पूर्व मध्य रेल East Central Railway



प्रधान मुख्य सिगनल एवं दूरसंचार इंजीनियर का कार्यालय हाजीपुर – 844 101 Office of the Principal Chief Signal & Telecommunication Engineer Hajipur - 844101

Comp. No.: 787 ECR-HQ0SnT(TLPL)/1/2020

Dtd. As signed.

Sr.DSTE DHN, DDU, DNR, SEE & SPJ E. C. Railway

S&T Policy No.02/2025

Sub: Regarding maintenance of OFC Network and Towers in ECR. Ref: Rly Bd's letter No 2023/Tele/6/(3)/1(3359640), Dated 09.09.2024

Rly Bd's under reference letter is enclosed for information and necessary action regarding maintenance of OFC network and other Telecom assets. In this respect, division are advised the following: -

- Division has to maintain the Telecom assets which have not been transferred to RCIL, including new OFC network/Towers created by Railways. The maintenance of such assets shall not be transferred to RCIL.
- 2. In this connection, under various works like KAVACH/ABS work, new OFC cables have been or being laid and new towers have been or being installed in the section between Pt. Deen Dayal Upadhyay (DDU) and Pradhankhunta (PKA). These OFC network and Towers have to be taken over by division for their maintenance. If required, such maintenance activities may be outsourced by division.
- 3. For outsourcing, tentative guidelines for OFC and Tower are given in Annexure 'A', which may be adopted by division. These guidelines are not exhaustive. Division can modify these guidelines with prior approval from HQ, if required, and incorporate further special conditions in the Tender as per their specific requirements. For outsourcing, fund from D&G charges of estimates from which assets has been created, may be utilized initially.
- 4. Open Tender may be invited for outsourcing. These Tenders may include the detailed scope of maintenance with defined parameters, preventive maintenance, frequency of maintenance, rectification of faults so as to ensure the availability of asset of the highest order. Penalty provisions shall also be incorporated in case of any deficiency in maintenance.
- 5. RCIL is maintaining Railway OFC and Tower assets and have outsourced the maintenance of these assets. Division may take the reference of the tender document/tender conditions adopted by RCIL for maintenance of existing OFC/towers etc. (weblink for reference attached below). Any condition/suggestions, for implementation of maintenance/tendering policy in this matter, should be sent to this office within 15 days. Formal guideline will be issued by HQ/ECR based on feedback from divisions.

This is issued with the approval of PCSTE/ECR.

DA: As above

https://ecr.indianrailways.gov.in/view_section.jsp?lang=0&id=0,2,279,1938

(अजीत कुमार) (Ajit Kumar) मुख्य संचार इंजीनियर / पूमरे / हाजीपुर CCE/ECR/Hajipur

Annexure "A'

Flowing can be included in outsourcing OFC network maintenance :-

- 1. OFC and Associated Telecom Equipment Maintenance: The sectional supervisor (SSE /JE Tele) will be responsible for its end-to-end OFC cable maintenance in their section. Besides OFC maintenance, associated Telecom equipment maintenance like power plant, DG sets if available, Air Conditioners if available and not maintained by Electrical, minor repairing of shelters/building like Porta Cabin which are not maintained by Engineering, Earthing arrangements etc. For Kavach OFC, sectional SSE/JE Tele may be authorized to open the relay room/Station kavach room as per SEM-I para 21.2.4
- 2. **Preventive Maintenance of OFC**: Details for Preventive maintenance for Cable Protection like regular patrolling and surveillance of OFC Route to have preventive OFC link disruptions. Attending to/Safe-guarding against any signs of damage or potential damage. Details of Planned repairs to existing joints/terminations and Preventive maintenance of OFC.Cable (measurements with OTDR and Power equipment), restoration of OFC cuts, mean time to repair response time, restoration time, record of fault repair time, monitoring and maintenance at equipment locations etc.
- 3. **Maintenance Plan Requirements:** Details to be submitted in Maintenance plan by Contractor, Details of the man-power and equipment proposed to be located at different sites to cover the jurisdiction for the maintenance of the OFC network. Details of Installation of Joint Closure & Splicing of OFC, upkeep of Power equipment (Charger, battery etc.).
- 4. **Penalty Provisions:** Details of Penalty provisions for non-compliance/deficiency in the maintenance of OFC, Power equipment and other associated equipment.

Following can be included in the outsourcing for Tower maintenance:

- 1. **Tower Maintenance and structural checks**: Details of maintenance for Feeder and Power Cables between RR Station and tower, Earthing and its meggaring and maintenance, Verticality check and level of top of foundations, Painting/Galvanizing and its finishing, Protection against lighting, Cleaning of towers, foundation checking and attending the same in case of settlement or damage, Structural stability, tilt of the tower and settlement of foundation if any; Buckling/distortion of members, if any, permissible tilt and if beyond the permissible limit then action for arresting the same and then rectification, Corrosion; Foundations and stability; Connections, looseness of bolts, Checking distortion of members using piano wire and scale, if necessary, Tower aviation lights.
- 2. **Responsibilities in case of natural disasters**: Responsibilities in case of damage /disturbances due to heavy rains/heavy wind/cyclone, etc. restoration to be done to the extent possible within provisions of maintenance agreement. In case such damage/disturbance, requires additional work like replacement of damaged tower member, fitting arrangements, aviation lamps, earthing, re-alignment, re-painting etc., cost to be assessed by Railways for both material and labour portion and with mutual consent can be executed by the contractor.
- 3. **Call-Based Maintenance**: Also, in normal conditions, call-based attending of failure/deficiency noticed to be done within reasonable time, as decided by Division.
- 4. **Penalty Provisions**: In the event of failure of contractor to complete the work or deficiency, suitable penalty may be imposed.

