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General Manager's

ANNUAL NARRATIVE REPORT

महाप्रबंधक की

वार्षिक वर्णनात्मक रिपोर्ट

2022-23



शोभन चौधुरी महाप्रबंधक

SHOBHAN CHAUDHURI

General Manager

उत्तर रेलवे

बड़ौदा हाऊस,

नई दिल्ली–110 001

NORTHERN RAILWAY

BARODA HOUSE

NEW DELHI-110 001

☎ : 011-23387227 & 23384548 (Off.)

011-23384503 (Fax)

सं0 - 9-ST/GM'ANR/2022-23 ***दिनांक*** *12/9/2024*

सचिव / *The Secretary*

रेल मंत्रालय / *Railway Board,*

रेल भवन / *Rail Bhawan,*

नई दिल्ली / *New Delhi.*

विषय: वर्ष 2022-2023 की महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट।

Sub: General Manager's Annual Narrative Report 2022-2023

वित्तीय वर्ष 2022-2023 में उत्तर रेलवे द्वारा किये गये कार्यों की वार्षिक वर्णनात्मक रिपोर्ट मैं इसके साथ अग्रेषित करता हूं।

I forward herewith the Annual Narrative Report on the working of Northern Railway for the financial year 2022-2023.

12.9.2024

(शोभन चौधुरी)

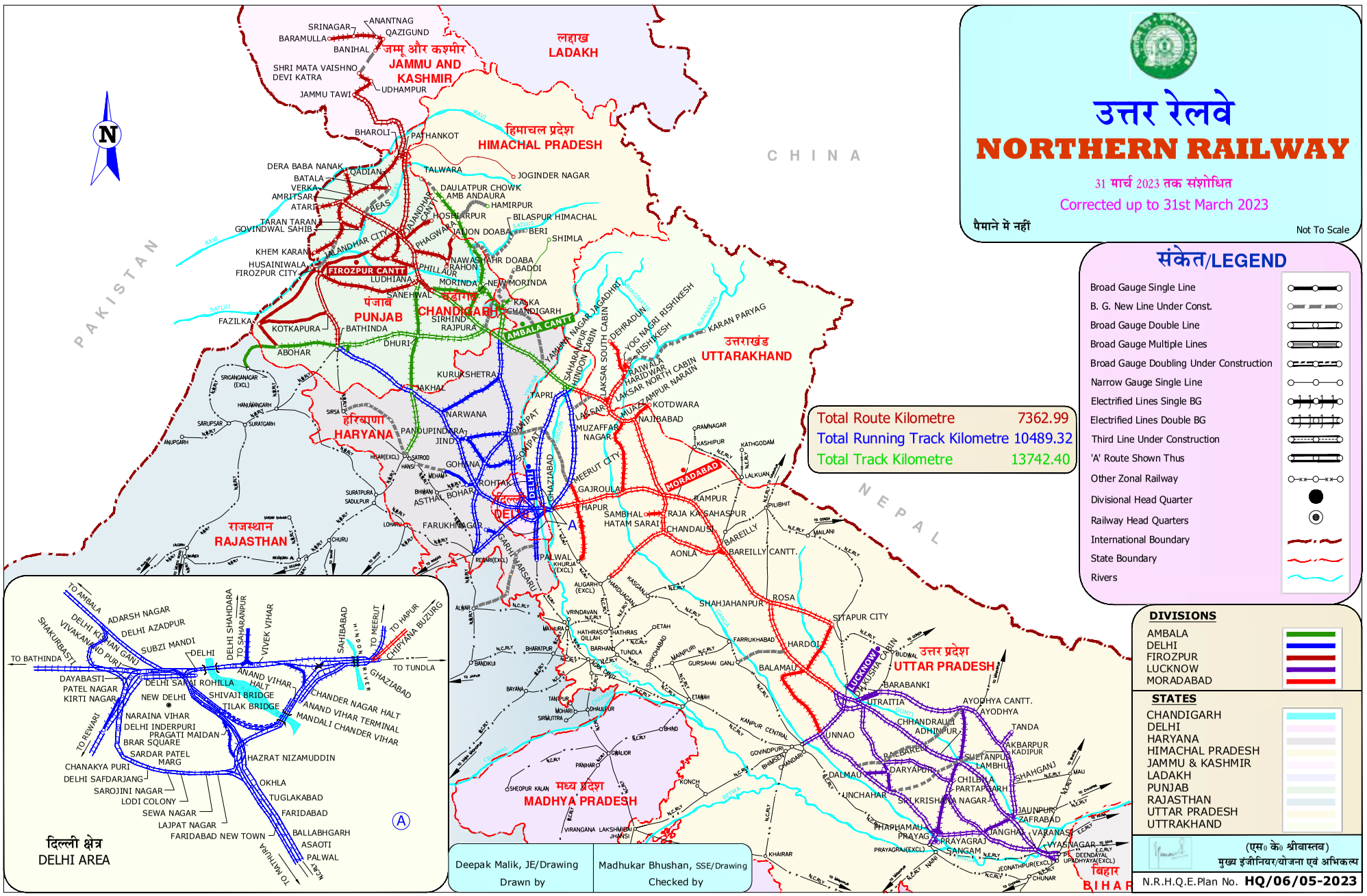
महाप्रबंधक

(SHOBHAN CHAUDHURI)

General Manager

संलग्न यथोक्त

Encl.: As above


उत्तर रेलवे
NORTHERN RAILWAY
31 मार्च 2023 तक संशोधित
Corrected up to 31st March 2023
पैमाने में नहीं
Not To Scale
संकेत/LEGEND
Broad Gauge Single Line
B. G. New Line Under Const.
Broad Gauge Double Line
Broad Gauge Multiple Lines
Broad Gauge Doubling Under Construction
Narrow Gauge Single Line
Electrified Lines Single BG
Electrified Lines Double BG
Third Line Under Construction
'A' Route Shown Thus
Other Zonal Railway
Divisional Head Quarter
Railway Head Quarters
International Boundary
State Boundary
Rivers
Total Route Kilometre 7362.99
Total Running Track Kilometre 10489.32
Total Track Kilometre 13742.40
DIVISIONS
AMBALA
DELHI
FIROZPUR
LUCKNOW
MORADABAD
STATES
CHANDIGARH
DELHI
HARYANA
HIMACHAL PRADESH
JAMMU & KASHMIR
LADAKH
PUNJAB
RAJASTHAN
UTTAR PRADESH
UTTRAKHAND
दिल्ली क्षेत्र
DELHI AREA
Deepak Malik, JE/Drawing
Drawn by
Madhukar Bhushan, SSE/Drawing
Checked by
(एस० के० श्रीवास्तव)
मुख्य इंजीनियर/योजना एवं अभिकल्प
N.R.H.Q.E.Plan No. HQ/06/05-2023
PAKISTAN
CHINA
NEPAL
जम्मू और कश्मीर
JAMMU AND KASHMIR
लद्दाख
LADAKH
हिमाचल प्रदेश
HIMACHAL PRADESH
पंजाब
PUNJAB
चंडीगढ़
CHANDIGARH
हरियाणा
HARYANA
उत्तराखंड
UTTARAKHAND
राजस्थान
RAJASTHAN
उत्तर प्रदेश
UTTAR PRADESH
मध्य प्रदेश
MADHYA PRADESH
बिहार
BIHAR
दिल्ली
DELHI
FIROZPUR CANTT
AMBALA CANTT
MORADABAD
LUCKNOW

उत्तर रेलवे
मुख्य विशेषताएं

मार्ग किलोमीटर	बड़ी लाइन(1676 एम एम) छोटी लाइन (762 एम एम) **कुल**	7102.14 260.85 **7362.99**
विद्युतिकृत मार्ग किलोमीटर	6648.69 कि.मी.	
रेलपथ किलोमीटर दूरी	बड़ी लाइन(1676 एम एम) छोटी लाइन(762 एम एम) **कुल**	10228.47 260.85 **10489.32**
सेवित राज्य एवं केंद्र शासित प्रदेश	07/03 (हिमाचल प्रदेश, पंजाब, हरियाणा, दिल्ली, उत्तर प्रदेश,राजस्थान और उत्तराखंड एवं केंद्र शासित प्रदेश चंडीगढ़, जम्मू एवं कश्मीर और लद्दाख)	
मंडलों की संख्या	5 (दिल्ली, फिरोजपुर, लखनऊ, मुरादाबाद एवं अंबाला)	
स्टेशन की संख्या	790	
यांत्रिक कारखाने	5 (जगाधरी, आलमबाग, चारबाग, कालका एवं अमृतसर)	
डीजल लोको शेड	4 बड़ी लाइन(तुगलकाबाद, लुधियाना, आलमबाग एवं शकूरबस्ती) 2 छोटी लाइन(कालका एवं पठानकोट)	
विधुत लोको शेड	2 (गाजियाबाद एवं लुधियाना)	
कर्मचारियों की संख्या	131322	
राजपत्रित अधिकारियों की संख्या	1645	
इंजनो की संख्या	विद्युत-1162 डीजल- 891	
सवारी डिब्बों की संख्या	8535	
2022-23 में वैगन होल्डिंग	290757	
2022-23 में प्रारंभिक यात्रियों की संख्या	36.98 करोड़	
2022-23 में राजस्व लदान	65.04 मीट्रिक टन	
2022-23 में सकल आय	रु0 22376.03 करोड़	
2022-23 में सामान्य कार्यगत खर्चे	रु0 26488.27 करोड़	
संचालन अनुपात	118.38%	

NORTHERN RAILWAY

SALIENT FEATURES

ROUTE KMs	BROAD GAUGE (1676 MM) NARROW GAUGE (762 MM) Total	7102.14 260.85 **7362.99**
ELECTRIFIED ROUTE KMs	6648.69 Kms	
RUNNING TRACK KMS	BROAD GAUGE (1676MM) NARROW GAUGE (762 MM) Total	10228.47 260.85 **10489.32**
STATES/UNION TERRITORIES COVERED	07/03 (Himachal Pradesh, Punjab, Haryana, Delhi, Uttar Pradesh, Rajasthan, Uttarakhand & U.T. of Chandigarh, J&K and Ladhakh)	
NO. OF DIVISIONS	5 (DLI, FZR, LKO, MB, UMB)	
NO. OF STATIONS	790	
MECHANICAL WORKSHOPS	5 (Jagadhari, Alambagh, Charbagh, Kalka and Amritsar)	
DIESEL LOCOSHEDS	4 BG (Tughlakabad, Ludhiana, Alambagh and Shakurbasti) 2 NG (Kalka and Pathankot)	
ELECTRIC LOCOSHEDS	2 (Ghaziabad, Ludhiana)	
NO. OF STAFF	131322	
NO. OF GAZETTED OFFICERS	1645	
NUMBER OF LOCOMOTIVES	Elect. – 1162 Diesel – 891	
NUMBER OF PASSENGER COACHES	8535	
WAGON HOLDING IN 2022-23	290757	
NO. OF ORIGINATING PASSENGERS IN 2022-23	36.98 Cr.	
REVENUE LOADING IN 2022-23	65.04 MT	
GROSS EARNING IN 2022-23	Rs.22376.03 Cr	
TOTAL WORKING EXPENDITURE IN 2022-2023	Rs.26488.27 Cr.	
OPERATING RATIO	118.38 %	

NORTHERN RAILWAY
CONTENTS

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सामान्य
GENERAL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

उत्तर रेलवे की उपलब्धियां

1. उत्तर रेलवे सबसे बड़ा क्षेत्रीय रेलवे है और यहां पंजाब, हरियाणा, दिल्ली, हिमाचल प्रदेश, उत्तरप्रदेश और उत्तराखंड के कुछ हिस्सों, केंद्र शासित प्रदशों, चंडीगढ़ और जम्मू और कश्मीर में रहने वाली एक बड़ी आबादी को सेवा प्रदान करता है । ज़ोन की ट्रेनें हर दिन देश भर के क्षेत्रों से लोगों को, खाद्यान्नों और सामानों को ले जाती हैं। यह उत्तर में दो अंतरराष्ट्रीय सीमाओं पर तैनात अपने सैनिकों को बनाए रखने में भारतीय सशस्त्र बलों का भी समर्थन करती हैं।

2. भारत ने 2022 में आजादी के 75 साल पूरे किए । स्वतंत्रता संग्राम में रेलवे के योगदान को स्वतंत्रता दिवस से पहले 18-23 जुलाई 2022 तक एक प्रतिष्ठित सप्ताह के माध्यम से मनाया गया जिसे "आजादी की रेलगाड़ी और स्टेशन" कहा गया ! पूरा उत्तर रेलवे, 8 स्टेशन, मेरठ, पं.राम प्रसाद बिसमिल (जिला सहारनपुर), काकोरी, खाटकरकलान, भगतांवाला, अमृतसर, चारबाग एवं सुनाम उधम सिंह वाला और 05 ट्रेनें 12953/54 अगस्त क्रांति एक्सप्रेस, 15273/74 सत्याग्रह एक्सप्रेस, 12312/11 नेताजी एक्सप्रेस, 13005/06 हावड़ा मेल और 12903/04 फ्रंटियर मेल जश्न का हिस्सा थे।

3. सुरक्षा पर सबसे अधिक ध्यान दिया गया है। समय –समय पर सुरक्षित रेल परिचालन सुनिश्चित करने के लिए विभिन्न सुरक्षा अभियान चलाए जाते हैं ।वर्ष 2022-23 में रेल दुर्घटनाओं की संख्या में कमी आई है और रेल दुर्घटना से कोई यात्री हताहत नहीं हुआ ।

   - यूएसएफडी प्रशिक्षण 48680 टीकेएम पर किया गया है।
   - विभिन्न मंडलों के कुल 66 रेल कर्मचारियों को महाप्रबंधक स्तर पर पुरस्कृत किया गया है।
   - 967.213 टीकेएम पर टीआर आर कार्य किया जा चुका है।
   - 1101.292 टीकेएम पर गहरी स्क्रीनिंग की गई है।
   - 705.119 केएम पर सीटीआर का काम हो चुका है ।

