Accident-I

Sub: Rear Collision of Train no. 12841 (Shalimar-Chennai) Coromandal Express with Goods Train No. N/DDIP and Side Collision with 12864 (Bengaluru Howrah) in Kharagpur Division of South Eastern Railway on 02.06.2023.

I. Cause of the Accident

The rear-collision was due to the lapses in the signaling-circuit alteration carried out at the North Signal Goomty (of the station) in the past, and during the execution of the signalling work related to replacement of Electric Lifting Barrier for level crossing gate no. 94 at the Station. These lapses resulted in wrong signalling to the Train No. 12841 wherein the UP Home Signal indicated Green aspect for run-through movement on the UP main line of the station, but the crossover connecting the Up main line to the Up loop line (crossover 17A/B) was set to the UP loop line; the wrong signaling resulted in the Train No.12841 traversing on the UP loop line, and eventual rear-collision with the Goods train (No. N/DDIP) standing there.

II. Remarks and Recommendations

Remarks and recommendations made by Commissioner of Railway Safety and Action Taken by Railways are given below

S,no	Recommendations	Action Taken by Railway
1	A drive should be launched to update the Completion signalling wiring diagrams, other documents (SIP, RCC, SWRD, Panel/VDU diagrams etc.), and lettering of signaling circuits at site.	Drives have already been launched regarding: (i) Status of completion documents vide this office letter No. 2020/Sig/21/Safety Performance dated 14.06.23, and (ii) Status of checking & verification of writing work details of signaling gears at site vide letter No. 2021/Sig/21/Safety Performance dated 28.06.23. This is a continuous process, and Zonal Railways have been advised to monitor the same closely.
2	Standard practices should be followed for carrying out signalling-modification work.	Policy for commissioning of new works and alteration to existing signaling installations, has been issued vide railway Board's letter No. 2020/Sig/21/Safety Performance dtd. 10.06.23 & letter no. 2012/Sig/SF/2(policy) dtd.20.07.23.

<table>
<tr><td>3</td><td>Before taking up modification of the, existing signalling circuits, functional tests of the existing circuits, under alteration, should be carried out to ensure that actual circuits are in accordance with the completion drawings.</td><td rowspan="2">These issues have been covered under the new policy circular issued, vide items no. (v) and (iv) of letter no 2012/Sig/SF/2(Policy), dated 20/07/2023 respectively.</td></tr>
<tr><td>4</td><td>Any alteration to signalling circuits should be carried out with an approved circuit diagram, and in presence of an Officer.</td></tr>
<tr><td>5</td><td>A separate team should be deployed for checking and testing of modified signalling circuits and functions before restoration/ reconnection of the work.</td><td>In case of minor day-to-day works of maintenance, repair & replacement activities, instructions have been issued vide Railway Board's Letter No.
2023/TT/IV/9/2 dtd. 16.06.23 for final correspondence test with ASM. This aspect has been taken care of in the JPO issued under the signature of AM/Signal & AM/Traffic, Railway Board.
A JPO has also been issued by SER under the signatures of PCSTE & PCOM. This JPO envisages that the preparedness shall be checked by nominated staff and actual execution shall be carried out by officers & staff duly authorized in writing.
In case of major works instructions are already in vogue.</td></tr>
<tr><td>6</td><td>A competency certificate should be issued after a rigorous practical training for carrying out signalling modification works. Both the Execution, and Checking & Testing of Signalling – modification works should be done by staff in possession of this competency certificate.</td><td>The procedure of issue of competency certificate is in vogue. The same is issued by IRISET (Indian Railway Institute of Signal Engg & Telecommunications) in case of SSE/ JE (Signal) and Zonal Training Centers in case of technicians.
Further, instructions have been issued to training institutes/centers for emphasis on practical training to carry out signaling modification works vide Railway Board's letter No.2020/Sig/IRISET dtd.08.08.2023.</td></tr>
<tr><td>7</td><td>In the event of a condition wherein pick up of both ‘Normal’, and ‘Reverse’ indication relays is detected for a point, all signal movement over that point should be</td><td>A Committee comprising of officials from Railways and signal design experts from Original Equipment Manufacturers (OEMs) of electronic</td></tr>
</table>