ECR-HQOSnT(TLPL)/1/2020-O/o Dy.CSTE/HQ/ECR

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PCSTE

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भारत सरकार Government of India रेल मंत्रालय Ministry of Railways रेलवे बोर्ड (Railway Board)

महाप्रवधक (प्रशासना) करण की पूर्व-मध्य रेल 111 SEP 2024

सं.2023/Tele/6(3)/1(3359640)

Rail Bhawan, New Delhi–110001 Dated: 09.09.2024

General Manager, All Zonal Railways

Telecom Circular: 07/2024

Sub.: Maintenance of OFC & other Telecom Assets by Railways

Ref.: Board's letter of even number dated 04.12.23

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Railway Board, vide above referred letter, had advised Zonal Railways not to transfer the OFC assets being created to RailTel. In this respect, Railways are advised that besides OFC, no new Telecom assets created shall be transferred to RCIL.

- 2. Railways are also advised to maintain these Telecom assets which have not been transferred to RCIL, including OFC, on their own. The maintenance of these assets can be outsourced, if desired, by Zonal Railways.
- 3. For outsourcing, tentative guidelines for OFC and Tower are given in Annexure, which may be adopted by Zonal Railways. These guidelines are not exhaustive. Railways can modify these guidelines, if required, and incorporate further special conditions in the Tender as per their specific requirements. Open Tender may be invited for outsourcing. These Tenders may include the detailed scope of maintenance with defined parameters, preventive maintenance, frequency of maintenance, rectification of faults so as to ensure the availability of asset of the highest order. Penalty provisions shall also be incorporated in case of any deficiency in maintenance.

This issues with the approval of AM/Tele/Railway Board.

Signed by

Dharmendra Singh

Date: 09-09-2024 14:06:23
(धर्मेन्द्र सिंह)

निदेशक / दूरसंचार
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Copy: PCSTEs, All Zonal Railways.

1/3104840/2024

Annexure

Following can be included in the outsourcing for OFC network maintenance:

1. **OFC and Associated Telecom Equipment Maintenance**: At least one team for maintenance in a section length of 200 Km. Besides OFC maintenance, associated Telecom equipment maintenance like power plant, DG sets if available, Air Conditioners if available and not maintained by Electrical, minor repairing of shelters/building like Porta Cabin which are not maintained by Engineering, Earthing arrangements etc.

2. Preventive Maintenance of OFC:Details for Preventive maintenance for Cable Protection like regular patrolling and surveillance of OFC Route to have preventive OFC link disruptions. Attending to/Safe-guarding against any signs of damage or potential damage. Details of Planned repairs to existing joints/terminations and Preventive maintenance of OFC Cable(measurements with OTDR and Power equipment), restoration of OFC cuts, mean time to repair ,response time, restoration time, record of fault repair time, monitoring and maintenance at equipment locations etc.

3. **Maintenance Plan Requirements**: Details to be submitted in Maintenance plan by Contractor: Details of the man-power and equipment proposed to be located at different sites to cover the jurisdiction for the maintenance of the OFC network. Details of Installation of Joint Closure & Splicing of OFC, upkeep of Power equipment (Charger, battery etc.).

4. **Penalty Provisions:** Details of Penalty provisions for non-compliance/deficiency in the maintenance of OFC, Power equipment and other associated equipment.

Following can be included in the outsourcing for Tower maintenance:

- 1. Tower Maintenance and structural checks: Details of maintenance for Feeder and Power Cables between RR Station and tower, Earthing and its meggaring and maintenance, Verticality check and level of top of foundations, Painting/Galvanizing and its finishing, Protection against lighting, Cleaning of towers, foundation checking and attending the same in case of settlement or damage, Structural stability, tilt of the tower and settlement of foundation if any; Buckling/distortion of members, if any, permissible tilt and if beyond the permissible limit then action for arresting the same and then rectification, Corrosion; Foundations and stability; Connections, looseness of bolts, Checking distortion of members using piano wire and scale, if necessary, Tower aviation lights.
- 2. **Responsibilities in case of natural disasters**: Responsibilities in case of damage / disturbances due to heavy rains/heavy wind/cyclone, etc. restoration to be done to the extent possible within provisions of maintenance agreement. In case such damage/disturbance, requires additional work like replacement of damaged tower member, fitting arrangements, aviation lamps, earthing, re-alignment, re-painting etc., cost to be assessed by Railways for both material and labour portion and with mutual consent can be executed by the contractor.
- 3. Call-Based Maintenance: Also, in normal conditions, call-based attending of failure/deficiency noticed to be done within reasonable time, as decided by Railway.
- 4. **Penalty Provisions:** In the event of failure of contractor to complete the work or deficiency, suitable penalty may be imposed.

Note: RCIL has been maintaining Railway OFC and Tower assets and have outsourced the maintenance of these assets. Railways may refer to RCIL Tender document/conditions for maintenance of such assets before finalizing their tender conditions.