4. केंद्रीय योजना प्रकोष्ठ ने वर्ष 2022-23 के दौरान उत्कृष्ट प्रदर्शन का गौरव हासिल किया है। जिसके परिणाम स्वरूप, इस अवधि के दौरान 30 कार्य अध्ययन आयोजित किए गए और कर्मचारियों की विभिन्न श्रेणियों के कुल 2036 पदों का समर्पण कर 78.96 करोड़ रुपए की मौद्रिक बचत की गई ।

5. उत्तर रेलवे कश्मीर को कन्याकुमारी से जोड़ने के लिए सभी मौसम के लिए उपयुक्त ब्रॉड गेज रेल लाइन का निर्माण कर रहा है। इसमें 12.75 किमी लंबी टी-49 सुरंग बनाने का कार्य भी शामिल है जो कि भारत की सबसे लंबी परिवहन सुरंग होगी । इस खंड पर 26 प्रमुख पुलों में से 21 और 11 छोटे पुल बिछाए जा चुके हैं । उत्तर रेलवे के USBRL परियोजना पर विश्व के सबसे उंचें रेलवे ब्रिज, चिनाब ब्रिज का निर्माण अक्टूबर 2022 में पूरा हो चुका है।

6. "एक स्टेशन एक उत्पाद" पहल के तहत, स्थानिय शिल्प, कलाकृतियों और खाद्य पदार्थों के प्रदर्शन के लिए उत्तर रेलवे के 94 स्टेशनों पर चिन्हित स्टॉल लगाए गए हैं । यह विशिष्ट उत्पादों के प्रदर्शन, लोकप्रियीकरण और बिक्री के लिए एक मंच प्रदान करेगा और स्थानिय कारीगरों को प्रोत्साहन देगा।

7. उत्तर रेलवे के दो स्टेशनों, अंबाला कैंट और उधमपुर को माननीय प्रधानमंत्री के पहले रोज़गार मेले के आयोजन के लिए चुना गया था। माननीय गृहमंत्री जी ने नवनिर्मित रेल कोच नवीनीकरण कारखाना एवं देश का पहला एलिवेटेड रेलवे कॉरिडोर रोहतक में दिनांक 27 अक्टूबर 2022 को

फरीदाबाद में आयोजित एक सार्वजनिक समारोह में माननीय रेल मंत्री की उपस्थिति में उद्घघाटन किया गया।

8. वर्ष 2022-23 के दौरान कुल 95 जोड़ी सवारी गाड़ियों को इलेक्ट्रिक कर्षण पर चलाया जा रहा है। इस वित्त वर्ष के दौरान रुपए 333.06 करोड़ की आवृत्ति बचत हासिल की गई है।

9. 100 % विद्युतीकरण मिशन के तहत उत्तर रेलवे पर विद्युतीकरण का कार्य तेज गति से चल रहा है। वित्तीय वर्ष 2022-23 के दौरान कुल 523.35 आरकेएम एवं 1178 टीकेएम को विद्युतीकृत किया गया। इसके परिणाम स्वरूप उत्तर रेलवे का स्वरूप 93% (6581 आरकेएम) रूट किलोमीटर विद्युतीकृत किया गया और अब दिल्ली, लखनऊ, मुरादाबाद, मंडलों का विद्युतीकरण कार्य पूरा हो गया है।

10. सोलर पावर प्लांट को कनेक्ट करने वाले KW पावर ग्रिड दिल्ली मंडल पर एक जगह (120 कि.वाट पावर) लखनऊ मंडल 1 जगह (50 कि. वाट पावर), अंबाला मंडल पर दो जगह (210 किलो वाट पावर) एवं मुरादाबाद मंडल पर तीन जगह पर (166 किलो वाट पावर)लगाए गए हैं ताकि पीपीपी मॉडल के अंतर्गत ग्रीन एनर्जी के उपयोग को बढ़ाया जा सके। इन प्लांटों से वार्षिक कुल 7.96 लाख यूनिट ग्रीन एनर्जी उत्पन्न होने की आशा है, जिसके परिणामस्वरूप रुपए 47.74 लाख की बचत होगी और प्रतिवर्ष 652.47 टन CO2 उत्सर्जन में कमी आएगी।

11. इस वर्ष के दौरान थ्री फेज इलेक्ट्रिक इंजन रीजेनरेटिव ब्रेकिंग का उपयोग करके लगभग रुपए 137.55 करोड़ की एनर्जी रीजेनरेट की गई।

12. मुरादाबाद मंडल के देहरादून डिपो (02 डब्ल्यू/एल) और अंबाला मंडल के चंडीगढ़ (02 डब्ल्यू/एल) में चार 11/.750 किलोवाट सी एस एस सफलतापूर्वक परिचालित किए गए हैं । इसके कारण ई ओ जी सप्लाई वॉशिंग लाइन एवं सिंक लाइन में दैनिक मरम्मत कार्य के दौरान दी जा रही है। इसके शुरू हो जाने के परिणाम स्वरूप दैनिक मरम्मत कार्य में किसी प्रकार का वायु प्रदूषण नहीं होगा और डीजल की लगभग 2 लाख लीटर वार्षिक बचत होगी।

13. वर्ष 2022-23 के दौरान डीईएमयू पीओएच का उत्पादन 276 (अर्थात् लक्ष्य 253 से 9.09% अधिक), इलेक्ट्रिकल/लोको पीओएच का उत्पादन 34 (अर्थात् 25 के लक्ष्य से 36% अधिक), एन जी कोच पीओएच का उत्पादन 146 (अर्थात 93 के लक्ष्य से 56.99% ऊपर) और एन ए सी आईसीएफ कोच पीओएच का उत्पादन 2054 था (अर्थात 1620 के लक्ष्य से 26.79% अधिक).

14. ईएमयू कार शेड, गाजियाबाद को पर्यावरण प्रबंधन प्रणाली (ईएमएस) के लिए आईएस ओ 14001: 2015 व्यवसायिक स्वास्थ्य और सुरक्षा प्रबंधन प्रणाली (ओ एच एस एम एस) के लिए आई सो 45001: 2018 और ऊर्जा प्रबंधन प्रणाली एवं 5 एस के लिए आइएसओ 50001: 2018 से मान्यता प्राप्त है।

15. एम ई एम यू कार शेड, सहारनपुर, को आईएसओ 50001: 2011 और 5एस, आईएस ओ 9001: 2015 आइएस ओ 14001: 2015 आई एस ओ 450001: 2018 प्रमाण पत्र से मान्यता प्राप्त है।

16. नियमित और विशेष एलएचबी ट्रेनों ने 2022-23 के दौरान 30980 यात्राओं (76.6%) की योजना पर काम किया । अप्रैल 22 से 23 मार्च तक इससे लगभग 2.68 करोड़ लीटर (लगभग 293.76 करोड) एच एस डी तेल की बचत हुई है तथा 71798 टन कार्बन क्रेडिट भी हुआ।

17. उत्तर रेलवे के दो कारखाने जगाधरी वर्कशॉप एवं कालका वर्कशॉप ने अपने ग्रीन को- रेटिंग प्रमाणन को उन्नत किया है। सी आई आई द्वारा जगाधरी वर्कशॉप को 13.04.2022 को ग्रीन- को प्लैटिनम रेटिंग से सम्मानित किया गया है। यह ग्रीन- को प्लैटिनम रेटिंग हासिल करने वाला पहला कारखाना बन गया है। सवारी डिब्बा कारखाना ,कालका ने 29.05.2022 को ग्रीन -को गोल्ड रेटिंग हासिल की है।

18. वित्त वर्ष 2022-23 के दौरान STBA के माध्यम से 35.41 लाख टिकट जारी किए गए हैं जिससे 28.59 करोड रुपए का राजस्व प्राप्त हुआ है , ATVM के जरिए 160.65 लाख टिकट जारी किए गए हैं जिससे 191.76 करोड़ों रुपए का राजस्व प्राप्त हुआ है, को- टी वी एम के माध्यम से 6.73 लाख टिकट जारी किए गए हैं जिससे 9.3 करोड़ का राजस्व उत्पन्न हुआ है और यू टी एस- ऑन -मोबाइल एप के माध्यम से 19.13 लाख टिकट जारी किए गए, जिससे रुपए 22.41 करोड़ का राजस्व उत्पन्न हुआ है ।

19. वर्ष 2022-23 के दौरान 34 भारत गौरव ट्रेनें (6 रामायण एसी इकोनामी ट्रेनें, 4 बौद्ध एसी डीलक्स ट्रेनें और 24 महाराजा एक्सप्रेस ट्रेनें) शुरू की गईं ।

20. वर्ष 2022-23 के दौरान NTKM प्रति वैगन दिन वर्ष 2021-22 के दौरान 8398.83 वैगन प्रतिदिन की तुलना में 9544.25 वैगन प्रतिदिन था , इससे 13.64 प्रतिशत की बढ़ोतरी दर्ज की गई और वर्ष 2021-22 के दौरान वैगन किलोमीटर प्रतिदिन 232.67 की तुलना में, वर्ष 2022-23 के दौरान वैगन किलोमीटर प्रतिदिन 254.37 था जिससे 9.33% की बढ़ोतरी दर्ज की गई।

21. वर्ष 2022-23 के दौरान वर्ष 2021-22 के दौरान 7295 लोडिंग की तुलना में 8897 वैगन पीसमील लोडिंग की गई जिससे 21.96 प्रतिशत की बढ़ोतरी दर्ज की गई।

22. वर्ष 2022-23 के दौरान, पिछले वर्ष की इसी अवधि की तुलना में डीजल ट्रैक्शन पर 0.76% की बचत हुई है।

23. उत्तर रेलवे के आरपीएफ कर्मियों को भारत के राष्ट्रपति द्वारा एक भारतीय पुलिस पदक प्राप्त हुआ और वर्ष 2023 में महानिदेशक/आरपीएफ द्वारा 06 DG का प्रतीक चिन्ह उनकी ईमानदारी, कर्तव्य के प्रति समर्पण और अनुकरणीय साहस के लिए प्राप्त हुए ।

24. पूरे उत्तर रेलवे के 614 स्टेशनों पर (फिरोजपुर- 120 अंबाला -103 दिल्ली -147 मुरादाबाद- 122 और लखनऊ- 122) वाई-फाई की सुविधा स्थापित की गई है। वाई-फाई की सुविधा टाटा ट्रस्ट और रेलवे द्वारा प्रदान की गई है।

25. प्रभावी हिसाब किताब रखने के लिए , उत्तर रेलवे IRWCMS , WAMS और TAMS जैसे विभिन्न डीजिटल प्लेटफॉर्म का उपयोग कर रहा है । इससे पारदर्शिता आई है और बही खाता ,जांच और भुगतान में तेजी आई है। जुलाई 22 से 100% ऑनलाइन बिल क्लीयरेंस लागू किया गया है। नए प्रवेशकों के लिए ऑनलाइन PRAN और सेवानिवृत कर्मचारियों के लिए ई-पीपीओ उनके लाभ के लिए तैयार किए जा रहे हैं ।

26. फाइल किए गए रिटर्न के विवरण, सी ए/ जीएसटी द्वारा दिए गए मतों सहित सूचनाओं के प्रसार के लिए तथा रेलवे बोर्ड द्वारा जीएसटी से संबंधित विभिन्न परिपत्रों को अद्यतन करने के उद्देश्य से उत्तर रेलवे मुख्यालय द्वारा एक डैशबोर्ड (10.2.2.11/ जीएसटी) विकसित किया गया है।

27. इस वित्त वर्ष के दौरान GeM के माध्यम से खरीदी गई वस्तुओं एवं सेवाओं का कुल संचयी मूल्य 607.55 करोड रुपए था । वित्त वर्ष 2022 -23 के दौरान उत्तर रेलवे के वर्ष के लिए निर्धारित 460 करोड़ के लक्ष्य को पार करते हुए 675.35 करोड रुपए की कुल स्क्रैप बिक्री की है।

28. यूजर डिपो माड्यूल (UDM) के क्रियान्वयन के मामले में उत्तर रेलवे ने सभी परेषितियों (कंसाइनी) को ऑन-बोर्ड करने की प्रक्रिया पूरी कर ली है। संपूर्ण भारतीय रेल पर उत्तर रेलवे का लेन-देन स्तर वर्ष 2022-23 में सर्वाधिक अर्थात 9357.90 करोड रुपए रहा।

29. उत्तर रेलवे केंद्रीय अस्पताल में HMIS लागू कर दिया गया है। रोगियों के रिकॉर्ड अब डिजिटाइज्ड हैं तथा टेली- परामर्श की सुविधा उपलब्ध है।

30. HRMS तथा संवर्ग प्रबंधन मोड्यूल (कैडर मैनेजमेंट माड्यूल) भी सफलता पूर्वक आरंभ किए जा चुके हैं।

31. वर्ष 2022-23 के लिए उत्तर रेलवे को कर्मचारी हित निधि के अंतर्गत 13,41,87,200 रु (तेरह करोड़ इकतालिस लाख, सतासी हजार और दो सौ रुपए) आंबटित किए गए थे। इस राशि का शिक्षा मनोरंजन, संस्कृति, महिला सशक्तिकरण, आयुर्वेद, होम्योपैथी, संस्थान और क्लब सुविधाएं, खेल, स्काउट एंड गाइड, संकट में राहत आदि के लिए सदुपयोग किया गया है।

32. 21 जून 2022 को पूरे उत्तर रेलवे में अंतर्राष्ट्रीय योग दिवस मनाया गया। दिल्ली के करनैल सिंह स्टेडियम में एक मेगा योग सत्र आयोजित किया गया, रेलवे बोर्ड के अध्यक्ष और सीईओ और बोर्ड के सदस्यों के साथ-साथ कई रेलवे कर्मचारियों ने इस कार्यक्रम में भाग लिया यह कार्यक्रम मैसुरू से प्रसारित होने वाले माननीय प्रधानमंत्री के समारोह के साथ मेल खा रहा था ।

33. उत्तर रेलवे के खिलाड़ियों ने बर्मिंघम राष्ट्रमंडल खेल 2022 में भारत के लिए परचम लहरा कर हमें फिर से बहुत गौरवान्वित किया है। 17 लोगों ने खिलाड़ियों और कोचों के रूप में विभिन्न आयोजनों में भाग लिया। सुश्री साक्षी मलिक, सुश्री विनेश फोगाट, कुश्ती में श्री बजरंग पुनिया ने स्वर्ण पदक तथा सुश्री दिव्या काकरान ने कुश्ती में कांस्य पदक प्राप्त किया। श्री सागर अहलावत ने रजत पदक और श्री रोहित टोकस ने बॉक्सिंग में कांस्य पदक जीता । वहां पर पुरुष और महिला हॉकी टीम और महिला क्रिकेट टीम ने उत्तर रेलवे का प्रतिनिधित्व किया। महिला क्रिकेट टीम और पुरुष हॉकी टीम ने अपने मैचों में रजत पदक जीता, जबकि महिला हॉकी टीम ने कांस्य पदक जीता ।

34. उत्तर रेलवे ने लगातार दूसरी बार कौल गोल्ड कप 2022- 23 जीता।

HIGHLIGHTS 2022-23

1. Northern Railway is the largest Zonal Railway and serves a huge population residing in the states of Punjab, Haryana, Delhi, Himachal Pradesh, parts of Uttar Pradesh and Uttarakhand, Union Territories of Chandigarh and Jammu & Kashmir. The trains from the zone ferry people, food grains and goods each day from the region across the country. It also supports the Indian armed forces in maintaining their troops stationed at the two international borders in the north.

