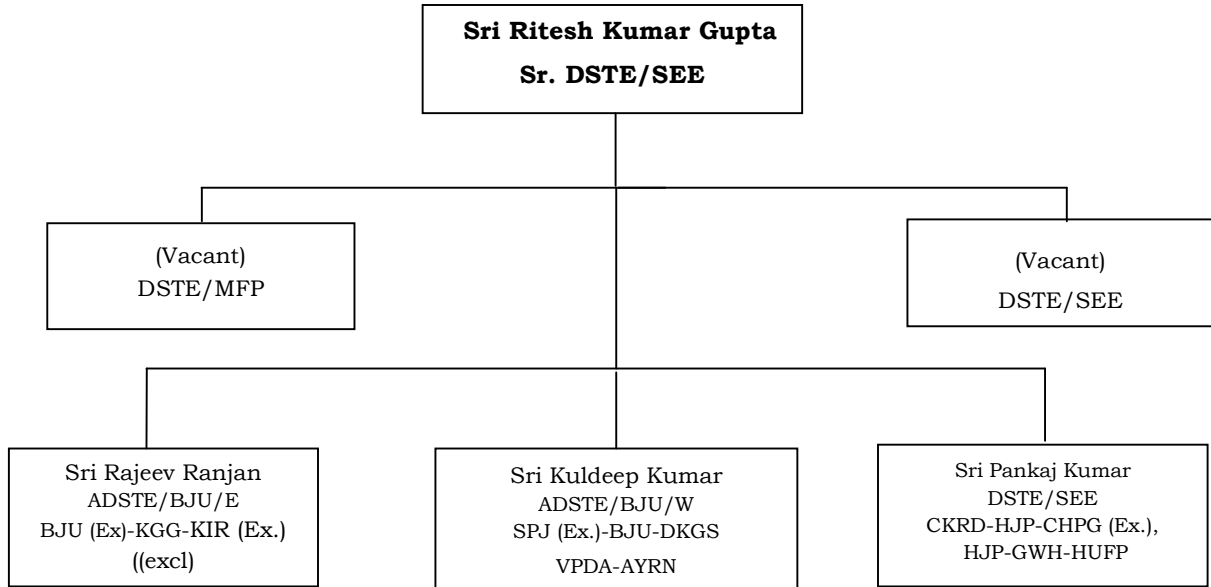


## Signal & Telecommunication

### General Information

#### I. Organization of Officers of Sonpur Division-



#### II. NON GAZETTED:

GROUP	SANCTION POSTS	ACTUAL POSTED	VACANT
"C"	512	441	71
"D"	341	324	17
<b>TOTAL</b>	<b>853</b>	<b>765</b>	<b>88</b>

#### III. SIGNALING ASSETS AT A GLANCE

<b>1. Total No. of Stations</b>	<b>70</b>
i) Central Panel	68
ii) End Panel	02 BJU (BJU/West-BJU/East), GHZ (GHZ-GHZ A cabin)
iii) IBH	06 Nos. (BLRI, MPNH, CDBN, ATNR, BRKB, BUJ)
<b>2 Type of Interlocking</b>	
i) EI	32 Stns. (CSR, DES, CKRD, AYRN, PHLG, MNO, SDG, KBH, NRPA, KUE, GHZ, RD, TUR, KHI, KRBP, DUBH, DOL, SSO, GRL, BNR, SAI, BCA, VPDA, MOG, NNNL, SPP, BJU/E, DKGS, KGG, PARUKHAS, NAZJ, UJP)
ii) PI	36
iii) RRI	02 (HJP, MFP)
<b>3. Type of Signals</b>	
i) Station with LED Signal	70 Stations
<b>4. Standard of Interlocking</b>	
i) Standard II (R)	69 Stations.
ii) Standard I	01 Station (BJU)