	prevented. In case of EI, this should be registered as fault condition, and the system should shut down automatically.	interlocking was given the task to examine the issue. Based on the recommendations of committee, the standard point circuit for EI has been revised and instructions have been issued to all Zonal Railways vide letter no. RDSO-SIGOEI(CKT)/1/2020 dtd 29.08.24 to incorporate the modified point detection circuit in standard typical circuits of EI for uniform adoption over all Zonal Railways.
8	If the status of a point indication relay (physical relay) is 'Normal', then the command for operation of the point from Reverse to Normal should not generate; and vice- versa.	The recommendation proposed was looked into by the committee. Addressing the same is causing some other undesirable scenarios. As such the same is not agreed to. However, the hazard that was sought to be addressed is being mitigated by incorporating by modification of point detection circuit as proposed in item 7 above.
9	Point detection circuits should be carried in a separate cable for each Point/Crossover without any intermediate termination.	Cable without intermediate termination is feasible by provision of Direct Drive which is under trial.
10	The point switch groups should be eliminated in EI installations.	The same is already catered in standard typical circuit of EI.
11	Provision should be made for separate logging of physical relays in the Station data-logger.	Instructions in this regard have been issued vide this office Letter No. 2018/Sig/18/6-Data Logger/1 dtd. 27.06.23.
12	RTU should be provided at end-goomties for logging of digital and analog inputs for ensuring end to end matching of status of gears.	
13	The Station Masters should be made aware of possible faulty conditions of EI system that could be detected through indications on the Panel; these should also be listed and incorporated in the SWR.	A drive has been launched where in joint counseling was done to sensitize station staff vide Railway Board's letter No. 2021/Sig/21/Safety Performance dtd 10.06.23.
14	As a long-term measure, Signalling functions/gears should be directly connected to EI, through OFC, eliminating intermediate relays.	Provision of Direct Drive is under Trial.

Accident-II

Subject: Rear end collision of Train no. 13174 DN (Kanchenjunga Express) and Goods Train no. GFCJ Container in Katihar Division of N.F Railway on 17.06.2024.

I. Cause of the Accident

Occurred due to lapses at multiple levels in managing the train operations under Automatic Signal failures. This includes an error in: -

(i) Issue of T/A 912 instead T/D912 in case of all Signals failure violating the provision of SR 9.12/1

(ii) Non-issuing of the Caution Order as stipulated in SR.9.11/1(h).

(iii) Non-availability of critical safety Equipments (Walkie-Talkie) with the loco pilot and train manager of DN GFCJ

(iv)The station master failed to take the signature of the Train Manager on Authority Operating Form T/A 912 as presbribed in the form

(v) Inadequate counselling of Loco Pilots and Station Masters about train operation in Automatic Signaling territory creating misinterpretation and misunderstanding of rules.

This accident is classified under the category of ´Error in Train Working”.

II. Remarks and Recommendations

Remarks and recommendations made by Commissioner of Railway Safety and Action Taken by Railways are given below

S.no	Recommendations	Action Taken by Railways
1	The large number of signaling failures in automatic signaling territory is a cause of concern and should be taken up with RDSO and OEMs to improve the reliability of the system.	Guidelines for improving Reliability of Signalling system have been issued vide RB's letter no. 2012/Sig/PRIME/1 dated 31.07.2024. Further specifically for the section, Zonal Railways have drawn an action plan and same has been implemented to improve the reliability.
2	For the existing Automatic signaling section, a Joint Procedural Order for dealing with signaling failure in automatic signaling territory likely to last for some time or cause serious delay as mentioned in GR 9.12, should be issued by PCSTE, PCOM & PCEE of NFR.	Zonal Railways have been advised regarding JPO on ABS territory vide RB's letter no. 2023/Sig/26A/ECOR/1 dated 05.08.2024. Railway Board has issued Unified Subsidiary Rules and Authority Forms under GR 9.12 vide Letter No. 2024/TT-IV/12/10 dated 16.08.2024.
3	Introduction of new Auto signaling sections should consummate with the provision of Automatic Train Protection. Further, the necessity of Auto Signaling in the Non-Suburban section shall be	1. ABS is provided as per traffic operational requirement. 2. Kavach is being implemented progressively.