2. India completed 75 years of independence in 2022. The contribution of Railways in the freedom struggle was celebrated in the run up to the Independence Day from 18-23 July'2022 through an iconic week, called "Azadi Ki Rail Gadi aur Stations" all over the country. Eight stations; Meerut, Pt. Ram Prasad Bismil (Distt. Shahjahanpur), Kakori, Khatkarkalan, Bhagtanwala, Amritsar, Charbagh & Sunam Udham Singh Wala and five trains; 12953/54 August Kranti Express, 15273/74 Satyagrah Express, 12312/11 Netaji Express, 13005/06 Howrah Mail and 12903/04 Frontier Mail were part of the celebrations over NR.

3. Safety has been at prime focus. Various safety drives are launched from time to time to ensure safe train operations. There is a decline in the number of train accidents and no casualty to passengers in 2022-23 from Train Accidents.

    - USFD testing has been done on 48680 TKMs.
    - Total 66 Railway Staff of different divisions have been awarded at GM's level.
    - TRR work has been done on 967.213 TKMs.
    - Deep Screening has been done on 1101.292 TKMs.
    - CTR work has been done on 705.119 KMs

4. The Central Planning Cell has achieved a distinction of outstanding performance during the year 2022-23. As a result of which, 30 work studies were conducted during this period and a total surrender of 2036 posts of various categories of staff were achieved with a monetary savings of Rs. 78.96 crores.

5. Northern Railway is constructing an all-weather BG Rail line to connect Kashmir to Kanyakumari. This includes the breakthrough of the 12.75 Km long T-49 Tunnel, which is set to become the longest transportation tunnel in India. 21 out of the 26 major bridges and 11 minor one on the section have been laid.The construction of the World's Highest Railway Bridge, the "Chenab Bridge" on the USBRL project of NR has been completed in October'2022. Trains are already running in Kashmir Valley.

6. Under the "One Station One Product" initiative, earmarked stalls have been setup at 94 stations of NR for display of local crafts, artefacts and food items. This will provide a platform for showcasing, popularizing and sale of the signature products and give impetus to local artisans.

7. Two stations of Northern Railway, Ambala Cantt. and Udhampur, were chosen to hold the Hon'ble PM's first Rozgar Mela. Hon'ble Home Minister inaugurated the newly constructed Rail Coach Navinikaran Karkhana, Sonipat and the country's first Elevated Railway Corridor at Rohtak in the presence of Hon'ble Minister of Railways from a public function held at Faridabad on 27th Oct.'2022.

8. A total of 95 pair of coaching trains have been taken over on Electric traction during the year 2022-23. A recurring saving of Rs. 333.06 Cr. accrued during this financial year.

9. Electrification work is going on at a rapid pace in NR under mission 100% electrification. A total of 523.35 RKM and 1178 TKM were electrified during FY 2022-23. With this 93% (6581RKM) route kilometer of Northern Railway has been electrified and Delhi, Lucknow, Moradabad divisions have been completely electrified.

10. 545 KWp Grid connected solar power plants have been installed at 01 location (120 KWp) over Delhi division, 01 location (50 KWp) over Lucknow division, 02 locations (210 KWp) over Ambala division and 03 locations (166 KWp) over Moradabad division to enhance the use of green energy under PPP model. Total 7.96 Lakhs units are expected to be generated from these plants annually which will result in a saving of Rs. 47.74 Lakhs and reduction of 652.47 tonnes of CO2 emission per annum.

11. Energy regeneration worth Rs. 137.55 Cr. approx has been achieved during this year by use of regenerative braking in three phase electric locos.

12. Four 11/.750 KV CSS has been successfully operated in Dehradun Depot (02W/L), of Moradabad division & Chandigarh depot (02 W/L) of Ambala division due to which EOG SUPPLY is being given during daily repair work in washing line and sick line. With its commencement there will be no air pollution in the daily repair work and there will be an annual saving of about 2 lakh liters of diesel.

13. During the year 2022-23, DEMU POH outturn was 276 (9.09% abovetarget of 253), Elect/ Loco POH outturn was 34 (36% above the target of 25), NG coaches POH outturn was 146 (56.99% above target of 93) and NAC ICF Coach POH outturnwas 2054 (26.79% above target of 1620).

14. EMU Car Shed, GZB has been accredited with ISO 14001:2015 for Environment Management System (EMS), ISO 45001:2018 for Occupational Health & Safety Management System (OHSMS) & ISO 50001:2018 for Energy Management System (EnMS) & 5S.

15. MEMU Car Shed, SRE is accredited with ISO 50001:2011 and '5S', ISO 9001:2015, ISO 14001: 2015, ISO 45001:2018 certifications.

16. Regular & special LHB trains worked on HOG scheme for 30980 trips (76.6%) during 2022-23. This has resulted in a saving of approx.2.68 Croreltrs (Approx. Rs. 293.76 Cr.) of HSD oil from April'22 to March'23 earning 71798 Tonnes of carbon credits also.

17. Two workshops in NR viz. JUDW and KLKW upgraded their Green-Co Rating certification. Jagadhri workshop (JUDW) has been awarded Green-Co "Platinum" Rating on 13.04.2022

by CII. It has become NR's first Workshop to achieve Green-Co Platinum Rating. C&W Workshop, Kalka (KLKW) has achieved Green-Co "Gold" Rating on 29.05.2022.

18. During FY 2022-23, 35.41 lakh tickets have been issued through STBA generating revenue of Rs. 28.59 Crores; 160.65 lakh tickets issued through ATVMs generating revenue of Rs. 191.76 Crores; 6.73 lakh tickets issued through Co-TVM generating revenue of Rs. 9.3 Crores and 19.13 lakh tickets have been issued through UTS-on-Mobile App generating revenue of Rs. 22.41 Crores.

19. During the year 2022-23, 34 Bharat Gaurav Trains (6-Ramayan AC Economy Trains, 4-Budhhist AC Deluxe Trains and 24 Maharajas Express Trains) were started.

20. During the year 2022-23, NTKM per wagon day was 9544.25 wagons per day as compared to 8398.83 wagons per day during the year 2021-22 registering an improvement of 13.64%.Wagon kms per wagon day was 254.37 wagon per day as compared to 232.67 wagons per day during the year 2021-22, registering an improvement of 9.33%.

21. During the year 2022-23, 8897 Wagons piecemeal loading was done as against 7295 loading during the year 2021-22 registering an improvement of 21.96%.

22. During the year 2022-23, there has been saving of 0.76 % on Diesel traction as compared to the corresponding period of previous year.

23. RPF personnel of NR received 01 Indian Police Medal by the President of India and 06 DG's Insignia by the Director General/RPF in the year 2023, in recognition of their sincerity, devotion to duty and exemplary courage.

24. Wi-Fi has been installed at 614 stations (FZR-120, UMB-103, DLI-147, MB-122 and LKO-122) over Northern Railway. Wi-Fi is provided by the TATA trust and Railway.

25. For effective account keeping, NR is harnessing various digital platforms like IRWCMS, WAMS and TAMS. This has brought in transparency and sped up book keeping, vetting and payments. 100% Online bill clearance has been implemented from July'22. On line PRAN for new entrants and e-PPOs for the retired employees are being generated for their benefit.

26. A dashboard forGST(10.2.2.11/GST) has been developed on intranet by NR Headquarter for dissemination of information including details of returns filed, opinions furnished by CA/GST and updating various circulars related to GST issued by Railway Board.

27. The Commulative value of procurement of Goods and Services through GeM during the financial year was Rs.607.55 Crores. During the year 2022-23 NR has achieved a total scrapsale of Rs.675.35 Croressurpassing this year target of Rs. 460 Crores.

28. In implementation of User Depot Module (UDM), Northern Railway has completed the process of on-boarding of all the consignees. Among Indian Railway, Northern Railway is highest in transaction level i.e. Rs.9357.90 Crores in year 2022-23.

29. HMIS has been implemented in NRCH. Patient records are now digitized and Tele consultations facilities are available.

30. HRMS and Cadre Management Modules have also been successfully launched.

31. For the year 2022-23,Rs. 13,41,87,200/- (Rs. Thirteen Crores Forty One Lakh Eighty Seven Thousand and Two Hundred Only) were allocated under the Staff Benefit Fund to Northern Railway and the amount has been gainfully utilized for activities such as Education, Recreation, Culture, Women Empowerment, Ayurveda, Homeopathy, Institute & Club Facilities, Sports, Scouts & Guides, relief in distress etc.

32. International Yoga Day was celebrated over NR on 21st June'2022. A Mega yoga session was held in Karnail Singh Stadium at Delhi, Chairman&CEO Railway Board and Board Members alongwith many Railway employees participated in the event. The Programme coincided with the Hon'ble PM's function being aired from Mysuru.

33. Northern Railway sportspersons have again made us very proud by winning laurels for India at the Birmingham Commonwealth Games 2022. 17 persons participated in the various events as players and coaches. Ms. Sakshi Mallik, Ms. Vinesh Phogat, Sh. Bajrang Punia won Gold Medals and Ms. Divya Kakran got Bronze Medal in Wrestling. Sh. Sagar Ahlawat won Silver and Sh. Rohit Tokas Bronze in Boxing. There is representation of NR in women's and men's Hockey and womens Cricket Teams. The women's cricket and men's Hockey team garnered silver in their respective matches while the women's Hockey team won the Bronze Medal.

34. Northern Railway has won the Kaul Gold Cup 2022-23 for the second time in continuation.

PUBLIC RELATIONS

1.1.1 About the Department

The Public Relations Department is instrumental in shaping a favorable public opinion of Northern Railway by building its positive image. This is done by sustained media interaction and timely dissemination of information to the public through press releases, advertisements, press conferences, press briefings etc. This department also plays a significant role in collecting a feedback of the public opinion towards the Railways to help in formulating policies that would be perceived by railway passengers, users and general public as being people friendly. This is achieved by the continuous monitoring of the print and electronic media.

The thrust of PR as planned and executed by this department is significantly influenced by the activities of the Zone at any given time. The year 2022-23 can be termed as a highly eventful year for Northern Railway.

Also Public Relations Office issued regular reports to the Press on the drives/action-plan taken by the Railways to bring in a palpable improvement in passenger services.The press reported checks and drives undertaken during the holiday season substantially. Wide publicity was given to the various special trains run on all occasions.

The crowning achievements of the year 2022-2023 were flagging off of the Amb Andaura –New Delhi Vande Bharat Express Train by Hon'ble Prime Minister at Una Himachal on 13.10.2022. Hon'ble Prime Minister has also inaugurated Rozgar Mela at Ambala & Udhampur through video conference on 22.10.2022. Hon'ble Minister of Railways inaugurated Swacchata Pakhwada at Hazrat Nizamuddin Railway Station on 17.09.2022. On the same day, Hon'ble Minister of Railway has also inaugurated Blood Donation Camp at Northern Railway Central Hospital. Hon'ble Minister of Railways has also performed Bhumi Pujan for various development works at Saharanpur Railway Station on 08.11.2022. On 28.02.2023, Hon'ble Minister of Railways has flagged off Bharat Gaurav Deluxe A.C. Tourist "Garvi Gujrat Yatra Train" from Delhi Safdarjung.

Public Relations Office, Northern Railway is doing immense work in the social media realm. Promotion through uploading videos on YouTube, tweets on twitter, informative messages on WhatsApp and articles on face book about recent events and developments of Railways are undertaken on a daily basis. This not only helps in making the public aware of the activities being undertaken by Northern Railway as well as Indian Railway as a whole but also being in constant dialogue with the public to hear about their grievances and resolve any problems they might be facing and in turn maintain a positive image in the public eye by bringing out all our efforts in the open.

Public Relations Department plays very important role during Accidents/other unusual occurrences such as bandh calls, railroko agitations, floods, fog etc. It also plays greater responsibility in interaction with media with correct and updated information such as relief and rescue measures, passengers injured and dead(in case of accident), as well as restoration of traffic etc..

During foggy weather, the PR Department worked in special shifts to upload train position/ information on the web site besides relaying the same to electronic media. In order to generate mass awareness on safety issues like safety at level-crossings etc., The PR Department also undertook SMS campaigns to disseminate the information, as and when required.

Factual information on all inaugural events of the various developmental projects was disseminated through highly informative, creative and colourfully designed brochures. The various occasions for media interaction and PR activities during 2022-23 are listed below.