5.	Block Instrument						
i)	Tokenless Block Instrument	04 Sets (Diado Type)					
ii)	SGE Double line Block Instrument	10 Sets					
iii)	UFSBI Block Instrument	69 Sets (Including 19 sets of SSBPAC)					
iv)	UFSBI/MUX	10 sets (NNR-BRKB IBH-PSR, LC 52/HJP-LC 53C/HJP, LC53/HJP-HJP, BCA-MPNH, MPNH-TGA, LC36/DES-SDG, LC43/AYRN-CSR, UJP-Belari, Belari-SPJ)					
6.	Electric Point Machine	1269 Nos.					
7.	Axle Counter (for Block Proving)	157 Sets					
8(i)	Axle Counter in parallel with Track Circuit	18 Nos. at 09 stns					
(ii)	MSDAC in place of Track Circuit	01 Stn. (MFP-89 T/S, DP-245 Nos.)					
(iii)	MSDAC in parallel of Track Circuit	08 Stns. (VPDA-13 T/S; MOG-13 T/S; NNNL-15 T/S; SPP-21 T/S, DP-29; SDG-17 T/S, DP-24; MNO-15 T/S, DP-22; AYRN-T/S-23, DP-35; CKRD-T/S-18, DP-26)					
9(i)	Integrated Power Supply (IPS)	111 Nos. (70 stns + 19 Nos. additional+ 05 Nos. IBH+ 15 Nos. LC gates +02 Nos Training school)					
(ii)	Mini IPS/Inverter	LC gates: Mini IPS (36 Nos.)					
10(i)	Data Logger	91 Nos. (70 stns. + 13 additional + 03 Nos. IBH/ATNR, IBH/MPNH, IBH Belari + 05 Nos. LC-4ASpl/SEE-PMU, LC-106Spl/MFP-KVC.....)					
(ii)	RTU	53 Nos. (49 Nos LC gates + 03 Nos. IBH (IBH/BRKB, IBH/BUJ, IBH/CDBN)+ 01 No. ZRTI)					
11.	Total No. of Interlocked LC-Gate	183 Nos.					
12.	Total No. of Gate telephones	640 Nos. (Magneto telephone-368, Non recording type m/slave phone-86, recording type m/slave phone-186)					
13.	DESU	207937					
14.	SUMMARY OF LC GATES						
		TRAFFIC			Engg.		
	Class	Interlocked	Non-Interlocked	Total	Interlocked	Non-Interlocked	Total
	Spl	38	0	38	26	7	33
	A	26	0	26	18	7	25
	B1	06	0	06	5	13	18
	B2	10	0	10	7	23	30

	B	00	0	00	00	00	00
	C	40	0	40	07	82	89
	<b>TOTAL MANNED LC</b>	<b>120</b>	<b>0</b>	<b>120</b>	<b>63</b>	<b>132</b>	<b>195</b>
	UN-MANNED	0	0	0	0	0	0
	<b>GRAND TOTAL</b>	<b>120</b>	<b>0</b>	<b>119</b>	<b>63</b>	<b>132</b>	<b>195</b>
<b>15. Position of interlocked LC gates in SEE Division</b>							
	<b>Class</b>	<b>Traffic</b>	<b>Engineering</b>	<b>Total</b>			
	Spl	38	26	<b>64</b>			
	A	26	18	<b>44</b>			
	B1	06	5	<b>11</b>			
	B2	10	7	<b>17</b>			
	B	00	00	<b>00</b>			
	C	40	07	<b>47</b>			
	<b>Total</b>	<b>120</b>	<b>63</b>	<b>183</b>			

#### IV. TELECOMMUNICATION ASSETS AT A GLANCE

1	Quad & OFC cable	503 RKM (Entire Division)
2	Section Control Boards with voice logger	05 Nos. SPP Board-(HJP-SPP-BCA), KIR Board-(KIR-BJU), KTI Board-(KTI-DKGS), CPR Board-(CPR-NRPA), BJU Area Control Board-(STJT, VPDA, BCA-BGS, GHZ cabin, DKGS & RJO)
3	Telephone Exchanges	06 Nos. (02 Nos.-Server based IP Exch.-SEE & HJP; 04 Nos-TDM Exch.-MFP, GHZ, KGG & THB)
4	OFC Coverage	All sections of SEE division except HUFPP-VSHI section.
5	TPC Control	BJU-BCA-SPP-SEE-GJH, HJP-MFP-SPJ-BCA, BJU-KIR
6	Remote Control	GJH-HJP, HJP-MFP-SPJ-BCA, HJP-SPP-BCA-DKGS, BJU-KIR
7	<b>Passenger Amenities</b>	
I	Manual PA System	Provided at all stations in SEE division
II	Electronic Digital Clock	09 Nos. (MNE, THB, BJU, BGS, KGG, SEE, HJP, MFP, NBJU)
III	NTES (National Train Enquiry System)	Sonpur Control, Sonpur Station, Hajipur, Muzafferpur, Naugachiya, Khagaria, Barauni,
IV	Auto Announcement System	16 Nos. (SEE, HJP, MFP, BJU, BGS, KGG, MNE, THB, MSK, NNR, KHQ, DSS, SPP, BJU Bypass, DES, NNA)
V	FCT with Jio sim provided instead of BSNL Telephone on station & Enquiry	All stations and Enquiry. Total - 83
VI	Coach indication board	07 Nos. (HJP, MFP, BJU, BGS, KGG, SEE, BJU Bypass)
VII	TIB (Train Indication Board)	09 Nos. (HJP, MFP, BJU, MNE, THB, BGS, KGG, SEE & BJU Bypass)
VIII	LCD Display	06 Nos. (HJP, MFP, BJU, MNE, KGG, BGS, SEE)
IX	Video Enquiry System	03 Nos. (HJP, MFP, BJU)

