



MAJOR ACHIEVEMENTS
OF
SIGNAL & TELECOM DEPARTMENT
LJN DIVISION
2024-2025



Major Achievements During 2024-2025

INFRASTRUCTURE CREATION

- Provision of Automatic Block Signaling has been done in Domingargh – Basti – Govindnagar section by Project unit.(total 65.72 RKm.)
- Chord line has been commissioned between Lucknow–Manknagar & Aishbagh-Manknagar section with closure of Block hut A station in LNJ-MKG section.
- Third line has been commissioned in GDK – MIR - CLJ section by Construction to enhance section capacity.
- Domingarh station has been commissioned with Kyosan make Electronic interlocking under third running line work between GKC-GKP-DMG section.
- Interlocking of 7 nos. LC gate have been done by Construction/Project to enhance road safety.

COMMISSIONING OF THIRD LINE IN GDK-MIR-CLJ SECTION

Gonda Kachehri



Block Panel IIIrd Line



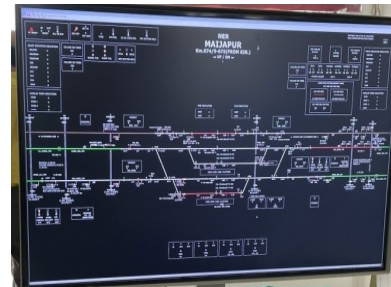
Starter Signal



Electric Point Machine



Reset Box IIIrd Line



VDU



UFSBI



SSBPAC



UFSBI



Dual VDU

COMMISSIONING OF DOMINGARH (DMG) STATION



SAFETY & MAINTENANCE WORKS

PROVISION OF BPAC WITH UFSBI & HASSDAC

BPAC with UFSBI & HASSDAC has been provided in 09 block section with media redundancy.

PROVISION OF ELECTRIC LIFTING BARRIER

Electric barrier has been commissioned at 44 nos. LC gate to avoid failures of wire breakage

PROVISION OF SLIDE BOOM BARRIER

Slider boom barrier has been commissioned at 11 nos. LC gate to reduce detention at the time of gate damaging.

COMMISSIONING OF RTU/DATALOGGER AT REMOTE LOCATION

34 nos LC gates/auto hut equipped with RTU/datalogger to monitor relay inputs at remote locations.

INNOVATIVE MEASURES IMPLEMENTED FOR RELIABILITY IMPROVEMENT:

PROVISION OF RDPMS (REMOTE DIAGNOSTICS AND PREDICTIVE MAINTENANCE SYSTEM):

The RDPMS has been commissioned at SDAM,TSF,MMB,PPE, SYU stations. It is an IoT (Internet of Things)-based system that monitors signaling assets, analyses data for predictive maintenance, and provides alerts to prevent failures, thereby improving safety and efficiency. RDPMS monitors real-time data of signaling assets.



PROVISION OF ELTU (EARTH LEAKAGE TRACKING UNIT):

ELTU has been provided at STP & TKUR station .It is an add on device with ELD to facilitate pre-warning the user about sudden or gradual deterioration of insulation resistance of the connected supply goes going down to 75 % or 50% of the current value as set by the user.



INNOVATIVE MEASURES IMPLEMENTED FOR RELIABILITY IMPROVEMENT:

PROVISION OF ON LINE EARTH TESTER

Provision of On line Earth tester has been commissioned at GTNR,DAL & STP station for continuous monitoring the earth value at station. It also facilitate alarm as well as Indication in case earth value increases from standard value i.e. 1ohm.



PROVISION OF SAFETY ALARM BUZZER:

Provision of Safety Alarm Buzzer in Panel for SM to set rear end point towards least important point has been commissioned at 15 stations.



OTHER SIGNALLING EQUIPMENT IMPROVEMENT WORK

- Provision of Auto fuse change over system has been done at 05 nos. Engg interlocked gate. to avoid failures of fuse.
- 57 nos. High thrust point machine have been provided under provision of Thick web switch.
- 61 Km defective signalling cable have been replaced in different section.
- Replacement of 46 nos. over aged defective Point Machines have been done.
- Replacement of 07 nos. block instrument due for overhauling have been done
- Provision of dedicated IPS at. Engg interlocked LC gates has been done at 02 LC gate to improve power supply reliability at remote location.
- 335 Nos. Red, Yellow and Green non integrated LED aspect have been replaced by integrated LED aspect. 209 nos. overaged route/shunt LED aspect have been replaced.
- 794 nos. FRP type TLJB have been provided at different stations in LJN Division to avoid incidences due to outside interference.

OTHER SIGNALLING EQUIPMENT IMPROVEMENT WORK

- Replacement of 32 Set over aged IPS battery have been done.
- Replacement of 1695 nos. overaged track cell have been done.
- Replacement of 83 nos. worn out ground connection have been done.
- Replacement of 13 nos. track relay due for overhauling have been done.
- Epoxy paint has been provided over glued joint 'T' to avoid metal chip failures at all stations.
- Maintenance free earth arrangement as per latest TAN 3006 version 3.0 has been provided at 03 stations.

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