Good work for the Period 01.04.2024 to 31.03.2025

I. Signalling Highlights:

1. The new **Electronic Interlocking (EI) of M/s Siemens make**, with 278 routes and OC relay room was commissioned at **CSMT** on 02.06.2025.
2. **Yard remodelling work at Kasara (KSRA)** was completed, undertaken in connection with the provision of a new Platform No. 1 and increasing the CSR of Down Yard Nos. 1, 2, and 3.
3. **The Signalling Maintenance and Management System (SMMS)** was successfully implemented across the entire division. All signalling assets have been entered into the system, and maintenance activities are being carried out as per the prescribed schedule. Additionally, failures are also being recorded systematically in the system.
4. All location boxes found to be infringing upon nearby tracks were identified, and necessary measures were taken. Chains and external stoppers were provided at vulnerable locations, which has significantly enhanced the safety.
5. A total of **144 conventional track circuits and overaged AFTCs** were replaced with **DC track circuits** across the division. This upgrade has not only improved the overall reliability of train detection but also reduced maintenance efforts and enhanced operational efficiency. The use of DC track circuits has contributed to more stable signalling performance, thereby increasing safety and punctuality of train operations.
6. **Panel Integrity Testing** was carried out at **18 stations**—namely Mumbai CSMT, Mazgaon, Dadar, Parel, Kurla Goods, Thane, Kalva, Thakurli Chola Yard, Asangaon, Khandala, Kaman Road, Ravli Junction, Chembur, Kopar Khairane, Kalamboli Goods, Panvel, Apta, Kasu, and Nagothane—in close coordination with the Operating Department. This comprehensive exercise facilitated the identification and rectification of discrepancies between Station Working Rules and panel indications, thereby enhancing the safety, reliability, and operational consistency of train movements.
7. During the financial year 2024–25, the division successfully disposed of various categories of scrap materials as part of asset optimization and housekeeping initiatives. A total of **150.258 tonnes of ferrous scrap**, **13.551 tonnes of non-ferrous scrap**, and **66.150 tonnes of used batteries** were disposed of in a systematic and environmentally responsible manner. This contributed to improved yard management, safety, and revenue generation.
8. During 2024–25, a total of **13 stations were identified for directed maintenance** based on Signal Failure Report (SFR) analysis. These stations include MZN, BY, DW, DI, ASO, KSRA, KJT, CHK, MHP, CMBR, ASO, KLMG, and PNVL. **Dual detection was implemented at CHK and MHP to enhance reliability**. Targeted maintenance activities have been planned and initiated at all these locations to address persistent issues and improve overall signalling performance.
9. A focused drive for **midlife rehabilitation of vital relays**, along with their replacement wherever found overaged, was conducted across the division. As part of this initiative, clear and standardized markings were also provided in relay rooms to easily identify vital relays, ensuring better traceability, streamlined maintenance, and enhanced safety in signalling operations.
10. **UFSBI** (Universal Fail-Safe Block Interface) was commissioned in four sections—**IGP–TGR1, TGR1–TGR2, TGR2–TGR3, and TGR3–Kasara**—in place of the existing conventional block instruments. This upgrade has improved block working reliability, enhanced safety, and facilitated more efficient train operations in the ghat section.
11. **Four level crossing gates** were removed during the year at the following locations: **LC-51 (Titwala), LC-53 (Titwala–Khadavli), LC-74 (Khardi–Ombarmali), and LC-2 (Dativli–Nilje**

section). Following their removal, necessary circuit alterations were carried out to ensure safe and seamless train operations.