X	Wi-fi facility	67 Nos. stations in SEE division
XI	Computerized Reservation Charting System	04 Nos. (HJP, MFP, BJU, KGG)
XII	CCTV	CCTV installed at 08 Nos. stations (SEE, HJP, MFP, BJU, KGG, NNA, MNE, BGS) + Rly. Hospital/SEE & GHZ, DRM/office/SEE, Zonal HQ/HJP, BJU, BCA & MFP for yard monitoring, DKGS, STLR & SMO- at Weigh bridge, Officer colony Sonpur, HHP BJU, GSD/GHZ, LC No. 07/RD-MFP, at 18 Nos. RPF Post (12)/outpost (06), all running rooms, Guard & Driver lobby)
XIII	PRS	<b>Locations-16 Nos.</b> (DGA, SEE, HJP, MFP, DOL, KRBP, DSS, BJU, BGS, KGG, MNE, NNA, THB, KPGM, GRL, BNR)
XIV	UTS	<b>Locations-67 Nos.</b> (SMO, THB, NNA, KUE, CRR, MNE, KGG, UMR, MSK, SKJ, LKN, BGS, BJU, BCA, DSS, TGA, RD, DUBH, SSO, KPGM, KRBP, DOL, NRPA, MFP, BNR, SAI, GRL, MOG, SPP, DES, AYRN, HJP, SEE, PMU, NYO, DGA, BAGL, GJH, TUR, KHI, UJP, TIL, SLT, STJT, STLR, NAZJ, LAK, PSR, DKGS, KTRH, NNR, SDG, MNO, CSR, VPDA, KHQ, GAI, CKRD, DPL, BKHR, NNNL, PHLG, GWH, SBDP, HUPF, LLJP, VSHI)
XV	Video Conferencing System	SEE, HJP, MFP & HHP Loco shed/BJU
XVI	UPT (UTS cum PRS terminal)	<b>Locations-17 Nos.</b> (SAI, MNO, VPDA, UJP, AYRN, DES, SPP, MOG, BCA, TGA, BJU Bypass, LKN, MSK, NNR, KUE, CRR & SMO)
XVII	On-Line booking of retiring room	<b>Locations-07 Nos.</b> (SEE, HJP, MFP, BJU, BGS, KGG, NNA)
XVIII	DETU	121928

#### V. Information Technology:

S. No.	Equipment	Remarks
1	Railnet facility	Provided for 775 users in division.
2	CMS	03 (Sonpur, Muzaffarpur and Barauni)
3	COIS/ICMS (Coaching Operation Information System / Integrated Coaching Management System)	03 Sonpur (CTNL & Carriage Control), Muzaffarpur (TNC /CDO) and Barauni (TNC/CDO)
4	FOIS Terminal (Freight Operation Information System)	17 (Sonpur, Sarai, Narayanpur Anant, Karpurigram, Barauni, Begusarai, Khagariya, Mansi, Naugachiya, Kursela, Semapur, IORG BJU, Sitalpur, Hajipur, Dinkargram Simariya, Tilrath, CYM/GHZ Cabin)
5	T.M.S. (Terminal Management System)	17 (Sonpur, Sarai, Narayanpur Anant, Karpurigram, Barauni, Begusarai, Khagariya, Mansi, Naugachiya, Kursela, Semapur, IORG BJU, Sitalpur, Hajipur, Dinkargram Simariya Tilrath, CYM/GHZ Cabin)

6	(TSR) Train Signal Register system	05 Stns. (HJP, MFP, BJU, KGG, MNE)
7	Parcel Management System(PMS)	03 Stations (HJP, MFP & BJU)
8	IPAS (Integrated payroll & accounting system)	Sonpur, Barauni
9	Control Chart	All the 05 Boards digital integrated with COIS.