	reviewed considering the limited number of train movements in the Non-suburban section.	However, instructions have been issued to give priority to Kavach on sections where Automatic Signalling is installed or works are in progress.
4	The occurrence of as many as 208 Cases of Signal Passing at Danger from 1.4.2019 to 31.03.2024, out of which 12 cases resulted in collision, highlights the limitations of preventive measures taken by the Zonal Railways (counselling of Loco Pilot/Assistant Loco Pilot, safety drives, etc.). This underscores the need for the implementation of the Automatic Train-protection system (KAVACH) on top priority. Use of non-signaling-based systems such as Artificial Intelligence based detection of the RED aspect of the signal and providing an early warning to the Loco Pilot/GPS based anti-collision systems shall be explored for provision in locomotive cabs across Indian Railways in non-ATP territory.	
5	Availability of walkie-talkie sets, being the safety critical equipment, to all Loco Pilots & Train Managers of all the trains shall be ensured all the time. For this purpose, if required, necessary changes in the procurement policy shall be effected. Further, Recording of conversations made by the Station master through Walkie-Talkie shall be ensured by providing VHF receiver cum recorder in Data logger Room.	Instruction have already been issued for treating VHF walkie-talkie sets as a lobby equipment vide Board's letter No.2010/Tele/11(3)/1-Part(1) (3467095) dated 24.06.2024. Following this, the issues pertaining to availability of walkie-talkie instruments to Loco Pilots & Train Managers have been addressed to a large extent. Further, the competent authority has granted exemption from PPP-MII policy for procurement of quality VHF walkie-talkie sets. As regards recording of conversations made by the Station master through walkie-talkie, it may be mentioned that Zonal Railways have already been advised vide letter No.2021/Tele/8(1)/6 dated 13.09.2021 (Annexure-III) to make necessary arrangements to install equipment with voice recording facility of conversation taking place on Driver/Guard communication channel within the radio coverage area of station VHF sets, which is presently under implementation on Zonal Railways.

		The same have also been reiterated vide RB letter dated 16.04.24.
6	The GR was issued by the Railway Board in the year 1976, since then lot of changes has taken place in the GR. There is a need to revise and re-issue the GR. Further, the corresponding SR is varying across the Zonal Railways. There is a need to bring uniformity in the SR of Zonal Railways by the Railway Board to the maximum extent possible.	The issue of revision of General Rules is under consideration in the Railway Board in consultation with IRITM and Zonal Railways. **GR 1.02 (55) states: 'Subsidiary Rule' means a special instruction which is subservient to the General Rule to which it relates and shall not be at variance with any General Rule;** Thus, the SRs has to be issued by various zonal railways in accordance with their local condition but the same shall not be in variance with any GR.
7	The provisions of the SR related to automatic signaling territory shall be reviewed with regard of the applicability of various operating forms — T/A 912, T/B 912, T/C 912, and T/D 912.	Railway Board, vide letter 2024/TT-IV/12/10 dated 16.08.2024, has issued Unified SR regarding automatic signaling territory & applicability of various Operating Forms (T/A 912, T/B 912, T/C 912, T/D 912).
8	Any changes in GR and SR should be vetted by the Safety Wing of the Railway Board/concerned Zone for the elimination of any ambiguity / clash with other rules.	Guidelines have been issued to all Zonal Railways vide Board's letter no. 2023/Safety(Inquiries)/3/7 dated 20.06.2024.
9	Classification of Operating staff into A, B, C & D category as advised by Railway Board vide Letter No. 2002/Safety-I/18-2 dated 16.02.2012 shall be implemented in true spirit.	Classification of Operating staff into A, B, C, D category has been already advised by Railway Board letter No. 2002/Safety-I/18/2 dated 16.02.2012. Further, categorization of Train Managers will be examined.
10	Crash-worthiness feature of the passenger coaches shall be reviewed in reference to standard EN-15227. On priority, at least the last two coaches of every passenger-carrying train should have crash-worthiness feature as per standard EN-15227. All new	1. Modified LWLRRMD, design of LWLRRMDAC and LSLRD coaches with high crash energy absorbing capability has been developed. Prototype Modified LSLRD Coach is under manufacturing at RCF/KXH and would be taken up for crash test at RDSO, Lucknow.