Other Improvement work:

1. A total **of 214 overdue point machines** were replaced across the division to enhance the reliability of point operations. Additionally, **64 new Thick Web Switch (TWS) points were inserted**, contributing to improved track structure integrity and reducing maintenance requirements.
2. A total of **133 signal units** were replaced in Mumbai Division during the year, as part of ongoing efforts to enhance the reliability and visibility of signalling infrastructure.
3. A total of **59 sets of IPS battery sets were replaced** across the division to ensure uninterrupted power supply to signalling installations.
4. 1,042 S-bonds and Alpha-bonds associated with Audio Frequency Track Circuits (AFTCs) were replaced across the division.
5. Auto-resetting functionality was provided for **MSDAC at 660 track section**s equipped with dual detection. This enhancement has streamlined the reset process, reduced manual intervention, and improved the overall reliability and availability of the track detection system.
6. Buzzers were provided for monitoring the 60V DC internal supply of relays, ensuring timely alerts in case of voltage drop or failure. Additionally, buzzers were installed at various locations across Mumbai Division to monitor the 110V DC point machine supply and the 230V AC on-load supply.
7. A total of **40 JE/SSEs** and **69 ESMs/MCMs** were sent for refresher training at their respective zonal and divisional training institutes.
8. Periodic overhauling of four lever frames was carried out at the following locations: KYN GDS-6, KYN GF-12, KYN Engg. Shed, and KLV Car Shed.
9. The Earthing and Surge Protection Drive has been successfully implemented at all identified S&T installations in the Mumbai Division. This has enhanced system reliability and reduced vulnerabilities to transient voltages and electrical surges.
10. To improve the reliability of point operations, **300 ground connections** for point machines were replaced across the division.

II. Telecom Highlights:

Passenger Amenities:

1. Outdated indicators are replaced by new IP based with enhanced feature at:- Rabale Ghansoli, Airoli, Koparkharane, Vashi and Govandi stations.
2. At Thane station Coach guidance system is installed with enhanced feature includes 10 nos. of at a glance for Coach position at Thane station FOB and 94 Nos. Coach Guidance indication boards at PF/5, PF/6, PF/7 and PF/8.
3. 26 nos new Coach Guidance indicator board and installed on Extension of CSMT PF-10&11.
4. Central Announcement (CA) system at control office/CSMT is upgraded to IP based along with Commissioning of IP-Based CA System at KYN, SHD, ABY, TLA, KDV, VSD, ASO, ATG, THS, KE, OMB, KSRA, VLDI, ULNR, ABH, BUD, VGI, SHLU, NRL, BVS, KJT, KHPI, AIRL, RABE, GNSL, TUH , KPHN, PNVL, Diwa, Kopar, Dombivali, Thakurli and Chunabhatti (Total of 33 Stations).
5. Announcement system improved by providing 20 nos. new Speakers on CSMT PF-10&11 on platform extension portion.
6. 40 Nos. of column speakers are replaced with new at Kalyan station PF-1, 1A, 2 & 3 and 13 speakers are replaced with new at Ulhasnagar PF-1 and 2.

7. CCTV camera installed at Kopar station PF-1, Umbermali and Thansit station.
8. 170 Nos. new buzzer for Divyangjan are installed at platforms in following section: -
    - 62 Nos from CSMT to Kings Circle on Harbour line stations
    - 42 Nos. from Byculla to Sion.
    - 66 nos. from Vashi to Khandeshwar on Harbour line

Special Achievement:

1) New OFC PoP opened at Vadala Road and Kalwa.
2) For better information about EIM, TMS main server replaced at CSMT with replacement of 25 Nos. of MUX and 52 pairs of Modems in the section including integration with EI at CSMT.
3) Indoor solution for Airtel coverage in Divisional Railway Hospital (KYN) is done by providing indoor boosters.
4) Old 25-Watt VHF sets replaced with new advance TalkPro VHF set at 90 locations/stations in Mumbai division.
5) For safety, fire alarm installed at 99 locations (OFC room and LC gates.) in Mumbai division.
6) CSMT auditorium 6 nos. of speakers are upgraded with new speakers (QSC make).
7) New Coral exchange (144 equipped port) installed at Kalyan for station area auto numbers.