**VI. HIGHLIGHTS OF SIGNALING & TELECOMMUNICATION FROM Apr'2023 TO Mar '2024 in 2023-24 financial year.**

	<b>Panel Interlocking</b> -02 Nos. Panel Interlocking has been commissioned at new stations LLJP on 11/10/2023 & VSHI on 24/01/2024 in continuity to HUPF-
	<b>Electronic Interlocking</b> -Total 03 Nos. Electronic Interlocking has been commissioned at new station PARUKHAS in continuity to VSHI 24/01/2024 and at NAZJ, UJP in place of Panel Interlocking in order to ABS commissioning on 09/03/2024.
1	<p>➤ <b>KRBP yard has been modified</b> with addition of new private siding and provision of additional facility with Shunt Signal 105 for movement in private siding on 22/12/2023.</p> <p>➤ <b>NNA yard has been modified</b> in existing PI in connection with provision of shunt signals on goods siding and machine siding and Tower wagon siding at Naugachia (NNA) station 03/03/2024</p>
2	<b>New Control Building</b> has been commissioned with commissioning of new modern equipments at SEE & the old equipment were shifted from old control room to new building. Entire building of New Control has been provided with Wi-Fi facility. All the boards and PC of New Control has been provided with high speed Internet facility by segregating bandwidth through V-LAN to meet the requirements.
3	<p><b>Interlocking of LC Gates</b>-Total 06 Nos. LC gate has been interlocked (48B2/UJP-SPJ, 10C/LLJP, 19B2/KGG-MNE, 17C/VSHI, 1B/KGG-Olapur, 1B/KGG-HSS)</p> <p><b>Note-02 Nos. LC gate 1B/KGG-Olapur, 1B/KGG-HSS taken over from SPJ division</b></p>
4	<p><b>Sliding Boom</b>-06 Nos. sliding boom has been commissioned at LC gate (48B2/UJP-SPJ, 10C/LLJP, 19B2/KGG-MNE, 17C/VSHI, 1B/KGG-Olapur, 1B/KGG-HSS)</p> <p><b>Note-02 Nos. LC gate 1B/KGG-Olapur, 1B/KGG-HSS taken over from SPJ division</b></p>
5	<p><b>Electric Lifting Barrier</b>- Total 10 Nos. EOLB have been commissioned/replaced (LC 48B2/UJP-SPJ, 10C/LLJP, 19B2/KGG-MNE, 17C/VSHI, 1B/KGG-Olapur, 1B/KGG-HSS, 65C/KRBP, 32Spl/DSS, 3T Spl/GHZ, 40C/NAZJ, 29B2/SKJ, 41C/NAZJ, 14C/STLR) in which 04 Nos. have been done during interlocking of LC gate, 03 Nos. conversion of mechanical lifting barrier to EOLB, 04 Nos. in place of worn out EOLB,</p> <p><b>Note-02 Nos. LC gate 1B/KGG-Olapur, 1B/KGG-HSS taken over from SPJ division</b></p>
6	<b>UFSBI</b> -03 set UFSBI have been commissioned in LLJP-HUPF, HUPF-VSHI, VSHI-PARUKHAS sections
7	<b>BPAC</b> -03 set HASSDAC have been commissioned in LLJP-HUPF, HUPF-VSHI, VSHI-PARUKHAS sections.
8	<b>RTU</b> -06 Nos. RTU has been commissioned at mid-section interlocked LC gates (14B C/MOG, 19B2/MNE, 29C/MNO, 22Spl/SPP, 52C/TIL-BGS, 22A/MNE-KGG)
9	<b>MSDAC</b> -MSDACs have been commissioned in parallel to track circuit at MOG (13 Nos. track sections), NNNL (15 Nos. track sections) & VPDA (13 Nos. track sections)
10	<b>DLBI</b> -08 Nos. overaged DLBI have been replaced for GWH-HJP/02, GRL-BNR/02, TGA-BJU/02, TIL-BJU/E/02 sections.