1.1.1 About the Department

Ceremonial Functions-01.04.2022 to 31.03.2023

S.No	Date	Event
1.	17.09.2022	Various Works at Swachhata Pakhwada inaugurated at Hazrat Nizamuddin Railway Station by Hon'ble Minister of Railways. Hon'ble Minister of Railways has also inaugurated Blood Donation Camp at Northern Railway Central Hospital, New Delhi.
2.	13.10.2022	Hon'ble Prime Minister, Shri Narendra Modi flagged off of the inaugural run of the Amb Andaura-New Delhi Vande Bharat express train from Una Himachal.
3.	22.10.2022	Inauguration of Rozgar Mela at Ambala & Udhampur by Hon'ble Prime Minister Shri Narendra Modi through video conference.
4.	05.11.2022	Inspection of redevelopment works at Kashi Railway Station by Hon'ble Minister of Railways Shri Ashwini Vaishnaw.
5.	08.11.2022	Inspection of Deoband Railway Station by Shri Ashwini Vaishnaw, Hon'ble Minister of Railways. Hon'ble Minister of Railways has also performed Bhumi Pujan for various development works at Saharanpur Railway Station.
6.	13.12.2022	Shri Ashutosh Gangal, General Manager, has inaugurated the new office of Operating Department at Baroda House, New Delhi.
7.	28.02.2023	Bharat Gaurav Deluxe A.C. Tourist "Garvi Gujarat Yatra Train "Flagged off from Delhi Safdarjung by Sh.Ashwini Vaishnaw , Hon'ble Minister for Railways.
8.	04.03.2023	Hon'ble Minister of Railways has laid the foundation stone of New Station Building at Dhampur regarding a move of enhancing passenger amenities
9.	18.03.2023	The live streaming telecast of Global Millet function (Shree Anna) inaugurated by Hon'ble Prime Minister of India was done at Various stations over Northern Railway.

10.	25.03.2023	Hon'ble Minister of Railways has bought local products at Baramula Railway Station to promote local artisan to encourage under the 'One Station and One Product' initiative. Hon'ble Minister of Railways has also promoted local employment by purchasing dry fruits through digital payment under the 'One Station and One Product' initiative Station.

1.1.3 Performance of Public Relations Department during the Year

S. No.	Activity	Indicate Number (S)	Remarks if Any
1.	Press Releases issued	638	
2.	Press Releases Published	638	
3.	Press Conferences	12	
4.	Press Tours Conducted	03	Una Himachal, Udhampur & Chenab Bridge.
5.	Publicity Brochures Brought Out	03	
6.	Participation in Exhibitions	01	IITF-2022
7.	Advertisements Released	3684	(Including Corrigendum).
a	Display	01	Vigilance Awareness Week.
b	Tender	3053	(Including Corrigendum).
c	Others (Notices)	631	(Including Corrigendum).
8.	Radio /TV spots Produced	–	
9.	Radio /TV spots	–	
10.	Interviews/Bytes Organised	–	

LEGAL MATTERS

1.2.1 About the Department

Law Department in HQ office of Northern Railway is headed by Dy.GM/Law and is working under the administrative control of AGM. Following are the duties of Legal Department-

- Nomination of Railway Advocates if needed e.g. in cases where unable to identify executive department.
- Coordination with nodal officers for providing Power of Attorney/Vakalatnama in favour of the nominated RA, para-wise comments and relevant rules in support of the stand to be taken by the administration in the court of law.
- To study the pleadings of the petitioners/applicants and legal vetting of Reply/Affidavit prepared by RA on the basis of para-wise comments provided by branch officer.
- Examining judgments/orders referred by other branches and to advise the concerned to ensure timely action.
- To examine the grounds of appeal framed by the executive departments for the purpose of taking decision with regard to filing of appeal.
- To provide legal opinion to the various departments whenever required by them.
- Legal vetting of all legal documents viz. Contract, Agreement, Lease, Bank Guarantee etc.
- To monitor timely payment of legal fee and legal expenses to Railway Advocates.
- Follow up action for pending Contempt and Execution cases with executives and bring into the notice of nodal officers about the urgency of taking decision in any individual case in order to avoid any embarrassing situation.
- Maintain Liaison with Solicitor General of India, Additional Solicitor General and Government Advocates in connection with cases in High Courts and Supreme Court of India.

1.2.2 Highlights of the year

- **Cases in Courts over Northern Railway Territory:**

The opening balance of court cases pertaining to Northern Railway within its territorial jurisdiction in various courts and Quasi judicial forums National State and District Consumer Forums, Tribunals etc. at the beginning of the financial year **2022-23** was **10111**. During the year under review, **4977** fresh cases were filed bringing the total to **15088**. Out of these **2674** cases were disposed off during the year leaving the balance of cases **12414** as on **31/03/2023.**

- **Cases in Courts outside Northern Railway Territory:**

In addition to above, **320** were pending in courts/quasi judicial forums outside the territorial jurisdiction of Northern Railway at the beginning of the financial year **2022-23**. **27** fresh cases were filed in these courts during the period under review bringing to the total to **347** cases. Out of these, **42** cases were disposed off, leaving the balance of **305** cases at the close of the financial year **2022-23.**

- **Financial Expenditure during April, 2022 to March, 2023:**

The total expenditure incurred on litigation during the year was **Rs.7,09,20,366/-**

- **Amount claimed/decreed by the Court:**

The position with regard to the amount claimed/decreed by the Court and payments made towards the satisfaction of decrees during the financial year **2022-23** is given below:

(i) Amount claimed in all cases instituted in various courts **Rs.67,29,71,559/-** during the financial year **2022-23;**

(ii) Amount decreed by the Court **Rs.83,11,13,091/-** during the financial year **2022-23;**

(iii) Amount paid towards satisfaction of decree including amount decreed in previous years is **Rs. 99,40,08,430/-**

- **Legal opinion:**

During the period under reference, Legal Opinion was given in **No.84** of cases (excluding Court cases) to Engineering, Stores, Mechanical, Commercial, Operating, Security, Medical and S& T Department.

VIGILANCE

1.3.1 About the Department

Vigilance Organization on the Northern Railway is under the administrative control of Senior Deputy General Manager who is also the Chief Vigilance Officer of this Railway. The activities of Vigilance Organization cover a wide range of activities. The organization not only investigates the complaints pertaining to offences of corruption and other kinds of malpractices, but also carries out preventive checks at sensitive points, locations and areas in order to ascertain if procedures are being adhered to.

1.3.2 General

The sphere of Vigilance Organization covers a wide gamut of activities. The organization not only investigates the complaints pertaining to offences of corruption and malpractices, but also carries out preventive checks at sensitive points and Mass Contact Area in order to ascertain if procedures are being adhered to additionally. Decoy checks are also conducted in order to reinforce the systems.

The main areas of activities of Vigilance broadly categorized are as under: -

(i) Preventive checks.

(ii) Investigations into genuine and owned complaints.

(iii) Punitive recommendations consequent to investigations.

(iv) Integrity building.

(v) Vigilance clearances.

(vi) Education and awareness.

Broad objectives of this organization are: -

(i) Ensure observance of rules and procedures.

(ii) Protect of Railway revenue against leakages.

(iii) Procedural and structural reforms to restrict and limit opportunities for corrupt practices.

(iv) Initiatives for integrity improvements.

(v) Improving rail user’s perception.

The following thrust areas have been identified for the year on which emphasis is given for conducting checks:-

(i) Scrutiny of expenditure contracts covering all Engineering Department.

(ii) In order to cover large value works/Machinery & plants/procurement, Plan Heads have been identified for conducting preventive checks, including proper accountal of stores.

(iii) Scrutiny of Earning contracts.

(iv) Misuse of various concessions including free passes, Checks in working of PRS System, E-Tickets – specifically refunds after preparations of charts, EFT's to detect fraud and their genuineness, Refund of PRS Tickets, Claim settlement cases under section 124-A.

(v) Monitoring coverage and usage of CCTVs and other Surveillance mechanisms at various critical infrastructures of Railways where misuse is rampant.

(vi) Checks on Non issued tickets and special cancellation in PRS and UTS.

(vii) Checks on reservation done on zero value/pre-bought tickets and misuse of special/ complementary passes.

(viii) Checks on overloading of VPs/SLRs and record keeping of overloading instances by the checking/contracting division and action taken thereof.

(ix) Duty Roster of TTEs & rotation of TTEs.

(x) EFT and station cash remittance and submission of periodical returns.

(xi) Review of staff posted at Goods Sheds, Parcel officers and other sensitive posts to ensure rotation.

(xii) Reconciliation of Issue & Receipt of new and released materials.

(xiii) Proper implementation of NIP & its inclusion in Service record against the staff against which D&AR action had been proposed.

(xiv) Checks in RRB/RRC exams, Departmental Selections, Compassionate ground Appointments.

(xv) Maintenance of leave records.

(xvi) Verification of various certificates of the candidates recruited through compassionate grounds, sports quota & cultural quota etc.

(xvii) Scrutiny of long absentee employee, verification of employee data in IPAS with muster roll/attendance and Service records.

(xviii) Scrutiny of compassionate appointment cases & role of Welfare Inspectors.

(xix) Failed NEFT transactions and bankers cheques.

(xx) Memorandum of differences for salary payment.

(xxi)Bill passing of contracts- entries in MB.

(xxii)Reconciliation of payment of Deposit works.

(xxiii)Internal-check machinery in bill passing of contractors and suppliers claims

(xxiv)Reconciliation of receipts through electronic mode.

(xxv)Report of pending RRs, deduction of surcharge and deposit of BG.

(xxvi)Check vendor/ Party Master in IPAS to weed out fake entities & expired contracts.

(xxvii)Checking Price Variation Bills.

(xxviii)Checking of Incentive bonus given to SSEs in Workshops and Production Units.

(xxix)Checking of DOB of the Pensioners/family pensioners in the Scroll Sheet of the Bank with special attention to pensioners>80 years of age.

(xxx)Maintenance and upkeep of in-motion weighbridges.

(xxxi)Hospital Management- Procurement of medicines and Quality of high value medicines.

1.3.3 Organization

Vigilance organization on the Northern Railway is under the Administrative control of Senior Deputy General Manager who is also the Chief Vigilance Officer of this Railway.

The sanctioned strength of the Vigilance organization is as follows:

a) Gazetted

1	SDGM/ Chief Vigilance Officer	1
2	Chief Vigilance Officer/T	1
3	Chief Vigilance Officer (S&T)	1
4	Dy. Chief Vigilance Officer (A)	1
5	Dy. Chief Vigilance Officer (E)	1
6	Dy. Chief Vigilance Officer (EL)	1
7	Dy. Chief Vigilance Officer (M)	1
8	Dy. Chief Vigilance Officer (S)	1
9	Dy. Chief Vigilance Officer (T)	1
10	Sr. Vigilance Officer (E)	1

b) Non-Gazetted Staff

1	Field staff (including 2 watchers)	33
2	Office staff (including two PO)	27
3	Group D staff	12

1.3.4 Investigations into Complaints

Total number of complaints investigated by the Vigilance branch during the year 2022-2023 and the result arising there from in the form of Major penalty/ Minor penalty proceedings are as under:

S. No	Items	Total
(a)	Total number of complaints investigated	82
(b)	Total number of Major penalty proceedings arising there from (Number of staff both GO & NGO)	9
(c)	Total number of Minor penalty proceedings arising there from (Number of staff both GO & NGO)	29

1.3.5 Preventive Checks

(a)	Number of Preventive checks undertaken	648
(b)	Amount realised/ raised towards Railway dues	209.61 Lakhs
(c)	Total number of Major penalty proceedings arising there from (Number of staff)	96
(d)	Total number of Minor penalty proceedings arising there from (Number of staff)	149

1.3.6 DAR Statistical Information

S. No	Items	GO	NGO	Total
(a)	Number of DAR cases brought forward from the previous year	28	103	131
(b)	Number of fresh cases arisen during the year	4	304	308
(c)	Number of cases finalized	10	255	265
(d)	Number of cases outstanding at the end of the year	28	103	174

1.3.7 Punishments

S. No	Items	GO	NGO	Total
1	Dismissal	-	3	3
2	Removals	-	1	1
3	Compulsory retirements	-	1	1
4	Reduction in rank/ Pay	4	103	107
5	Withholding of increments	1	94	95
6	Withholding of promotion	-	1	1
7	Censure	-	23	23
8	Others	5	29	34
	Total	**10**	**255**	**265**

1.3.8 Some Important checks conducted by Vigilance Department During the period 01.04.2022 to 31.03.2023

a) Detection of irregularity in Parcel Office/Leased SLR/VPU

- During preventive check conducted at Parcel Office/MB on 06/04/2022, total weight 4045 kg was detected against booked weight of 2300 kg. of 23 packages booked from HWH to MB. Thus, 1756 kg was found excess against booked weight for which an amount of Rs. 4807/- realized from the party. GM/ER had been advised for taking action against the defaulting staff.
- During reweighment of F/SLR II of train No. 22969 on 16/04/2022, total weight of 4180 kg was detected against booked weight 3950 kg. Thus, 230 kg was found excess for which an amount of Rs. 15080/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of VPU of train No. 00463 on 28/04/2022 ex HWH-DLI, 413 kg excess weight was detected of 15 consignments. An amount of Rs. 44310/- was realized from the party and necessary action recommended against the lease holder.
- During preventive check conducted at Parcel Office/KLK on 11/05/2022, Rs. 9210/- were found undeclared/unaccounted Cash in possession of staff on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted at Parcel Office/LKO On 11/05/2022, Rs. 1900/- were found excess in Pvt. Cash of staff on duty. DRM had been advised for taking action against the defaulting staff.

- During reweighment of F/SLR of train No. 12581 on 05/06/2022, total weight of 4324 kg was detected against CC 3900 kg. Thus, 424 kg was found excess for which an amount of Rs. 19877/- was realized from the party and necessary action recommended against the lease holder.
- During preventive check conducted at Parcel Office/BSB on 09/06/2022, total weight 14232 kg was detected against booked weight of 12385 kg. booked from to HWH to DLI. Thus, 1847 kg was found excess against booked weight for which an amount of Rs. 15374/- realized from the party. GM/ER had been advised for taking action against the defaulting staff.
- During preventive check conducted at Parcel Office/DLI on 29/06/2022, Rs. 5515/- were found short in Govt. Cash of staff on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted at Parcel Office/BSB on 05/07/2022, total weight 20684 kg was detected against booked weight of 13760 kg. booked from NDLS to BSB. Thus, 6924 kg was found excess against booked weight for which an amount of Rs. 16172/- realized from the party. DRM had been advised for taking action against the defaulting staff.
- During reweighment of SLR of train No. 22177 on 14/07/2022, total weight of 4496 kg was detected against CC 4000 kg ex CSTM-BSB. Thus, 496 kg was found excess for which an amount of Rs. 20217/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of SLR of train No. 15909 on 08/08/2022, total weight of 4978.85 kg was detected against CC 3900 kg ex DBGR-DLI/LGH. Thus, 1078.85 kg was found excess for which an amount of Rs. 42924/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of SLR of train No. 15909 on 18/08/2022, total weight of 5840 kg was detected against CC 3900 kg ex DBGR-DLI. Thus, 1940 kg was found excess for which an amount of Rs. 64637/- was realized from the party and necessary action recommended against the lease holder
- During rewighment at Parcel Office on 31/08/2022, 2 packages of weight 2120 kg found unbooked in train no 22417 between BSB-LKO for which an amount of Rs. 31617/- realised as undercharges.
- During reweighment of FSLR of train No. 12721on 19/09/2022, total weight of 5202 kg was detected against CC 3900 kg ex HYB-NZM. Thus, 1302 kg was found excess for which an amount of Rs. 50431/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of FSLR of train No. 12723on 19/09/2022, total weight of 4868.9 kg was detected against CC 3900 kg ex HYB-NDLS. Thus, 968.9 kg was found excess for which an amount of Rs. 30222/- was realized from the party and necessary action recommended against the lease holder

- During reweighment at Parcel Office/NDLS on 14/10/2022, total weight 3947 kg was detected against booked weight of 1700 kg of 45 packages booked from HWH to BSB. Thus, 2247 kg was found excess for which an amount of Rs. 6675/- was realized as undercharges. GM/Vig/ER had been advised for taking action against defaulting staff.

