EAST COAST RAILWAY

Office of the
Pr. Chief Safety officer
Bhubaneswar.

No:- ECoR/SFY/Alert advice-51/2025/472 Date: 30.07.2025

To
The Divisional Railway Manager
KUR, SBP & WAT

ALERT MESSAGE-51

Sub:-Rear end collision between T/No.-13174 DN and GFCJ Container between section Rangapani (RNI) -Chatterhat (CAT) BG Electrified Double Line Auto signaling section of Katihar Division of Northeast Frontier Railway at 08.50hrs on 17.06.2024.

THE ACCIDENT:

On 17.06.2024 at 8.50 hrs there was a Rear collision of T/No.-13174 DN and GFCJ Container between section Rangapani (RNI) -Chatterhat (CAT) BG Electrified B Route Double Line Auto signaling section of Katihar Division of Northeast Frontier Railway resulting derailment of 05 coaches of 13174 Exp. and 11 BLC wagons of DN GFCJ container with 10 casualties, 10 grievous injury and 33 simple injury. Loco Pilot and Asst. Loco Pilot of the Goods train and Train Manager of the Coaching train were expired. Total cost of damage was Rs.2,77,64,853/-.

PARTICULARS OF TRAINS & CREW INVOLVED:

1. DN T/No.13174 Kanchanjunga Exp. engine with 23 coaches having 100% brake power, BPC issued at SDAH/ER; left RNI station at 8.33hrs on paper authority T/369(3b) and T/A912 passing the starter and advance starter of RNI station and proceeding as per G&SR 9.02 observing the failure auto signal no. AS-654, AS-652 and was just about to stop AS-650.
2. DN GFCJ container hauled by multiple loco with 46 BLC loads with valid BPC arrived RNI station at 8.15hrs and departed at 8.45 hrs on paper authority T/369(3b) and T/A912 passing the starter and advance starter; collided in rear of 13174 Exp. at a speed of 40 KMPH which was reduced on application of emergency brake from a speed of 78 KMPH.
3. LP and ALP of 13174 Exp. signed ON at NJP at 7.00hrs on 17.06.2024 after a rest of above 40 hrs and LP & ALP of DN GFCJ container signed ON at 6.44 hrs at NJP on 17.06.2024 after taking rest of more than 30 hrs.

THE SECTION:

The length of Rangapani (RNI)-Chatarhat(CAT) block section is of 14.13 KMs having Nine interlocked level crossing gates and divided into **Nine** Auto Signals with provision of MSDAC for track detection, GGTronics make Axle Counters and to achieve redundancy, Dual Axle Counters with interlocked auto Huts.

THE BACKGROUND & CAUSE OF THE REAR COLLISION:

1. There was a signal failure of DN starter S-4, DN advance starter S-2 and all DN auto signals between RNI-CAT at 5.50hrs and all the track sections were showing red and all signals are showing blank in auto territory at the VDU of RNI. However, at VDU of CAT the auto signals AS-654, AS-652 and AS-650 were showing RED whereas all other signals AS-648 to AS-638 were showing as per signal aspect sequence.

2. The signal staff attended to the failure by replacing the 6 Amp blown up fuse of NV-MUX & MSDAC and also reset the track sections in the jurisdiction of Auto Hut-4.
3. Due to resetting, Track circuit No. A2XT, 654XT, 652XT turned into preparatory mode, however the signal aspect of AS654, AS652, AS650 remained in ON position.
4. Further, the track circuit A2XT turned into preparatory mode and reset at 08:43:21 hrs due to which the Advance Starter S2 turned to '**Yellow**' aspect at 08:43:21 hrs and the starter signal turned into **Yellow** aspect at 08.43.23 hrs.
5. The Loco Pilot of DN GFCJ passed starter S-4D at a speed of 15 kmph and Advance Starter S-2 at a speed of 38 kmph at YELLOW aspect, AS654 at a speed of 47 kmph and AS652 at speed of 78 kmph at RED aspect and applied emergency brake while approaching AS-650 on notice of the 13174 Exp which was just about to stop at AS650 which was in Danger.
6. This indicates that the Loco Pilot despite being given the authority as per practice in the division in case of failure of signals; created an impression in the mind that all defective signals can be passed at maximum permissible speed of the section which is 110 kmph.
7. Speed of 07 trains on same authority to proceed between the same section were checked and found different speed pattern followed by LPs. However, the DN GFCJ is highly over speeded.