11	<b>Automatic Fire detection &amp; Alarm System</b> -Automatic Fire detection and Alarm System has been installed at PARUKHAS, VSHI, LLJP, BJU/ERH & BJU/E		
12	<b>Remote Diagnostic Preventive Maintenance System (RDPMS)</b> -RDPMS system has been installed at STLR, DGA, PMU, BAGL, GJH for real time health monitoring of different gears like track circuits, Electrical point machines & Signals.		
13	<b>Networking and validation of datalogger</b> -Networking and validation of datalogger has been done at LLJP, 19B2/KGG-MNE		
14	<b>Monitoring of ELD through Data Loggers</b> -Monitoring of ELD through Data logger has been provided at LLJP KPGM, BCA/C, KGG/C, KGG/W, KGG/E, BJU/E.		
15	<b>Provision of S&amp;T Key Boxes</b> - S&T Key Boxes with additional set of keys as per JPO issued from HQ have been provided in SM's room at all stations in SEE division		
16	<b>Defective/low insulation Cable replacement</b>	<b>Target</b>	<b>Cumulative Mar'24</b>
(a)	<b>Signaling Cable</b>	150 Km	54.165 Km
(b)	<b>Telecom Cable</b>	30 Km	15.436 Km
17	<b>Permanent Joints</b> -142 Nos. permanent joint was done different section during rectification of 6 quad cable.		
18	IP Based-Exchange has been commissioned at 03 stations (MFP, THB, KGG) to cater the communication load at these location.		
19	STM 1 & PD MUX each one has been commissioned at LLJP		
20	<b>Implementation of enlargement of Mobile CUG scheme</b> -Till date 2999 Nos. of Airtel CUG SIM has been provided to group-D&C staff of different departments, under the scope of enlargement of CUG facility.		
21	<b>Provision of VPN connections</b> - More than 50 Railnet VPN connection provided to railway officials to access E-office remotely.		
22	<b>SIM based Router</b> -03 Nos. of SIM based router has been provided for FOIS(BTPS/BJU, IORG/BJU and HURL/BJU)		
23	<b>Hon'ble PM's VC Program</b> - Video conferencing facility for 03 mega program has been organized at various railway stations in Sonpur division for inauguration/foundation laying/ dedication of various railway projects over this division. For that arrangement of video wall, PA System, video conferencing equipment along with last mile connectivity has been arranged.		
24	<b>Maintenance free earthing</b> -33 Nos. maintenance free earthing was provided at CRR, SMO and BKHR, NBJU-UMNR (04 Nos), NNA-KHQ(03 Nos), GHZ/Exch, GHZ/MW, BCA, TGA,SMO, CRR, KIBH, KTRH, THB, NNA, GAI, PSR, MNE, UMNR, SKJ, DPL, TIL & BGS station.		
25	<b>Fire Extinguisher</b> - Fire Extinguisher (CO2 type. 4.5 Kg) each installed at BJU/Enquiry, East Outer/BJU, Jn-Cabin-GHZ, OFC room at DKGS, BCA, STJT, DSS & NAZJ, BJU/Enquiry, TGA station, East Outer/BJU, Jn-Cabin/GHZ, OFC room of DKGS station, West Panel/BJU, East Panel/BJU, GHA exchange, exchange battery room, MW/OFC room/GHZ, BCA, STJT, NAZJ & UJP station.		
26	<b>CCTV Camera</b> -13 Nos. CCTV cameras were installed at Running Room/BJU-06 Nos. & LC Gate No-6: 07 Nos respectively.		
27	<b>Surge Protection Device</b> -26 Nos. SPD connection was provided at GHZ/Exch, MW/GHZ, Cabin/GHZ, DKGS, STJT, DSS, NAZJ, UJP, SMO, CRR, KBH, KTRH, THB, NNA, GAI, PSR, MNE, UMNR, SKJ, DPL, TIL, SKJ, BKHR, KUE, SMO OFC room and MFP/enquiry, BGS		
28	<b>Battery sets</b> -Total 116 Nos, 2V/200AH battery was installed for OFC equipment 24 Nos. at each BKHR, SIHO, TIL & SKJ. Further, 4 Nos, 12V/200AH battery was installed at each KHI, NRPA, SLT, KRBP& KPGM station.		

## VII Scrap Disposal-

**5287** Nos. batteries and **173** Nos. DG sets have been offered to stores for Scrap.

**Ferrous** 64 MT

**Total Ferrous material 64 MT**

**Non- ferrous** 1.891 MT

**Total Non-ferrous material 1.891 MT**

**Other Scrap material**

i.	Batteries	1195 Nos.
ii.	DG sets	10 Nos.

**Total scrap disposal material completed-65.891 MT** & (1195 Nos. batteries, 10 Nos. DG set)

## VIII. ASSISTANCE REQUIRED

- i. Following materials are required on urgent basis for expeditious commissioning of various targeted reliability improvement work in division-

S. No.	Items	Provision of Freight Terminal at KTRH	Provision of additional loop line at DUBH	Provision of shunt signal at SMO	Interlocking of LC gates	Total
1	12C signaling cable	120 Km	30 Km	40Km	50 Km	<b>240 Km</b>
2	OFC Cable	1.5Km	1.5 Km	-	-	<b>3 Km</b>
3	IPS (6L)	1 No.	-	-	-	<b>1 No.</b>

Indents for cables and IPS have already been placed for procurement at HQ level.

- ii. Post of ASTE/MFP is Vacant from March 2023