- During reweighment at Parcel Office/NDLS on 20/10/2022, total weight 20531 kg was detected against booked weight of 13448 kg. of 279 packages booked from HWH to BSB. Thus, 4692 kg was found excess for which an amount of Rs. 10752/- was realized as undercharges. GM/Vig/ER had been advised for taking action against defaulting staff.

- During preventive check conducted at Parcel Office/BE on 23/11/2022, Rs. 1750/- were found excess in Pvt. Cash of Parcel Porter. DRM had been advised for taking action against defaulting staff.

- During reweighment of SLR of train No. 15127on 18/11/2022, total weight 4301.5 kg. was detected against CC of 3900 kg. Thus, 401.5kg. was found excess for which an amount of Rs. 13995/- was realized from the party and necessary action recommended against the lease holder.

- During reweighment of SLR of train No. 12415 on 07/12/2022, total weight 5139 kg. was detected against CC of 3900 kg. Thus, 1239kg. was found excess for which an amount of Rs. 30909/- was realized from the party and necessary action recommended against the lease holder

- During reweighment of FSLR of train No. 15658on 05/01/2023, total weight 8605.5 kg. was detected against CC of 3900 kg. Thus, 4705.5kg. was found excess for which an amount of Rs. 135771/- was realized from the party and necessary action recommended against the lease holder.

- During reweighment of VPU of train No. 22691 on 06/01/2023, total weight 41.10 tones detected in VPU No. CR-203239 of 32 tones. Thus, 9.10 Tonnes was found excess for which an amount of Rs. 688697/- was realized from the party and necessary action recommended against the lease holder.

- Acting upon source information about overloading in train no. 00468 COVID Special, Northern Railway Vigilance jointly/in association with ECR vigilance conducted check at HWH and PNBE stations. During reweighment of consignment of 7 PWBs booked from DLI to HWH at destination (HWH) station and 51 PWBs booked from LDH-PNBE and ASR-PNBE at destination (PNBE) station, total 143969 kg. was detected against Booked weight of 89715 kg. Hence, 54254 kg was found excess for which an amount of Rs. 271575/- was realized from the party as undercharges. DRM had been advised to taking D&AR action against the defaulting staff.

- A preventive check was conducted in Parcel Office/MB on 13.01.2023 wherein records pertaining to pending railway dues were scrutinized and it was found that Debit memo by SR.TIA/MB, was lying un-cleared as well as not accounted for in Railway accounts. These debit memos were issued for the difference of freight which was to be realized as VPs were booked on P scale instead of R scale. After instruction given to CPS/MB for

early realization of all debit memos, it was taken in the railway earning through current balance-sheet. Thus, an amount of Rs. 38,10,380/- raised/ realized from the party.

- During Preventive check conducted in Parcel Office/HNZM on 08/02/2023, Rs. 2037/- was found short in Govt. Cash of staff on duty. Besides this Rs. 93585/- was found undeclared/ unaccounted from another Parcel staff. DRM had been advised for taking D&AR action against the defaulting staff.
- During reweighment of RSLR of train No. 20805 on 09/02/2023, total weight 6355 kg. was detected against CC of 3900 kg. Thus, 2455kg. was found excess for which an amount of Rs. 62733/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of SLR of train No. 12301 on 09/02/2023, total weight 6091.4 kg. was detected against CC of 3900 kg. Thus, 2191.4kg. was found excess and 4 packages were also found extra for which an amount of Rs. 68276/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of RSLR of train No. 12807 on 13/02/2023, total weight 5897 kg. was detected against CC of 3900 kg. Thus, 1997 kg. was found excess for which an amount of Rs. 55750/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of FSLR of train No. 12807 on 13/02/2023, total weight 4504.6 kg. was detected against CC of 3900 kg. Thus, 604.6 kg. was found excess for which an amount of Rs. 24171/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of RSLR of train No. 12477 on 23/02/2023, total weight 4594kg. was detected against CC of 3900 kg. Thus, 1594 kg. was found excess for which an amount of Rs. 39738/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of FSLR of train No. 12285 on 27/02/2023, total weight 6345.4 kg. was detected against CC of 3900 kg. Thus, 2445.4 kg. was found excess for which an amount of Rs. 66354/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of RSLR of train No. 12721 on 12/03/2023, total weight 5309 kg. was detected against CC of 4000 kg. Thus, 1309kg. was found excess for which an amount of Rs. 41813/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of FSLR of train No. 12779 on 12/03/2023, total weight 5413 kg. was detected against CC of 4000 kg. Thus, 1413kg. was found excess for which an amount of Rs. 31053/- was realized from the party and necessary action recommended against the lease holder.
- During reweighment of RSLR of train No. 12779 on 20/03/2023, total weight 6067 kg. was detected against CC of 4000 kg. Thus, 2067kg. was found excess for which an amount of

Rs. 63369/- was realized from the party and necessary action recommended against the lease holder.

- During reweighment of FSLR of train No. 12779 on 20/03/2023, total weight 4554 kg. was detected against CC of 4000 kg. Thus, 554kg. was found excess for which an amount of Rs. 29798/- was realized from the party and necessary action recommended against the lease holder.

b) Detection of irregularity in Train

- During preventive check conducted in Train no. 12554 on 01/04/2022 alongwith TTEs of the Train, 45 WT passengers were found in the train. An amount of Rs. 39340/- realized as penalty and due fare from them.
- During preventive check conducted in Train no. 12445 on 19/04/2022, Rs. 1160/- were found excess in Pvt. cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 15909 on 19/04/2022, three WT passengers were found in Pantry Car of train. An amount of Rs. 10200/- realized from them and DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 15909 on 19/04/2022, Rs. 2200/- and Rs. 400/- were found excess in Pvt. Cash of two TTEs on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12445 on 20/04/2022, two vendors/ waiters were found working without medical certificate in pantry car of train. Rs. 3120/- were realized from them and DRM had been advised for taking necessary action against the contractor.
- During preventive check conducted in Train no. 12031 on 21/04/2022, one passenger was found in C-14 manned coach of TTE on duty. An amount of Rs. 2200/- realized as penalty and due fare from them. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 22461 on 21/04/2022, one vendor/waiter was found working without medical certificate in pantry car of train. Rs. 1510/- were realized from him and DRM had been advised for taking necessary action against the contractor.
- During preventive check conducted in Train no. 12230 on 26/04/2022, Rs. 2850/- were found short in Govt. Cash of TTE on duty. Besides, 01 without ticket passengers were also found in his manned coach and an amount of Rs. 550/- realized from him. DRM had been advised for taking action against the defaulting staff.
- During another preventive check conducted in Train no. 12557 on 27/04/2022, Rs. 950/- were found excess in Govt. Cash of TTE on duty. Besides Ticket checking authority and Traveling authority were also not found with TC staff. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Train no. 12337 on 28/04/2022, six vendors/ waiters were found working without medical certificate in pantry car of train. Rs. 22290/- were realized from them as due fare and penalty and DRM had been advised for taking necessary action against the contractor.
- During preventive check conducted in Train no. 12358 on 28/04/2022 alongwith TTEs of the Train, 165 WT passengers were found in unmanned coaches of the train. An amount of Rs. 132800/- realized as penalty and due fare from them.
- During preventive check conducted in Train no. 12413 on 29/04/2022, five WT/irregular passengers were found in manned coach of TTE on duty. An amount of Rs. 2200/- realized as penalty and due fare from them. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12413 on 29/04/2022, Rs. 1550/- were found excess in Govt. cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12171 on 06/05/2022, one without ticket passenger was found in A1 coach, manned by TTE on duty. An amount of Rs. 2082/- realized as penalty and due fare from him. DRM had been advised for taking action against the defaulting staff.
- During another preventive check conducted in Train no. 12171 on 06/05/2022, four without ticket passenger was found in coach, manned by TTE on duty. An amount of Rs. 6600/- realized as penalty and due fare from him. GM/Vig/ had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12171 on 08/05/2022, Rs. 34730/- were found excess in Pvt. Cash of TTE on duty. Besides, 03 without ticket passengers were also found his manned coach and an amount of Rs. 6150/- realized from them as penalty and due fare. GM/Vig/CR had been advised for taking D&AR action against the defaulting staff.
- During preventive check conducted in Train no. 12424 on 11/05/2022, one without ticket passenger was found in coach, manned by TTE on duty. An amount of Rs. 7050/- realized as penalty and due fare from him. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12917 on 24/05/2022, Six WT/Irregular passenger was found in coach, manned by TTE on duty. An amount of Rs. 4500/- realized as penalty and due fare from him. DRM had been advised for taking action against the defaulting staff.
- During another preventive check conducted in Train no. 12917 on 24/05/2022, two WT/ Irregular passengers was found in coach, manned by TTE on duty. An amount of Rs. 4960/- realized as penalty and due fare from him. Besides Traveling authority were also not found with TTE on staff. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted at TC office/RBL on 31/05/2022, Rs. 6500/- were found short in Govt. Cash of TC on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 13006 on 07/06/2022, one vendor/waiter was found working without medical certificate in pantry car of train. Rs. 4200/- were realized from him and DRM had been advised for taking necessary action against the contractor.
- During another preventive check conducted at TTE/Lobby/NDLS on 22/06/2022, it is found that 11 ticket checking staff did not turn up to duty in 06-14 hrs. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12480 on 28/07/2022, Rs. 1500/- were found excess in Govt. cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 11077 on 28/07/2022, two vendors were found without medical certificate. Rs. 4920/- had been charged from them and DRM had been advised for taking action against the defaulting Contractor.
- During preventive check conducted in Train no. 12238 on 28/07/2022, two vendors were found without medical certificate. Rs. 4000/- had been charged from them and DRM had been advised for taking action against the defaulting Contractor.
- During preventive check conducted in Train no. 15707 on 29/07/2022, Rs. 920/- and Rs. 410/- were found excess in Govt. Cash of two TTEs on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 22402 on 29/07/2022, three irregular passengers were found in manned coach of TTE on duty. Rs. 6165 had been charged from them. DRM had been advised for taking D&AR action against the defaulting staff.
- During preventive checks conducted in TC Office/GZB on 04/08/2022, Rs. 1830/-Rs. 6150/-, Rs. 8400 and Rs. 6480/- were found excess in Pvt. Cash of TCs on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 15707 on 18/08/2022, two passengers were found travelling without ID on e-ticket. Rs. 5525/- were charged from them. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in TC Office/LDH on 18/08/2022, Rs. 4330/- was found excess in Pvt. Cash of TTE on duty. DRM had been advised for taking action against the defaulting staff
- During preventive check conducted in TC Office/GZB on 18/08/2022, Rs. 4020/- was found excess in Pvt. Cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Train no. 12555 on 28/09/2022, Rs. 2215/- were found excess in Pvt. cash of TTE on duty. Besides, 3 irregular passengers were found in manned coach by another TTE and Rs. 4055/- were realized from them. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in TC office/MB on 28/09/2022,Rs.500/- were found short in Govt. Cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in TC office/HPU on 29/09/2022,Rs.450/- were found excess in Govt. Cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12558 on 11/10/2022, Rs. 39330/- realized from irregular passengers found in unmanned coach.
- During preventive check conducted in Train no. 15006 11/10/2022, two vendors were found without traveling authority in pantry car for which Rs. 3150/- were realized from them. Besides, it was found that proper bill was not being delivered to passengers by the pantry staff. DRM had been advised for taking action against the firm.
- During preventive check conducted in Train no. 12404 on 19/10/2022, Rs. 73230/- were realized from without ticket passengers found in unmanned coach.
- During preventive check conducted in Train no. 12424 on 19/10/2022, one without ticket passenger was found in manned coach by TTE. Rs. 10230/- were charged from him. Besides, three unauthorized passengers were found in panty car of the train. Rs. 23700/- were accordingly charged from them. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12230 on 21/10/2022, eight irregular passengers were found in manned coach of TTE on duty. Rs. 4620 had been charged from them. Besides, Rs. 1350/- were found excess in Pvt. Cash of another TTE. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12029 on 21/10/2022, two irregular passengers were found in manned coach of TTE on duty. Rs. 7840/- had been accordingly charged from them. Besides, one irregular passenger was found in another manned coach of TTE on duty. Rs. 2590 had been charged from him. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Train no. 12487 on 02/11/2022, Rs. 13030/- were realized from without ticket passengers found in unmanned coach.
- During preventive check conducted in Train no. 12565 on 02/11/2022, pantry car manager was found responsible for carrying 5 without ticket passengers in panty car of the train. Rs. 31725/- were accordingly charged from them. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Train no. 18309 on 02/11/2022, one irregular passenger was found in manned coach by TTE on duty and Rs. 1760/- were realized from him. Besides, two vendors were also found without medical certificate in Pantry Car. Rs. 11920/- were accordingly charged from them. DRM had been advised for taking action against the defaulting staff.

- During another preventive check conducted in Train no. 18309 on 02/11/2022, Rs. 9660/- were realized from without ticket passengers found in unmanned coach.

