

Performance - Signal

S.No.	ITEM	TARGET (2020-21)	ACTUALS (Up to Jan)	
			2019-20	2020-21
1	Signal Failures	4846	4418	3264
2	Signal Failures attributed to S&T	2412	2056	1715
3	Overhauling of signaling gears.			
	a) Lever frames	100% due(5)	11	3
	b) Block Instt.	100% due (6)	22	18
	c) Shelf Relays	100% due(1500)	2664	2435
4	Station Inspection F/P Inspection	100% due 100% due	100% 81.94%	76.12% 12.22%

Performance - Telecom

S.No.	ITEM	TARGET (2020-21)	ACTUALS (Up to Jan)	
			2019-20	2020-21
5	Efficiency of Railway owned CNL circuits			
	a) RE/Q Cable	99%	99.59%	99.91%
	b) OFC	100%	98.85%	99.93%
6	Efficiency of DOT owned CNL circuits	--	--	--
7	Training - Refresher	Actual due (2020-21)	Done Up to Jan '2020	Done Up to Jan '2021
	a) SI	32	18	34
	b) SM	65	70	150
	c) TCI	19	27	17
	d) TCM	32	20	31


Achievements

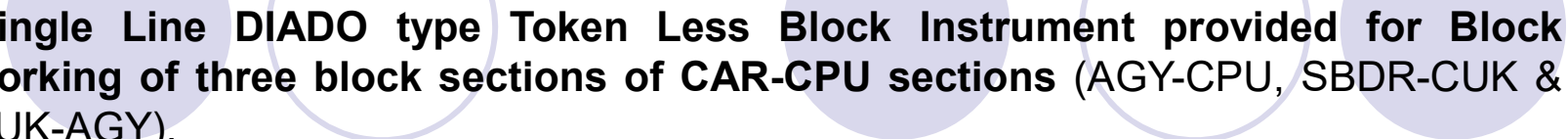
- **Electronic Interlocking commissioned at Kanpur Loco & Mota stations,** in connection with replacement of old and worn out mechanical signaling equipment
- **At Bhaupur, new EI was commissioned on 27.12.20** in connection with provision of connectivity to DFC line.
- **For clearance of DN side for construction of EDFC at BH-K,** station building has been shifted towards UP side with S&T assets with **commissioning of new Electronic Interlocking.**
- **Electronic Interlocking** of Kailhut, Gaipura & Jigna Stations of Prayagraj division **has been upgraded from Warm Standby to Hot Standby.**
- **Provision of Dual VDU at JSR, LOG, LKJN, BRG & KCN stations by removing domino type operating panel.**
- **Modification in RRI Kanpur done after provision of simultaneous movement from 3rd and 4th line at GZB end and from North and South lines at LKO end** by insertion of three X-overs and extension of overrun line no.11 at LKO end in Kanpur yard.
- **Commissioning of HGJ station in connection with provision of UTCL siding** along with additional Line No. 9 & 10.
- **Yard layout correction carried out** at DER, DKDE, WIR, BRG, HGJ & LKJN Yards.
- **Commissioning of Auto signaling (4 Sections);** SSL-PMPR, PMPR-KBN, KBN-AUNG & AUNG-BKO.

- **Dual detection of track circuit commissioned in 02 automatic sections and 01 station** by providing MSDAC with AFTC; BNT – EKL & EKL – ETW (Up & Dn line), JJK station.
- **Bi-directional work commissioned in 02 stations & 01 automatic section** by providing dual MSDAC; DER, WAIR, WIR-DKDE (Dn line & 3rd line)
- **BPAC commissioned in 19 block sections** in Prayagraj division.
- **Redundancy in BPAC done in 21 block sections** in NYN-MKP & PRYJ-CNB sections.
- **ELD installed and integrated with Central Data Logger Center, Prayagraj at 28 signaling installations.** Now ELD is provided at all station/ECU/RH/LSCs over Prayagraj division.
- **Monitoring of CCTV CAMERA at LX GATE with the help of Android Mobile phone.** It is observed that many incidents of breaking booms at different level crossing gate occur by outsider's vehicles while crossing the tracks. To identifying culprits, CCTV Camera at different LC gates have been installed by S&T department for time to time monitoring purpose by S&T staff while attending their maintenance schedule at LC gate, CCTV camera's video can be checked on their ANDROID MOBILE PHONE with the help of ADSL Wi-Fi modem.
- **MTRC Charger potential free contact at 36 stations & STM Charger potential free contact of 65 stations connected with Datalogger.**

