considered to constitute willful/ persistent disregard to instruction of Railway Engineer-in-charge of the work.
11.6	Normally, all the deputed service engineers shall remain present in their respective Head Quarters or in the respective sections as per the requirement of Railway.
11.7	The signal control in-charge/sectional in-charge/suitable person (monitoring authority) deputed by Sr. DSTE shall ensure the all-time presence of all field engineers in their respective Head Quarters or in the respective sections as per requirement of AMC and shall accordingly closely monitor their movement as per requirement of Railway. They shall also maintain attendance for this purpose. The field AMC Engineer shall keep the monitoring authority informed of his movement.
11.8	The firm shall arrange competent engineer (having adequate technical competence) as replacement before granting any leave or permission to leave their allotted Headquarter/section to any field engineers after taking the consent of Railway representative thus ensuring presence of field engineers at all times in all nominated Locations or in their Respective Section over the Division.
11.9	The Service Engineers nominated by the contractor should contact the SSE/Control in the division every day and give their movement and acquaint themselves with the failures of Equipment at stations.

11.10	In case of absence of any field engineer without arranging his substitute/reliever engineer 'absence penalty' on the basis of per day per engineer will be imposed and recovered from bill. For maintaining less than requisite engineers at a time 'absence penalty' on the basis of per day per engineer shall be imposed and recovered from the next bill.
12	Issue of Identity cards by Contractors
12.1	The OEM is bound to issue identity card to each and every person employed by him and deployed for execution of the contract work as per the prescribed format provided in the tender document, at his cost. Failure on the part of the contractor to issue identity cards to their employees will be treated as breach of contract conditions and therefore will be dealt as per Clause of GCC 2022 with latest amendments.
12.2	It is mandatory on the part of every employee, deployed by the contractor to keep in his possession, the identity card, issued by the contractor throughout the execution of the work. Failure to possess such Identity will be treated as unauthorized presence in the Railway premises. Such persons shall be liable for prosecution as per law.
12.3	It is mandatory for the contractors to submit the list of the employees issued with the identity cards and deployed for execution of the particular contract, to the Railway's Engineer at site before commencement of the work and also for any subsequent changes made during the execution of the work.
12.4	No claims whatsoever arising out of implementation of special conditions pertaining to issue of identity cards shall be admissible.
12.5	The format of the I-Card is placed as Annexure-I of the Special Condition of Contract.

13. Penalty Clause

1	ABSENCE PENALTY PER DAY: Absence by any Service Engineer without arranging his substitute/reliever Engineer	200% of the maintenance Charges per day for the equipment being maintained by service Engineer
2	Penalty for late arrival at failure site: If Service Engineer fails to attend the failure site within stipulated time, a penalty will be imposed as mentioned on the monthly AMC charges of equipment.	0-12 Hrs.: Stipulated Period 12-18 Hrs.: 5% of monthly AMC Charges. 18-24 Hrs.: 15% of monthly AMC charges > 24 Hrs.: 25% of monthly AMC Charges

3	Penalty for extra time consumed in rectification after reaching at failure site will be imposed on the monthly AMC charges of equipment.	0-4 Hrs.: Grace Period 4-8 Hrs.: 5 % of monthly AMC Charges. 8-12 Hrs.: 10 % of monthly AMC Charges 12-16Hrs.: 25 % of monthly AMC Charges >16 Hrs.: 50 % of monthly AMC Charges
4	Penalty for non/less availability of each type of spares of buffer stock. (Deficient spare penalty)	Rs. 500.00 per day for each type of spare.
5	Penalty for delay in replacement of defective standby Components/ Cards/ Modules within 7 days after being informed by Railway Administration	5 % of the per day AMC charges for per day delay after 7 th day of that equipment.
6	Penalty for missing the periodical schedule of maintenance of equipment	5 % of the per day AMC charges for per day delay after 7 th day of scheduled date of that equipment.
7	Penalty for major breakdown	0-4 Hrs.: Stipulated Period. Penalty @ ₹5000/- will be levied for delay per location along with penalty of ₹500 per hour after 8 hours
8	Penalty for non-submission of technical analysis within 15 days of any failure	₹10,000/- lump sum.

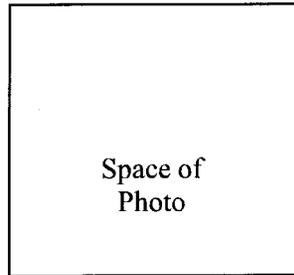
Note-

1. If failure is being prolonged beyond one week for any system, no payment for that quarter will be made for that particular system.
2. The contractor shall rectify the defects as may be pointed out in the course of AMC. Where defects due to bad workmanship on the part of the contractor or otherwise notices or any dispute arising as to the correctness of the defects pointed out, the railway Engineer's decision in this regard shall be final and binding.
3. If the Service Engineer feels that the failure is due to any other reason which is beyond his purviews, the same should be reasonably supported by reports/measurements/readings etc. Railways decision in this regard shall be final.
4. Quarterly maintenance is included. Contractor shall ensure the Quarterly maintenance is done with in ± 7 days as per the last schedule of visit. Otherwise, penalty as per contract condition will be imposed.

5. If the system requires major repairs, the contractor shall provide a standby equipment within 24 hours at the contractor's cost to make the system functional.

Annexure -I

Identity Card

**Identity Card**

IDENTITY CARD NO :
 DATE OF ISSUE :
 CONTRACT AGREEMENT NO :
 NAME OF THE CONTRACTOR :
 ADDRESS :

Particulars of Employee

NAME OF THE EMPLOYEE :
 AADHAR NO. :
 PERSONAL IDENTIFICATION MARK :
 PERMANENT ADDRESS :

(SIGNATURE OF CONTRACTOR)

(The person who signed the original tender document
or the contract agreement)

(SIGNATURE/THUMB IMPRESSION OF
EMPLOYEE ENGAGED BY CONTRACTOR)