- During preventive check conducted in Train no. 15716 on 08/11/2022,Rs.490/- were found excess in Pvt. Cash of TTE on duty. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Train no. 12230 on 25/11/2022, nine irregular passengers were found in AC manned coaches (M1 and M2) of TTE on duty and Rs. 9525/- were realized from them. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Train no. 15620 on 30/12/2022,six passengers were found traveling on booked ticket by misusing MP's IDs. They were treated as irregular passengers and Rs. 15620/- was realized from them.

- During preventive check conducted in Train no. 12429 on 13/02/2023, six passengers were found carrying by Coach Attendant in linen space of M1, M2 and M3 coaches. An amount of Rs. 8820/- was realized from them for due fare and penalty. Besides, Rs. 4200/- were also found from three Coach Attendant. DRM had been advised to take necessary action against the Contractor.

- During preventive check conducted in Train no. 22162 on 15/02/2023, two OBHS staff was found traveling without travelling authority. As they refused to submit due fare and fine, they are accordingly handed over to RPF/UMB.

- During preventive check conducted in Train no. 22462 on 15/02/2023, four OBHS staff was found traveling without Medical certificate. As they refused to submit due fare and fine, they are accordingly handed over to RPF/NDLS.

- During preventive check conducted in Train no. 12013 on 25/02/2023, three without ticket passengers were found travelling in manned coaches of TTEs on duty. An amount of Rs. 6000/- was realized from them for due fare and penalty. DRM had been advised to take DAR action against defaulting staff.

- During preventive check conducted in Train no. 12417 on 01/03/2023, 16 irregular/without ticket passengers were found travelling in manned coaches of TTEs on duty. An amount of Rs. 11760/- was realized from them for due fare and penalty. Besides, Rs. 2500/- and Rs. 4320/- were found excess in Pvt. Cash of two TTEs and Rs. 950/- was found excess in Govt. Cash of another TTE. DRM had been advised to take suitable action against defaulting staff.

- During preventive check conducted in Train no. 12155 on 07/03/2023, four irregular/ without ticket passengers were found travelling in manned coaches of TTEs on duty. An

amount of Rs. 4680/- was realized from them for due fare and penalty. DRM had been advised to take suitable action against defaulting staff.

- During preventive check conducted in Train no. 12425 on 07/03/2023, TTE allotted/ manning Coach No. B1 to B4 was not found in train and two irregular/without ticket passengers were found travelling in his coaches. An amount of Rs. 6300/- was realized from them for due fare and penalty. DRM had been advised to take suitable action against defaulting staff.
- During another preventive check conducted in Train no. 12425 on 07/03/2023, two irregular/without ticket passengers were found travelling in B5 coach manning by TTE on duty. An amount of Rs. 6300/- was realized from them for due fare and penalty. DRM had been advised to take suitable action against defaulting staff.
- During preventive check conducted at Platform/LKO on 07/03/2023, Rs. 1850/- and Rs. 480/- were found excess in Govt. cash of two ticket checking staff on duty. Besides Rs. 4100/- found excess in Pvt. Cash of another Ticket Checking staff on duty. DRM had been advised to take action against defaulting staff.
- During another preventive check conducted at Platform/LKO on 07/03/2023, Rs. 1800/- was found excess in Govt. cash of ticket checking staff on duty. DRM had been advised to take DAR action against defaulting staff.
- During preventive check conducted in Train no. 14611 on 18/03/2023, six without ticket passengers were found travelling in coach manned by TTE on duty. An amount of Rs. 6000/- was realized from them for due fare and penalty. Besides, Rs. 2560/- was also found excess in his Govt. cash DRM had been advised to take action against defaulting staff.
- During another preventive check conducted in Train no. 14611 on 18/03/2023, eleven without ticket passengers were found travelling in coach manned by another TTE on duty. An amount of Rs. 17310/- was realized from them for due fare and penalty. Besides, Rs. 170/- was also found excess in his Govt. Cash. DRM had been advised to take action against defaulting staff.

c) Detection of irregularity in YTSK

- A preventive check was conducted on 23/03/2023 at YTSK centre (1019) in New Delhi surrounding area wherein several irregularities were detected like staff were working without their IDs , staff in possession of excess government as well as private cash, and over charging from the passengers. DRM /DLI had been advised to take suitable action against the YTSK licensee.

d) Detection of irregularity in Booking Office

- During preventive check conducted in Booking office of a station on 27/05/2022, Rs. 350/- were found short in Govt. Cash of Booking Staff. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Booking office of a station on 15/06/2022, Rs. 630/- were found excess in Govt. Cash of Booking Staff. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/DLI on 02/09/2022, Rs. 226/- were found short in Govt. Cash of Booking Clerk. DRM is being advised for taking action against the defaulting staff.
- During preventive check conducted in Reservation office/DLI on 06/09/2022, Rs. 5650/- were found excess in Govt. Cash of Reservation Clerk. DRM is being advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/UMB on 07/09/2022, Rs. 551/- were found short in Govt. Cash of Booking Clerk. DRM is being advised for taking action against the defaulting staff.
- During preventive checks conducted in Booking office/DLI on 08/09/2022, Rs. 230/- were found excess in Govt. Cash of Booking Clerk and Rs. 585/- were found short in Govt. Cash of another Booking Clerk. DRM is being advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/DLI on 26/09/2022, Rs. 1210/- were found short in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 10/10/2022, Rs. 615/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 11/10/2022, Rs. 1350/- were found excess in Pvt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/LDH on 21/10/2022, Rs. 305/- were found short in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/DSB on 26/10/2022, Rs. 380/- were found short in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 28/10/2022, Rs. 5730/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 30/10/2022, Rs. 814/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.

- During preventive check conducted in Booking office/DLI on 02/11/2022, Rs. 380/- were found short in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/ANVR on 02/11/2022, Rs. 580/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 04/11/2022, Rs. 620/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/ANVR on 25/11/2022, Rs. 335/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/DLI on 25/11/2022, Rs. 466/- were found excess in Govt. Cash of Booking Clerk. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking office/NDLS on 25/11/2022, Rs. 300/- were found excess in Govt. Cash of Booking Clerk. Besides one ticket ex DLI-DBG amounting to Rs. 320/- was also found in his possession. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Booking Office of a division on 07/03/2023, Rs. 510/- was found excess in Govt. Cash of Booking Staff on duty. DRM had been advised to take DAR action against defaulting staff.

e) Detection of irregularity in Reservation Office

- During preventive check conducted in Reservation office of a station on 29/04/2022, Rs. 1800/- were found short in Govt. Cash and Rs. 6170/- were found excess in Pvt. Cash of Reservation staff on duty. Besides, 3 unclaimed confirmed tickets recovered from his counter. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Reservation office of a station on 05/05/2022, Rs. 535/- were found short in Govt. Cash of staff on duty. DRM had been advised for taking action against the defaulting staff.
- During preventive check conducted in Reservation office of a station on 12/05/2022, Rs. 1250/- were found excess in Pvt. cash of staff on duty. DRM had been advised for taking action against the defaulting staff.

f) Detection of irregularity in Goods Office

- During preventive check conducted in Goods office of a station on 05/05/2022, Rs. 7740/- were found excess in Pvt. Cash of staff on duty. Besides, Rs. 181000/- stands outstanding in lieu of demurrage. DRM had been advised for taking action against the defaulting staff.

g) Detection of irregularity in NPSB siding

- A preventive check was conducted by team vigilance in NPSB/siding at Sarai Banjara railway station in Ambala Division for investigating any irregularity in goods siding of Nabha power, wherein it was detected that the party is not paying All India Engine Hour Cost since the siding had been commissioned. The team vigilance raised the matter before the Divisional authorities which resulted in realization of Rs. 25.30 crores of pending All India Engine hour cost from the siding owner. This huge amount of dues pending since 2016 could be realized only after investigation and chasing by team vigilance.

h) Detection of irregularity in supplying of sub standard ERC & Metal Liners:

- A complaint was received against a firm for regarding supplying of substandard ERC and Metal Liners to Indian Railway. Vigilance check was conducted in Track Depot Ghaziabad to seize the samples. The firm had supplied 38735 nos. of MK-V ERC and a stain firm had supplied 605000 Nos. of Metal Liner RT8616-17. The samples of ERC MK-V and Metal Liner T-8616 & T-8617 were collected from Track Depot for Investigation. Weight, Toe load & Dimension of MK-V ERC of five different lots were taken and found avg. weight as 1019.52 gm, which was 60.48 gm less (5.74% less) than specified as 1080 gm. Even Toe load of 50% ERC was not qualifying as per IRS specifications. During dimension checking of ERC MK-V, central Leg position and other than central Leg position; the diameter was having average 20.42 mm against 20.64mm specified. Engineering officers had also test checked the weight and Toe load of ERC and found similar lapses and payment was withheld. Dimensions of metal Liner T-8616 & T-8617 were measured and found OK. The average weight of metal Liner T- 8617 was 392 gm. and T-8616 was 341gm. Samples of ERC and Metal liner were collected from Track Depot GZB and sent to RDSO for testing. As per test report; ERC were not qualifying in weight, chemical composition & Hardness test. Metal Liners T-8616 was not conforming in chemical composition & Surface Defects (Test macro examination test) Metal Liner T-8617 was not conforming in chemical composition. Subsequent to Vigilance report, Engineering Branch rejected 38735 nos. of ERC MK-V, supplied by the firm and payment was not released to contractor. In case of Metal Liners (T-861617), these were supplied much earlier and payment was also released before vigilance check. EngineeringBranch has written to RITES and Railway Board about failure of Metal Liners.

i) Detection of irregularity execution of Work Contract

- On the basis of source information, a vigilance check was carried out in one of the division on zonal works contract. It was noticed that in one of the work order, entry of 67 nos PVC water storage tanks of 500 liters capacity was recorded in online MB but only 31 nos water tanks were found. These tanks were below standard in quality & specifications; without ISI mark & weight of these tanks without lid was found 10.950 kg against the standard weight of 18 kg. Released water tanks are not accounted in ledger and not found in concerned SSE store too. Some other items like CI sluice valve & brass bib cocks were also entered in MB without actual execution in field. Site records i.e. material passing register, site order book etc were not maintained.

Regular ADEN was on leave and for optimum utilization of funds before expiry of financial year, ADEN of adjoining section was deputed to test checks the bill. He test checked the bill on the basis of available tanks in other work. In the meantime, concerned Sr. DEN got news of fake entries by SSE and stopped the bills for payment. Thus no financial loss occurred in this case.

j) Detection of irregularities in construction of Over Bridge

A vigilance check was conducted on the work of Const. of ROB by Construction organization. As per drawing, Bow String Girder with steel plates was to be used in Super Structure. As per contract clause, provisions of stage payment @ 40% on supply of steel and @ 15% on fabrication of girder after reaching at site of work in good condition were available. Further as per contract condition, fabrication of steel girder was to be done in RDSO approved workshop and if workshop was away from site, then Bank Guarantee of equal amount of Steel structural material was to be submitted by agency as security. Accordingly agency procured 140 MT Steel structural materials and received stage payment @ 40% (amounting approx ₹63 lakh) against supply. This structural material was sent to RDSO approved workshop, which was located about 200 Km away from site of ROB but agency failed to submit required BG in fulfillment of clause.

On fabrication of steel girder in workshop, 2nd stage payment @ 15% (amounting to approx ₹ 23 lakh) was also released to agency without receiving Girder at site. However subsequently Girder was received at site and erected also. The work was being executed in COVID period. For above lapse, two SG officers, one Sr. Scale officer and concerned SSE/W/C were recommended for “Administrative” action.

k) Detection of irregularities in Track Work

A vigilance check has been carried out in one of the division on works contract related with CTR work of Railway track. During investigation, it is found that cutting/tempering has been done by SSE in measurement book. Initially record entry was made against item NS-1 related to deep screening for a quantity of 815.75 Track meter with location details and later on cancelled the total quantity without recording the reasons for doing so. Again this item was entered in running bill CC-2 with same quantity in same MB. But again this running bill CC-2 was strike out without recording any reasons in MB. After this, new CC-2 running bill was entered in same MB and in this new CC-2, again item NS-I was entered with the same quantity but once again this CC-2 running bill strike out without recording any reasons for doing so. Once again new CC-2 bill was entered in same MB, but in this CC-2 bill, against item NS-1, above quantity was not entered. Concerned SSE entered quantity of same item three times in MB and cancelled out without recording any reasons for doing so. On detailed investigation through TMS records, it was found that said item on recorded locations was actually carried out by Track Machine (BCM) and not by agency. Thus, SSE recorded the bill with inflated quantity of 815.75 Track meter against item NS-1 which was actually not executed by the agency and thus tried to pay undue amount of ₹ 1,81,520/- to the agency. Concerned SSE is recommended to be taken up for “Major penalty” under D&AR.

l) Detection of irregularities in Quality and Quantity Aspects

A preventive Check was carried out on a works contract at one station of LKO division. During vigilance check, it was observed that excess quantities of 148.52 Sqm for 40 mm thick Kota Stone (SOR Item No.096074) at station platforms, 98.61 Sqm for 50 mm thick bituminous macadam (SOR Item No.238013) at approach road are recorded in the Measurement Book and paid to agency for these inflated quantities. Even thickness of bituminous macadam was found 38 mm against 50 mm. At station, 10 mm thick hollow twin box type multiwall polycarbonate sheet used was under specification. Item rate for this sheet was much higher than market rates and brand was also different than specified. For these lapses, Major Penalty charge sheet against SSE/Sectional, Minor Penalty charge sheet against SSE/W/Incharge and Administrative action against ADEN is recommended. In addition, ban on using item of 10 mm thick hollow twin box type multiwall polycarbonate sheet without fresh analysis of rates is recommended.

m) Irregularities found in the Power Cable

Two preventive checks were conducted at MB and SSE/C/SSB.