	coaches should be turned out with crash-worthiness features and existing coaches shall be retrofitted during major schedules of coaches. It is noted that around 500 ICF coaches of different types have been manufactured with crash-worthiness features. These coaches shall be converted into SLR coaches and attached at either end of the rake to minimize loss of human life and Railway property in case of collisions.	2. Provision of these modified design LWLRRMD, LWLRRMDAC, and LSLRD coaches with high crash energy absorbing capability would be done in a phased manner.
11	Railway is in the process of retrofitment Crew Voice & Video Recording System (CVVRS) in locomotives to conversation of Loco Pilot with Train Manager, Station Master, etc. It shall be implemented on priority	CVVRS is being provided on electric locomotives. CRIS is the nodal agency for procurement and commissioning of CVVRS on locomotives. As on date, about 450 electric locomotives are provided with CVVRS. Tender is being floated by CRIS for 14,364 CVVRS to be provided on 2,779 diesel and 11,585 electric locos.
12	All the systems such as Datalogger, VCU of Locomotive, Control office clock, Station master office clock, etc. shall be synchronized with GPS.	Instruction regarding Data logger synchronization with GPS clock already exists. Presently all Data loggers are being commissioned with the same. Action has been taken by RDSO to synchronize the VCU clock to GPS standard time by incorporation in Version 6 of Specification for propulsion system, which is developed by RDSO.

Accident-III

Subject: Derailment of Train No. 12759 (Charminar Express) after dashing with dead end Terminal Platform No. 5 at Hyderabad Station of Secunderabad Division of South-Central Railway on 10.01.2024.

I. Cause of the Accident

Caused due to the following factors:

1. Delayed application of A-9 brakes by LP and non-application of emergency brake by ALP violating the instructions issued vide SOB 09/2022 dt. 5.3.22 and S.R No. 4.49.1 of South Central Railway.
2. Shifting of stop board to the dead end, leaving very little/no margin of error for LPs, which acted as trigger to this accident.

This accident which resulted in grievous injury to one passenger and simple injury to five passengers **is classified under the category "Error in Train Working".**

II. Remarks and Recommendations

Remarks and recommendations made by Commissioner of Railway Safety and Action Taken by Railways are given below.

<table>
<tr><th>S.no</th><th>Recommendations</th><th>Action Taken by Railways</th></tr>
<tr><td>1</td><td>LPs & ALPs shall be sensitized to follow safety measures while working the trains as per extant instructions in terms of G&SR 4.49.1& SOBs issued from time to time.</td><td>Agreed.
A letter no. 2024/Elect(TRS)/113/6 dated 13.12.2024 has been issued to Zonal Railways in this regard.</td></tr>
<tr><td>2</td><td>Stop boards at terminal stations to be provided at appropriate distance from dead end buffers to leave margin of safety.</td><td>In G&SR and SEM, there is no specific mention of the distance at which stop boards are to be provided from the dead-end buffer stop at terminal station.</td></tr>
<tr><td>3</td><td>Passenger lines on terminal platforms should be provided with High Capacity Dead End Energy Absorption Buffer-Stops.</td><td rowspan="2">A Joint Procedure Order (JPO) for installation and maintenance of dead ends was formulated and approved by Board (MRS, MTr., ME, MT & FC).