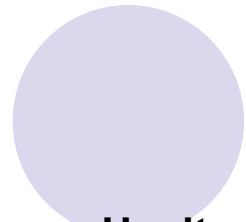
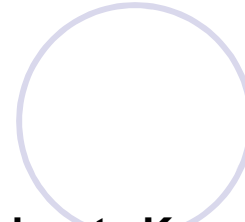
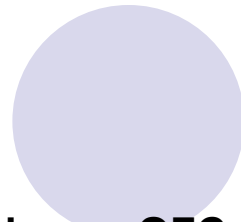
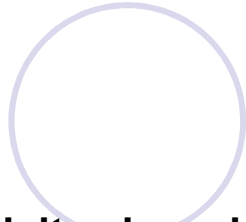
- **Fuse Alarm system commissioned at RUB station, RH-1, 2 & 3(KCN – PCOI), RH-1 & 2 (MJA-BEP) auto section.** It improves the reliability of system. When a short period overload fault occurs in a circuit, it introduces standby fuse and generate audio alarm.
- **Track Feed Battery Charger fail indication with audio alarm commissioned at BRE, GMC, PNKD, BPU & CPA stations.**
- **Dual detection of berthing track/metal bridge done for 49 track circuits-** SB-JGR Bridge No.55, PATA (5 TC) - 31.07.20, KNS - (4 TC) -22.07.20, RRH-MTO (Metal Bridge No- 304, 2 TC) - 23.07.20,ALJN (5 TC) - 14.07.20, BBL (5 TC) - 27.09.20, FZD-(4 TC) – 30.06.20, ULD (4 TC) – 16.08.20, BBL (3 TC) – 27.09.20, MZP(18TC)-22.12.20, FTP (15 TC)-15.01.21
- **Commissioning of interlocking of LC gate 64 & 65 (BKO-AUNG), LC-433 (LKJN) & LC-63B (MOTA) with POLB and sliding boom.**
- **17 LC gates (BPU-KRJ) commissioned with DFCCIL.**
- **Approach warning hooter alarm provided at 39 LC gates for road user to alert them when train is approaching to gate and only 4 KM away from gate.**
- **Secure communication installed at 30 non interlocked LC gates.** 11 in Naini – Manikpur section, 16 in Prayagraj – Kanpur section & 3 in Chunar – Chopan section.
- **AT – Supply provided at signaling installation is connected with data logger at 67 stations & 19 RH/LSCs.**

- **Dual media between DDU-BH-K for UFSBI provided through changeover switch, which includes E-1 channel (OFC) & quad cable for UFSBI.** This will help in seamless connectivity for train operation even in the case of failure of either cable.
- **Auto-announcement system commissioned** on ETW, PHD & GOY stations.
- **Point Health Monitoring Unit commissioned at 13 stations and integrated with Datalogger** - JHG, GAE, ARW, MZP, KYT, KCN, UND(RH-1, 2 & Central), BDL, BEO, JIA, MJA, CPA & MNF
- **Fire Alarm and Suppression system installed in ECU – 46C, 46EC, 46WC, 46 EO, 46 WO, CTC, Telephone Exchange & Testroom of Tundla station.** It is capable to extinguish the fire itself. It also alerts with audio alarm and send SMS to officers.
- **Thermal camera installed at MZP, PRYJ, CNB, ETW, TDL & ALJN stations, DRM office, PRYJ and Central Hospital, PRYJ for safety from persons infected by COVID-19.**
- **MTRC commissioned over Prayagraj division and 1446 nos ordinary handsets (Samsung GURU) distributed to Guard & Loco pilots in place of MTRC sets** which are reliable, clear voice communication and very low cost communication equipment for the means of secure communication for ensuring safety of running train over PRYJ division.
- **Common fuse blown alarm relay connected to data logger and fault logic updated** at 8 RHs of PRYJ-DDU section.