LESSON LEARNT:

1. While passing an Auto signal in danger in double line/Single line; LP & ALP should follow the laid down procedures in GR 9.02 & 9.07 and SRs thereto.
2. Unified SR 9.12 on authorities to be issued and working procedure during failure of Auto signal/Signals to be strictly followed. Frequent counseling to Station masters, TMRs & Crew in this regard by assigned supervisors shall be done. Working of staff to be super checked and scrutinized by divisional & HQ officers need to be ensured.
3. ALP should be vigilant & alert to apply emergency brakes ahead of signal in danger or any obstruction in exigency.
4. Unnecessary sharing of information on signal aspects/failures over walkie talkie with crew to be avoided.
5. ECoR JPO No. ECoR/OPTG/SC/66/JPO/23 of date 01.12.2023 issued by PCSTE, PCEE & PCOM on "Procedure to be adopted for rectification of Auto signal failures between two stations in Automatic Signaling Territory" which is reiterated below for strict adherence:
    a. Whenever a loco pilot passes any Auto signal/Semi-automatic Gate Stop signal in "ON" position between two stations, he shall report the same to the Station Master of next block station in advance by available means of communication.
    b. After getting the information from the loco pilot in this regard, the on duty Station Master of the concerned block station in advance shall inform the Station Master of block station in rear. Both Station Masters shall verify the cause of passing the signal at 'ON' position from Auto section-indication board/VDU/reset box provided at the stations.
    c. If it is an MSDAC/AXLE counter failure as visible on VDU/indication board, on duty Station Master shall wait for passing of one train for auto reset/supervisory reset.
    d. If section is not clear after passing of one train, the Station Master shall apply manual reset as per the procedures prescribed in the SWR. The MSDAC/AXLE counter should generally clear after one train is passed through the concerned defective MSDAC/AXLE counter.
    e. However, if the MSDAC/AXLE counter is not reset due to any reason, and the cause of signal at 'ON' position is not known, the Station Master on duty shall inform the Station Master of rear station and section controller about the failure of signal/gear with diary entry messages.

f. The Station Master of the block station in rear shall inform about the failure to concerned S&T Maintainer and failure memo shall be issued at the station to the S&T Maintainer. If the S&T Maintainer is physically not available, or not responding to VHF/Mobile Phone, then the Station Master will ensure that he has informed the S&T controller through section controller on control phone about the failure.

g. The S&T Maintainer, after getting the failure memo, shall issue disconnection memo wherever required. The Signal Maintainer will write clearly about the signaling gear where failure has occurred by observing the VDU/data logger. He will clearly mention the gear for which disconnection is required and its repercussion on signals. In case he is not physically available, communication to be made in the regard through Section Controller /S&T controller.

h. After reaching at site, Signal Maintainer will disconnect the fuse or link of Yellow, Double Yellow and Green aspect of concerned signal in that particular goomty/location so that loco pilot will not get any Green, Yellow or Double Yellow aspect during failure period.

i. After rectification of axle counter/failure of gears, Signal Maintainer will request on duty Station Master to apply resetting as per details prescribed in the SWR. After axle counter is put in preparatory mode, one train to be passed to clear the MSDAC/AXLE counter as per SWR provisions.

j. If Axle counter is reset and clear indication appears in the reset box, the Station Master will inform the same to Signal Maintainer. Then Signal Maintainer will connect the link or fuse of green, double yellow and yellow aspect.

k. S&T Maintainer shall reconnect the fuse of green, double yellow, yellow aspect only after ascertaining from the Station Master that no train is in the section in rear of the affected signal. He shall then advise Station Master of the concerned station to verify the rectification of signal from the auto-section indication board wherever provided. The Station Master, after satisfying himself that the signal is showing 'OFF' aspect in conformity with the position of the series of auto signaling sections ahead, shall inform the S&T staff about the same.

l. S&T staff will then record the rectification time in his diary with details of signaling gear failed and subsequently rectified and inform the S&T controller. S&T controller will in turn inform the section controller about the rectification.

m. The S&T Maintainer after reaching at station shall issue reconnection memo/rectification memo to the Station Master to that effect and record in Signal Failure Register.

n. Till such period, all trains will observe the auto signaling rules as per G&SR and the Station Master will not communicate status of any signal to the Loco Pilot of any train.

All section DTIs, CLIs, JE/SSE (Sig), TLCs, CC & CHCs are advised to counsel the staff and monitor strict adherence of the instructions in letter & Spirit and ensure no short cut to be allowed under any circumstance. In case of any discrepancy with codes and manuals; the later shall prevail.

30/7/25

Pr. Chief Safety Officer
Bhubaneswar

Copy to-

1. Secy. to GM for kind information of GM.
2. Secy. to AGM for kind information of AGM.
3. PCE, PCME, PCOM, PCEE, PCCM, PCSTE, PCSC & CAO (Con) for information.
4. Sr.DSO/ KUR, SBP & WAT for information & necessary action.
5. Principal MDTC/VSKP & MDZTI/BBS for information & necessary action.