This was circulated vide letter no. 2009/M(C)/141(G) Vol. II/Part to all Zonal Railways for maintenance of dead ends where upgraded buffers to new specification will be fitted.

Further, RDSO has formulated "Schedule of Technical Requirements for supply, installation and commissioning of</td></tr>
<tr><td>4</td><td>Policy regarding standard design and installation drawings for dead end buffers and responsibility for installation and maintenance to be issued by the Railways.</td></tr>
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		High-Capacity Dead End Energy Absorption System for Station/Yard for Passenger Coaches & Locomotives in Indian Railways".
5	Thorough site survey of existing CSRs to be done and drawings updated.	Thorough Joint Survey has been conducted by Engineering and S&T officials of Secundrabad Division and both SWR & SWRD were updated on 13.02.24 & 20.03.24 respectively. Instructions have been issued to zonal railways vide Board's letter No.2024/CE-II/CRS/12759/SCR dated 02.07.2024 for compliance to be undertaken in coordination with Signaling and Traffic departments.
6	Feasibility of increasing CSRs to be Examined in light of extant instructions under IRSEM para 17.2.4 (a) and 17.2.5 (c) (iii).	

Accident-IV

Subject: Derailment of Train no. 12506 (North-East Express) at Raghunathpur Station in Danapur Division of East Central Railway on 11.10.2023.

I. Cause of the Accident

Due to breakage of rail in approach of LC Gate No. 59/B/T: The failure to timely detect the flaws in rail (containing heterogeneities of complex oxides of Calcium, Aluminum, Magnesium and Silicon), initiation of fatigue crack from these locations of clustered inclusions which acted as stress concentration locations and subsequent propagation of these cracks reaching a critical length, led to overload failure.

II. Remarks and Recommendations

Remarks and recommendations made by Commissioner of Railway Safety and Action Taken by Railways are given below

S.no	Recommendations	Action Taken by Railways
1	Stricker monitoring should be excercised in controlling the various processes involved in manufacture of rails. Railway may consider exploring possibilities of Real Time Monitoring of the health of track.	Continuous improvement & up gradation is being done by Railways and rail manufacturing plant of SAIL / Bhilai for ensuring better quality of steel making & Rail rolling. Many important steps have already been taken for enhancing rail qualities which are as under: **Improvement in manufacturing quality in rails at SAIL/Bhilai-** For production of better quality of rails, SAIL/Bhilai has installed the following equipment in Steel Making Shop: i. Electromagnetic Stirrer- This equipment used to homogenize the liquid rail steel at the time of bloom casting. ii. Automatic Mould Level Controller (AMLC)- This equipment used to maintain the metal of liquid steel in mould for producing better quality of rail blooms. iii. Slag Detector cum Slag Arrester-This equipment used to arrest the flow of slag from Ladle to Tundish.

		Improvements in Chemical & Metallurgical property of Rails- i. IR has switched over from 880 grade rails to cleaner steel of R260 grade rails since April 2021. ii. R260 has better mechanical properties also. iii. The O_2 and N_2 content in liquid steel is controlled within 20 ppm max and 90 ppm max respectively, at par with European specifications. iv. H_2 content in liquid steel is 1.6 ppm max, which is a world bench mark. v. The norm of aluminium content in liquid rail steel is reduced from 0.015% max to 0.004% max. vi. The norm of Yield strength has been increased from 460 MPa to 550 MPa. vii. Hot surface defect detection system installed for early detection of defects during manufacturing stage. viii. Automatic body flatness measurement equipment and control rail straigthtness of rails. For proper monitoring of track health, various modules in the Track Management System (TMS) are operational. These include monitoring of USFD testing of rails and welds. USFD operators regularly feed the USFD testing data of rail and weld during daily USFD testing on TMS . These USFD testing data are monitored regularly at all concerned levels for necessary maintenance. For real time monitoring following technologies are under trail/testing for broken rail detection system in various zonal railways. i. Continuous Broken Rail Detection System (NGRT): Trial in North Eastern Railway is under progress.