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- **Provision of Anti-Theft Alarm System for security of equipment from theft/unauthorized access at 28 stations/LSCs/RHs.**
 - **The work of segregation of power supply for MLK-II of Ansaldo make EI completed at 90 stations.**
 - **NTES connectivity provided for Train Arrival Departure Display Board at 16 stations.**
 - **CCTV Control Room commissioned at Kanpur Central**
 - **VSS commissioned at Etawah station with 40 CCTV camera.**
 - **Coach Guidance Display board commissioned at CPA, PHD, ETW & GOY stations.**
 - **56 standalone CCTV camera installed over PRYJ division.**
 - **Provision of Wi-Fi and CCTV monitoring facility at Loco Hospital, Kanpur.**
 - **Wi-Fi commissioned at 11 stations- BNT, BRE, ULD, MKP, CPA, RRH, SKB, BDN, BPU, PTX& JLS stations & Loco Hospital, Kanpur.**
 - **OFC connectivity provided by laying 77 KM OFC cable in BRN-ETH (62 KM) & ALJN-HGJ (15 KM) section for providing better communication facility.**
 - **PRYJ - FTP section new OFC link & STM 4 inaugurated at Telecom Control DRM office. Due to installation of STM-4, new circuits which comes day by day can be added without system upgrade.**

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- **Single Line DIADO type Token Less Block Instrument provided for Block working of three block sections of CAR-CPU sections (AGY-CPU, SBDR-CUK & CUK-AGY).**
 - **Signal implantation of 132 signals improved.**
 - **Panel integrity tested at 30 stations.**
 - **New PRS connectivity provided at Narayanpur Post Office which is connected with ARW station via JTBS linker, Modem on 12.11.2020.**
 - **Block working shifted from 4- Quad to 6-Quad in 3 block sections- MWH-KSQ, PMPR-KBN & PMPR-SSL**
 - **As per HQ's instruction, during the use of sliding boom, the normal aspect of gate signal as per interlocking are provided at 110 LC gates. Earlier, normal OFF aspect of gate signal was yellow, in case, sliding boom operation at LC gates.**
 - **HQ's JPO dated 09.10.2020 for working of trains in NCR where Dual Detection is provided by Axle counter over AFTC/DCTC (JPO No 1 of 2020) implemented at 18 stations. Now, controlling signal goes to caution aspect automatically, if DCTC fails.**
 - **Work on User Depot Module (UDM) started over Prayagraj division by all onboard 18 consignees.**
 - **CCTV Control Room commissioned at HQ on 30.04.20.**

- **New intercom Exchange (Coral Telecom) is installed at DRM Exchange PRYJ on 04.12.2020.** It is IP based exchange and can be installed easily wherever IP network (railnet link) is available. Now, video call is possible with video IP phone.
- **23 nos. Video IP phones are installed at Branch Officer's chamber in DRM Office PRYJ on 05.12.2020 .**
- **New 64 Kbps UTS connectivity provided at JSC on Railway OFC from ETH with one pair of modem at both end on 01.12.2020.**
- **Hooter provided in Divisional Control Office, DRM Building, PRYJ for spreading important messages at once in case any emergency situation occurs over PRYJ division.** For this, a separate Press-switch provided to all four Safety Controller. In addition to it, a board with four indications (one for each Section Controller) & buzzer is provided to Safety Control. It is connected with all four section controllers for calling purpose.
- **MTRC training regarding registration/deregistration is given to LP & Guard at PRYJ, CNB & TDL**
- **On the auspicious occasion of 72nd republic Day, flag hoisting program was organized by the Divisional Railway Manager in the premises of DSA ground, Prayagraj and by the Additional General Manager of NCR in the premises of General Manager's Office. For live telecast of the ceremony, S&T Department has been installed a large scale PAE system to make this event audible to all audience.**
- **05 nos. 70-watt Solar Panels have been installed at Level Crossing Gate no. 23C, 24C, 26C, 28C & 32C between LUSA – KHRY section for providing uninterrupted power supply to secure communication devices.**



- **UTS connectivity has been provided on OFC link at Kamalpur Hault connected from DAR on 10.01.2021.**
- **Data logger connectivity of three divisions (PRYJ, AGC and JHS) has been provided in S&T Control at NCR HQ.**
- **TRACK FEED BATTERY CHARGER provided at SRO, BH-KK, BDNP, SJT, UND, BVRA, MNJ, SYWN, BRE, BH-K & WAIR stations have been connected to Datalogger and database & logic updated.**
- **SPD (Surge Protection Device) provided at MIU has been connected in datalogger and database & fault logic have been created.**
- **Potential free contacts of IPS provided at PRYJ, DBR, PNHI, CPA, MZGI, BH-K, KCN, NYN, LSC-56, 60, LC Gate-31C, 16C have been connected with datalogger for remote monitoring of power supply.**