- Samples of LT XLPE ARMOURED CABLE of size 2Cx16 sq. mm, 4Cx16 sq.mm, 2Cx25 sq. mm & 4Cx70 sq. mm at two/three different locations of a drum were seized.
- During the visual check of the samples, numbers of strands in the core, no. of amour wire/ strips were found to be varied along the length of cable.
- Test results of the sample of 2Cx16 Sq. mm, conducted at a Govt. approved four Lab showed that sample failed to meet the requirement of IS: 7098 (Pt.1)-1988for a specific test i.e. conductor resistance test.
- The varying number of strands in the core at different locations can causeuneven current distribution, leading to hotspots, reduced mechanical strength, and potential failure.
- Failure to meet the conductor resistance test can result in insufficient cross sectional area, high resistance, voltage drop, heat generation, potential damage to the connected equipment, and premature failure

1.3.9 System Improvements

- During investigation of a vigilance check, it was found that ID's provided by the NSDL for processing of NPS cases are being exclusively managed by the Accounts Department. This is in contravention to the Railway Board's letter No. 2017/AC-II/21/2 dated 15.1.19 issued under RBA No 5/2019 according to which Maker ID is to be operated by the Personnel Department and Checker by the Accounts Department.

  Therefore, PFA/NDBH& PCPO/NDBH vide this office letter dated 28.2.22 had been advised to ensure that the differentiation between Maker and Checker ID as per the SOP may be adhered to by all the units.

- **System Improvement regarding time limit for signing the bid sheet:** During a preventive check, it was noticed that bid sheet was signed by competent authority after one week of e-auction conducted for sale of scrap material. In view of above, it was suggested to issue necessary instructions for specifying the time limit for signing bid sheet unless there is proper justification for delay. Store Branch issued instructions on 06.09.2022 that the bid sheet of the sold lot should be signed on the same day of auction.

- **System Improvement regarding estimation of weight for scrap delivery:** During the investigation of case related to delivery of scrap, it is noticed that estimated weight of lot was too high as compare to actual weight found on the day of delivery. Assessment of weight was done by survey committee on the basis of Inspection Note of Headquarters Office. In this regard, a system improvement was suggested that before offering a lot of such type of material the record of previous auctions of same/similar item should be taken into account and accordingly estimation of weight must be done. If history of same/similar nature of item was not available then the weight should be estimated by scientific method so that such type of situation can be avoided. The same was implemented by Stores Branch by giving instructions to all concerned.

- During a vigilance check, it was revealed that duplicate bills for advertisement in news paper were processed for passing and forwarding it to accounts department. Though the duplicity was detected in accounts department and thus the overpayment was prevented. Therefore CPRO was requested that extensive check should be conducted to rule out any double payment in the past to the same party or any other party. Besides, a system may be put in place to prevent duplicate processing of bills in future.

  The same was implemented vide CPRO's letter 100 PR-7/2022 dated 25/08/2022.

- During the course of vigilance investigation some irregularities have been noticed for which PCMM was advised for adhere the same, which are as under:-

  1) LOA should be issued prior to issue of PO & PO should not be issued without submission of SD/PG within stipulated time period.

  2) It should be mandatory to ensure legal vetting & Bank verification of SD/PG by purchase orders issuing Department before onward submission to Accounts for safe custody.

  3) It is requested to instruct the uses of standard terms viz. SD & PG instead of Performance Security, Guarantee warranty etc to the units because SD/PG are standard terms with standard defined meaning for our tenders.

  4) Standard Format for BG is already available in codal provision. Its implementations seem to be lacking for which concerned staff/ officers can be counselled/ taken up.

  CMM/Store/BH/NDLS vide his letter no. E-S/Misc/Vig/Non Implementation of Rules/ 2022 dated 12.09.2022 issued instructions as under:

  1) The purchase orders should not be issued without submission of SD/PG within stipulated time period (whenever exemption is not permitted).

2) Bank verification of SD/PG should be ensured before onward submission to Accounts for safe custody.

3) Standard terms viz. Security Deposit (SD) & Performance Guarantee (PG) should be used instead of Performance Security, Guarantee, warranty etc.

4) Standard Format for Bank Guarantee (BG) as available in codal provisions should be utilised.

- During investigation of a vigilance case, it was found that date of birth of 02 employees working under Delhi Division was mismatched in IPAS and their service records. Due to which both the employees had faced lots of problems in their salary and settlement. Therefore PCPO vide this office letter dated 19.7.22 had been suggested that one time verification of all the staff details in IPAS be done with service record and Aadhar and this should be continued once in a year for the new appointments/employees transferred from other Zones.

  Implemented vide GM/P's letter no 807/E/Pending Reference/Co-ord.Cell/2022 dated 07.10.22.

- During investigation of a vigilance case, it was found that Clause regarding verification of certificate mentioned in the offer of appointment is not as per Railway Board's letter. Thus, Pr CPO vide this office letter dated 27.9.22 was requested to issue suitable directions in this regard.

  Implemented vide GM/P's letter no 807-E/Pending Reference/Co-ord.Cell/2022 dated 14.10.22

- During investigation of a vigilance check, it was found that excess travelling allowance was paid to employees who have not submitted any claims for the same. This amount was paid either by increasing the travelling allowance claims in travelling allowance summary sheet or increasing the total amount of travelling allowance summary sheet. It was further observed that there is guideline to send the travelling allowance journals alongwith the TA Bills to account office of employees whose pay is 1440/- and above which is on the recommendation of 4th CPC. Therefore, vide this office letter dated 23.9.21, Secretary/ Railway Board & CPO/NDBH have been requested that guidelines of 4th CPC needs to be reiterated keeping in view of pay level of 7the CPC. Also it is recommended that executive under takes its own check in a comprehensive manner not only for Muktsar but also for other units.

  Implemented vide GM/P's letter no 839E/145/EIII/BILLS dated 20.9.22

- During investigation of a vigilance check, it was found that ID's provided by the NSDL for processing of NPS cases are being exclusively managed by the Accounts Department. This is in contravention to the Railway Board's letter No. 2017/AC-II/21/2 dated 15.1.19 issued under RBA No 5/2019 according to which Maker ID is to be operated by the Personnel Department and Checked by the Accounts Department. Therefore, PFA/NDBH vide this office letter dated 28.2.22 had been advised to ensure that the differentiation between Maker and Checker ID as per the SOP may be adhered to by all the units.

  Implemented vide GM/P's letter no 839E/145/EIII/BILLS dated 20.9.22.

CENTRAL PLANNING CELL

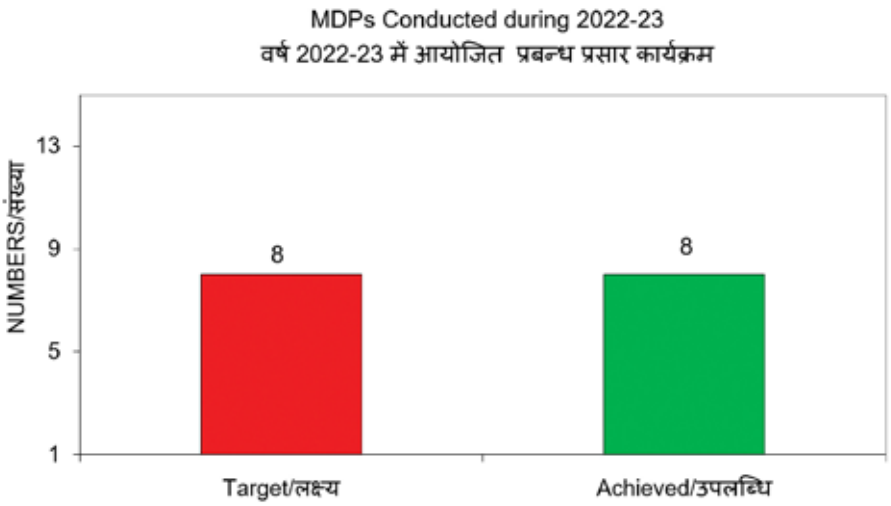
1.4.1 About the Department

Central Planning Cell conducts work studies of various departments over Northern Railway with a view to effect savings in expenditure through reduction in manpower. Work Studies are also conducted to improve and modify the system.

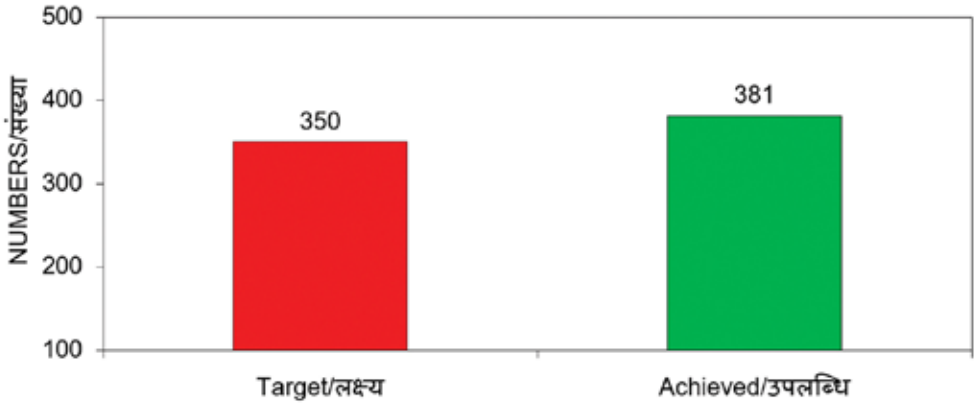
1.4.2 Highlights of the Year

Central Planning Cell conducts work studies of various departments over Northern Railway with a view to effect savings in expenditure through reduction in manpower. Work Studies are also conducted to improve and modify the system. The Central Planning Cell has achieved a distinction of outstanding performance during the year 2022-23. As a result of which 30 no. of work studies were conducted during this period and a total surrender of 2036 posts of various categories of staff were achieved with a monetary savings of 78.96Crores.

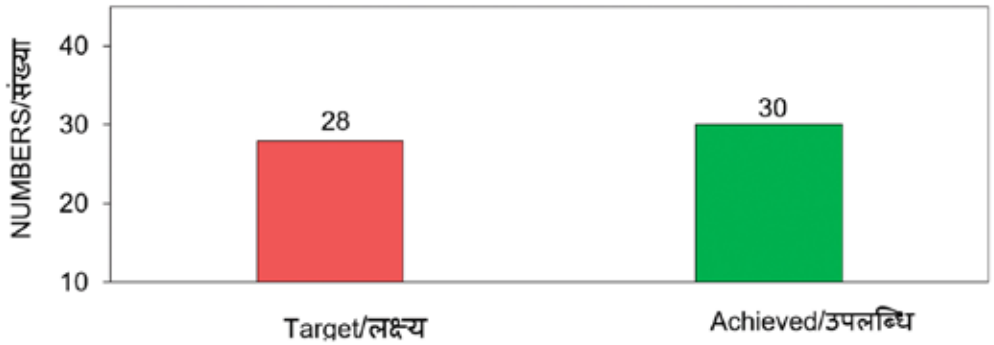
The Central Planning Cell also conducts Management Development Programmes for Senior Supervisors/Sr. Group 'C' staff of all Departments. The Management Development Programme was first time introduced on Northern Railway inAug 1985. It is a five day programme and is conducted at various locations like Lucknow, Shimla, Dharampur, Mussoorie, Delhi etc. for ease of participants. During the course, senior officers of the rank of HAG/SAG/JAG delivered lectures and interacted with the participants. The topics covered in MDP are such that these enhance the managerial skill, develop positive attitude and helps to improve manpower productivity as well as updating the knowledge of participants. At the end of this programme, there is provision for obtaining written feedback from participants on the topic covered, quality of lectures and suggestions for making the course more useful. In the FY 2022-23, total 08 MDP's were conducted and 381 participants of different departments had attended this programme.



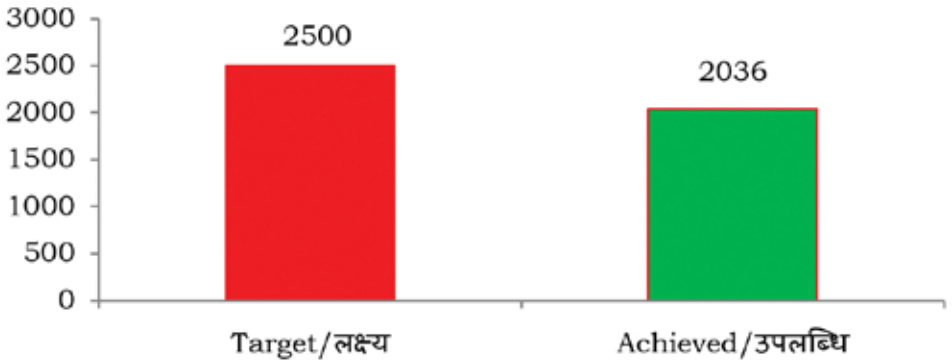
Supervisors Trained During 2022-23
वर्ष 2022-23 में प्रशिक्षित पर्यवेक्षक

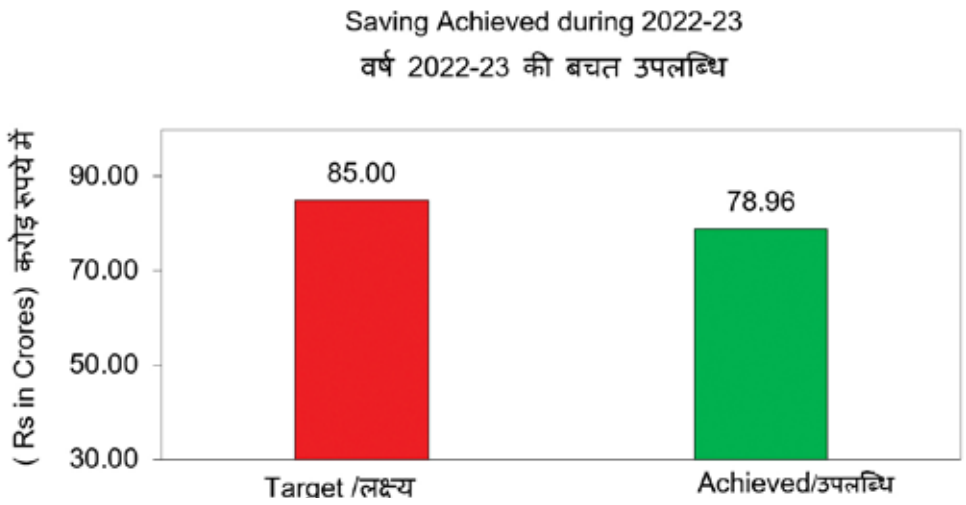


Work Studies Conducted during 2022-23



Man Power Surrendered during 2022-23
वर्ष 2022-23 में अभ्यर्पित जनशक्ति





1.4.3 Yearly Performance of Central Planning Cell

S.No	Item No.	Target for 22-23	Performance					Best Ever	
			18-19	19-20	20-21	21-22	22-23	Figure	Year
1	No. of work studies	28	39	36	26	26	30	39	2018-19
2	Vetted saving (in crore)	85	81.07	74.63	63.12	90.14	78.96	90.14	2021-22
3	Manpower surrender (in nos)	2500	1563	1575	1951	2026	2036	2036	2022-23
3	MDP conducted (in nos)	8	9	8	8	8	8	9	2018-19
5	No. of supervisors trained	350	392	396	354	361	381	396	2019-20