		ii. Acoustic Domain Technology 'Rail Acoustic': Trial in North Central Railway is under progress. iii. Vibration Energy-based Broken Rail Detection System: Trial in North Central Railway is under progress.
2	Proper mechanism should be available with the Railway for identification of fatigue cracks developed in rails.	a) The present system of ultrasonic testing of rails by Single Rail Tester/Double Rail Tester is capable of detecting the transverse fatigue defects (Kidney defects) which are nearly inclined at 20 degrees in the rail head region. However, these machines are not capable to detect the vertical oriented transverse fatigue defects in rail head. Phased array SRT is capable of detecting such defects. b) The field trial of Phased array SRT had been completed. c) Zonal Railways/ PSUs have been advised for adoption of Phased Array Ultrasonic Single Rail Tester (PAUT SRT) for rails testing.
3	The locomotives, and coaches of all running trains should be closely examined and defective rolling stock should not be permitted, more-so in Mail Express Trains with high speed. Records of maintenance of Coaches and Loco may be computerized similar to what has been done for Track Monitoring System (TMS) so that the data can be readily accessed for analysis and scrutiny.	Coaches of all running trains are examined regularly as per laid down procedures, manuals, and instructions. After ascerrtaining the laid down parameters these coaches are certified fit for operation in service by duly issuing the Brake Power Certificate. With the advent of information technology, IR envisaged the digitalization, automation, and instrumentation of maintenance practices of rolling stock to leverage data and empower rolling stock maintainers by providing them with historical information related to maintenance, defects, and

		deficiencies of rolling assets at their fingertips. Keeping the above benefits of technology, the software application named CMM (Coaching Maintenance Management) for the maintenance of coaches was conceived as a pilot project in FY 2009 for the implementation in 3 coaching depots viz New Delhi (NDLS), Lucknow (LKO), and Mumbai Central (BCT, now MMCT). The initial objective of the project was to computerize the manual record-keeping of maintenance and analyze the data through Business Intelligence (BI) tools. After the success of pilot project, the project's 2nd phase was started and implemented to 89 depots out of the 200+ depots spread over the IR network along with the enhancement in scope of work to capture all gamut of coaching activities. Recently, this application has been expanded to production units to capture the coach assembly (Rolling Stock certificate) records at the origin of the information, which will enable CMM user in end to end tracking the fitment to failure life cycle of each individual components. It is further supplemented that presently CMM is being used by all the field units & ZR HQs for feeding & fetching requisite information of Passenger Rolling Stocks like rake maintenance commissioning Data etc. after phase 3 completion. Moreover, BPCs after rake maintenance are also being issued through CMM portal. The CMM software solution has been made available to all coaching depots of IR and more than 99%

		of brake power certificates are now issued through CMM. The full-fledged implementation of ICT is envisaged in phase-4 of CMM. Further other coaching stocks (such as Vande Bharat, Vande Metro, MEMU/EMU, DEMU) will also be included in Phase 4. The CMM application covers the entire life cycle of the coach starting from the production to the condemnation. The broad functionalities under its ambit are:- • Coach Master for generating coach numbers, capturing parameters of coaches as well as components, rolling stock certificate. • Rake maintenance Process covering entire maintenance work being carried out on washing line and pit line. • Sick line (Coach Maintenance) process to cover all planned and unplanned major maintenance tasks, which are not possible to carry out on the washing line. • The manpower booking process for task-wise nomination of staff. • The material booking process for capturing coach-wise fitment of material. Integration with WISE Workshop Information System) for exchange of coach's periodic overhaul-related information.
4	Alternate power supply source should be available to RTIS to continue recording the events in the Locomotive even after disruption of supply from the Battery.	RDSO modification for power supply modification is under implementation over IR including ECR and being monitored at Rly. Bd's level. The RTIS system which are being installed in Phase-2 have inbuilt battery with 30 minutes backup.

		After implementation of this modification power will be available to RTIS directly from battery even after switch off HOBA switch for power supply to locomotive
5	Railway may consider installing Cab Voice Recorder in the Loco to record the conversation between the crew during/just before any Accident. This may be extended to facilitate contacting the local Divisional Train Control.	Crew Voice and Video Recording System (CVVRS) is installed in 479 locomotives and is under implementation by CRIS in all locomotives.
6	Formal training or guidelines are to be issued for Videography and Photography of the Accident Site including with Drone Camera of Locomotive, coaches & track; necessary training should be imparted to the Railway staff.	Guidelines for videography and photography at accident site have already been issued vide Board's letter nos. (i) 2005/Safety (A&R)/26/6 dt. 11.12.2019 (ii) 2016/Safety (A&R)/1/17(pt.) dt. 11.12.2020 and (iii) 2019/Safety (A&R)/1/10 dt. 16/17.12.2020. (iv) 2022/Safety(A&R)1/2 dated 06.05.2022 Further, these guidelines have also been reiterated vide Board's letter no. 2022/Safety)Inquiries)/3/6 dated 15.11.2023.
7	Railway may consider informing the local Civil Authorities including NGOs available nearby, immediately after an accident so that medical relief can be arranged at the earliest.	Contact details of local civil authority like DM, SP, Local Thana, are being displayed on board available at all railway stations. Contact details of the NGO like Private Hospital, Nursing home are also being displayed on board at all railway stations. These contact numbers are being checked and updated time to time in Disaster Management Plan.

Accident-V

Subject: Accident of Train no. 12876 (ANVT-PURI Neelanchal Express) at Suisa station yard under Ranchi Division of South Eastern Railway on 01.06.2024.

I. Cause of the Accident

Occurred due to failure of equipment i.e. metallic carbon strip of working pantograph of the train

II. Remarks and Recommendations

Remarks and recommendations made by Commissioner of Railway Safety and Action Taken by Railways are given below

S.no	Recommendations	Action Taken by Railways
1	Automatic Dropping Device (ADD) should be provided in pantographs to detect damage to metallic carbon strips	1.Amendment No. 2 has been issued to RDSO Technical Specification for High Reach Pantograph for A.C. Electric Locomotives Specification No, RDSO/2007/EL/SPEC/0054 Rev. '3' on 17.01.2025 2.The amended specification now incorporates ADD feature in High Reach Pantograph. All future procurements will be done with latest amended specification
2	Considering the frequent premature replacement of metallic carbon strips; specifications, quality check at the time of procurement and service life of the metallic carbon strips need to be reviewed.	RDSO is now holding performance review meetings for ADD in particular for high reach pantograph along with Zonal Railways concerned. Issues from Zonal Railways are being discussed to take corrective measures for improvement in the quality.
3	Vacancies in the cadre of supervisors should be filled up so that trip inspection of locomotives is carried out at the prescribed level of officials.	Occurrence and filling up of vacancies is a continuous process on Indian Railways considering its size, spatial distribution and critically of operation. Adequate

		and suitable manpower is provided to cater to the regular operations, changes in technology, mechanisations and innovate practices. The vacancies are filled up primarily by placement of indents by Railways with Recruitment agencies as per operational and technological requirements. During ten years i.e. from 2014-2015 to 2023-2024, 4282 candidates for the post of SSE (Graduate Engineers) and 25430 candidates for the post of junior Engineers/DMS/CMA have been empaneled by 21 RRBs. 7951 vacancies for the post of JE/DMS/CMA has been notified under CEN No. 03/2024 in July 2024 and Computer Based Test-1 has already been completed on 18.12.2024.
4	Telephone number of ambulances and hospitals displayed at stations should be called and verified by station masters, at least once in a month.	Contact details of local civil authority like DM, SP, Local Thana, are being displayed on board available at all railway stations. Contact details of the NGO like Private Hospital, Nursing home are also being displayed on board at all railway stations. These contact number are being checked and updated from time to time in Disaster Management Plan.