1.5.1 राजभाषा की प्रगति

उत्तर रेलवे ने सरकारी कामकाज में सभी स्तरों पर राजभाषा हिंदी की उत्तरोत्तर वृद्धि के लिए सतत प्रयास किए हैं। परिणामस्वरूप, उत्तर रेलवे पर राजभाषा के प्रयोग में अत्यधिक प्रगति हुई है। वर्ष 2022-23 के दौरान राजभाषा विभाग, गृह मंत्रालय, भारत सरकार द्वारा निर्धारित लक्ष्य प्राप्त करने के हर संभव प्रयास किए गए। हिंदी में कार्य करने हेतु प्रधान कार्यालय के सभी अधिकारियों/ कर्मचारियों को व्यक्तीश: आदेश जारी किए गए।

विभिन्न क्षेत्रों में राजभाषा के प्रगामी प्रयोग की स्थिति इस प्रकार है :

(i) अनुवाद एवं प्रकाशन

वर्ष के दौरान, महाप्रबंधक के निरीक्षण, वार्षिक रिपोर्ट, सभी विभागों के कागजात, जेड.आर.यू.सी.सी बैठकों की कार्यसूची/कार्यवृत, पीसीडीओ, विभिन्न विभागीय परीक्षाओं के प्रश्न -पत्र,विभिन्न प्रकार के संरक्षा संबंधी अनुवाद, सतर्कता बुलेटिन, प्रशस्ति-पत्र, प्रेस विज्ञप्तियां, खेलकूद विभाग की भर्ती संबंधी नीति का अनुवाद, यात्रियों से संबंधित अपराध में रेल सुरक्षा बल की भूमिका संबंधी अनुवाद, परिचालन विभाग के सामान्य एवं सहायक नियम के परिशिष्ट 'एच' का अनुवाद तथा उधमपुर-श्रीनगर-बारामूला रेल लिंक परियोजना संबंधी अनुवाद आदि जैसे नेमी प्रकार के अनुवाद किए गए।

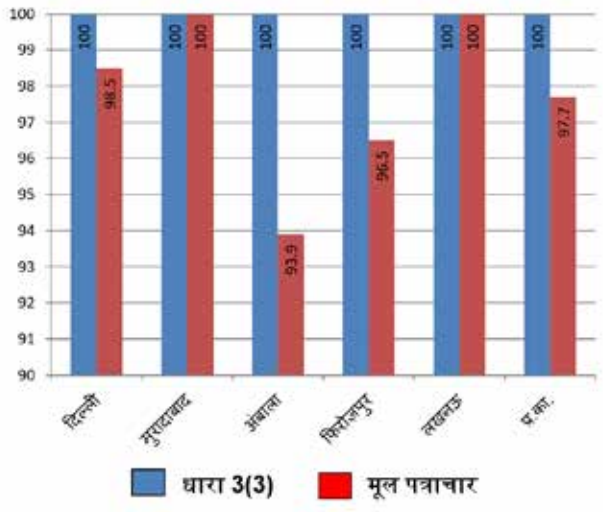
उपयुक्त के अलावा निविदा सूचनाओं एवं समय-सारणी को भी द्विभाषी रूप में उपलब्ध कराया गया। वर्ष 2022-23 के दौरान राजभाषा विभाग, उत्तर रेलवे द्वारा प्रधान कार्यालय से 'सरस्वती संगम', लखनऊ मंडल से 'सारंग', फिरोजपुर मंडल से अमृत दर्पण', मुरादाबाद मंडल से 'अभिव्यक्ति' व निर्माण संगठन से 'नवकृति' नामक पत्रिकाओं का प्रकाशन किया गया।

(ii) राजभाषा अधिनियम, 1963 की धारा 3(3)

उत्तर रेलवे पर **राजभाषा अधिनियम, 1963 की धारा 3(3)** के अनुपालन में, संकल्प, सामान्य आदेश, नियम, अधिसूचनाएं, प्रशासनिक तथा अन्य रिपोर्टें, प्रेस विज्ञप्तियां, संसद के किसी सदन या दोनों सदनों के समक्ष रखी जाने वाली प्रशासनिक तथा अन्य रिपोर्टें व सरकारी कागजात, संविदाएं, करार, अनुज्ञप्तियां, अनुज्ञा पत्र, टेंडर नोटिस तथा टेंडर फार्म आदि शत-प्रतिशत द्विभाषी रूप में जारी किए गए।

(iii) मूल पत्राचार

वर्ष 2022-23 में उत्तर रेलवे पर मूल पत्राचार 97.8 प्रतिशत रहा। राजभाषा अधिनियम-1963 की धारा 3 (3) और मूल पत्राचार की स्थिति निम्न चार्ट में दर्शाई गई है :



(iv) स्टेशन संचालन नियम

उत्तर रेलवे पर सभी 738 स्टेशन संचालन नियम द्विभाषी हैं ।

(v) कोड/नियमावली

उत्तर रेलवे पर प्रयोग में लाई जा रहीं सभी 47 कोड/नियमावली द्विभाषी हैं ।

(vi) राजभाषा कार्यान्वयन समितियां

उत्तर रेलवे पर कुल 107 राजभाषा कार्यान्वयन समितियां गठित हैं। इनकी प्रत्येक तिमाही में बैठक आयोजित की जाती है तथा बैठकों में रेल कार्यालयों में राजभाषा प्रगति की स्थिति की समीक्षा की जाती है और प्राप्त सुझावों को कार्यान्वित किया जाता है।



श्री आशुतोष गंगल, तत्कालीन महाप्रबंधक, उत्तर रेलवे क्षेत्रीय राजभाषा कार्यान्वयन समिति की दिनांक 29-03-2023 को प्रधान कार्यालय में आयोजित बैठक को संबोधित करते हुए



श्री आशुतोष गंगल, तत्कालीन महाप्रबंधक, उत्तर रेलवे क्षेत्रीय राजभाषा कार्यान्वयन समिति की दिनांक 29-03-2023 को आयोजित बैठक में क्षेत्रीय हिंदी प्रतियोगिताओं के विजेताओं को सम्मानित करते हुए

(vii) हिंदी पुस्तकालय व वाचनालय

उत्तर रेलवे पर कुल **89 हिंदी पुस्तकालय व वाचनालय** हैं। इन पुस्तकालयों का संचालन रेलवे कर्मचारियों द्वारा कुशलतापूर्वक किया जा रहा है।

(viii) हिंदी कार्यशालाओं का आयोजन

वर्ष 2022-23 के दौरान उत्तर रेलवे पर **कुल 111 हिंदी कार्यशालाओं** का आयोजन किया गया।

(ix) राजभाषा पखवाड़ा

प्रधान कार्यालय में **दिनांक 14.09.2022 से 29.09.2022** तक राजभाषा पखवाड़ा का आयोजन किया गया। दिनांक 14 सितंबर, 2022 को महाप्रबंधक का **हिंदी दिवस संदेश** जारी किया गया। दिनांक 16-09-2022 को **हिंदी निबंध** और **हिंदी टिप्पण एवं प्रारूप लेखन प्रतियोगिताओं** का आयोजन किया गया। दिनांक 19-09-2022 को उत्तर रेलवे के प्रधान कार्यालय के प्रांगण में **राजभाषा नुक्कड़ नाटक** का आयोजन किया गया, इस कार्यक्रम में महाप्रबंधक महोदय की गरिमामय उपस्थिति में प्रधान कार्यालय के सभी प्रमुख विभागाध्यक्षों एवं अधिकारियों/कर्मचारियों ने भरपूर आनंद लिया। दिनांक 20-09-2022 को हिंदी वाक् प्रतियोगिता का आयोजन किया गया। वाक् प्रतियोगिता का विषय 'मन के हारे हार है, **मन के जीते जीत अथवा कठिन हिंदी बनाम सरल हिंदी-आपकी नजरों में**

क्या है' था। दिनांक 21-09-22 को न्यूज़ रीडिंग प्रतियोगिता का आयोजन किया गया। दिनांक 22-09-22 को अधिकारियों के लिए हिंदी डिक्टेशन प्रतियोगिता एवं राजभाषा संपर्क अधिकारियों की कार्यशाला का आयोजन किया गया। दिनांक 23-09-22 को चित्र देखकर कहानी लेखन प्रतियोगिता का आयोजन किया गया। दिनांक 26-09-2022 को रामधारी सिंह दिनकर जयंती का आयोजन किया गया, जिसमें दिल्ली विश्वविधालय के प्रोफेसर डॉ. पूरन चंद टंडन जी ने उनके जीवन एवं कृतित्व पर व्याख्यान दिया। दिनांक 27-09-22 को महाप्रबंधक की अध्यक्षता में **उत्तर रेलवे क्षेत्रीय राजभाषा कार्यान्वयन समिति की बैठक का आयोजन** किया गया। दिनांक 28-09-22 को तकनीकी गोष्ठी का आयोजन किया गया और दिनांक 29-09-22 को राजभाषा पखवाड़ा समापन एवं पुरस्कार वितरण समारोह का आयोजन राष्ट्रीय रेल संग्रहालय, चाणक्यपुरी, नई दिल्ली के ऑडिटोरियम में किया गया। इस अवसर पर उत्तर रेलवे के सांस्कृतिक दल द्वारा भव्य सांस्कृतिक प्रस्तुति दी गई। पखवाड़े के दौरान आयोजित प्रतियोगिताओं के 33 विजेता अधिकारियों/कर्मचारियों को महाप्रबंधक महोदय द्वारा प्रमाण-पत्र प्रदान किए गए।

इसी प्रकार उत्तर रेलवे के सभी मंडलों, कारखानों एवं निर्माण कार्यालय द्वारा भी सितंबर, 2022 माह में राजभाषा पखवाड़ा का उत्साहपूर्वक आयोजन किया गया।



श्री आशुतोष गंगल, तत्कालीन महाप्रबंधक उत्तर रेलवे द्वारा द्वीप प्रज्ज्वलित करके उत्तर रेलवे राजभाषा समारोह का शुभारंभ



प्रधान कार्यालय में दिनांक 09.05.2022 को आयोजित नोबल पुरस्कार विजेता एवं साहित्यकार रवीन्द्र नाथ ठाकुर जी की जयंती में उपस्थित तत्कालीन मुख्य राजभाषा अधिकारी और व्याख्यान देते हुए दिल्ली विश्वविद्यालय के प्रो. डॉ. पूरन चंद टंडन



प्रधान कार्यालय में दिनांक 21.04.2022 को लाइफ स्टाइल डिस्ऑर्डर विषय पर आयोजित हिंदी कार्यशाला में व्याख्यान देते हुए डॉ. पुनीत भगत, अपर मुख्य चिकित्सा अधीक्षक, कार्यशाला में उपस्थित मुख्य राजभाषा अधिकारी, उप महाप्रबंधक/राजभाषा तथा अन्य अधिकारी और कर्मचारीगण।

1.5.2 उपलब्धियां

➢ मुख्य राजभाषा अधिकारी की अध्यक्षता में दिनांक 21-04-2022 को प्रधान कार्यालय के सभी कर्मचारियों के लिए हिंदी कार्यशाला का आयोजन किया गया। इसमें अपर मुख्य स्वास्थ्य चिकित्सा अधीक्षक, डॉ. पुनीत भगत ने लाइफ स्टाइल डिस्ऑर्डर विषय पर व्याख्यान दिया।

➢ संसदीय राजभाषा समिति की दूसरी उप समिति द्वारा दिनांक 29-04-2022 को चंडीगढ़ रेलवे स्टेशन का राजभाषा संबंधी निरीक्षण किया गया। इस निरीक्षण में रेलवे बोर्ड के अधिकारी, मुख्य राजभाषा अधिकारी तथा उप महाप्रबंधक/राजभाषा ने सहभागिता की।

➢ मुख्य राजभाषा अधिकारी की अध्यक्षता में दिनांक 09-05-2022 को प्रधान कार्यालय में नोबल पुरस्कार विजेता साहित्यकार रविंद्र नाथ ठाकुर जी की जयंती का आयोजन किया गया। इस अवसर पर दिल्ली विश्वविधालय के प्रोफेसर डॉ. पूरनचंद टंडन ने गुरुदेव जी के जीवन एवं कृतित्व पर व्याख्यान दिया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 24-05-2022 को निजामुद्दीन रेलवे स्टेशन एवं वहां स्थित हिंदी पुस्तकालय का निरीक्षण किया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 08-06-2022 को ओक ग्रोव स्कूल, झारीपानी, मसूरी में आयोजित 345वें प्रबंधन विकास कार्यक्रम में रेलवे प्रणाली में राजभाषा के प्रयोग विषय पर व्याख्यान दिया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 15-06-2022 को दिल्ली जंक्शन एवं वहां स्थित हिंदी पुस्तकालय का गहन निरीक्षण किया।

- उप महाप्रबंधक/राजभाषा की अध्यक्षता में दिनांक 31-07-2022 को प्रधान कार्यालय में उपन्यासकार एवं कथाकार मुंशी प्रेम चंद जी की जयंती मनाई गई। इस अवसर पर उनके द्वारा लिखित पुस्तकों की प्रदर्शनी भी लगाई गई।

- उप महाप्रबंधक/राजभाषा की अध्यक्षता में दिनांक 03-08-2022 को प्रधान कार्यालय में राष्ट्रकवि मैथिलीशरण गुप्त जी की जयंती मनाई गई एवं उनके द्वारा लिखित उपन्यासों की प्रदर्शनी भी लगाई गई।

- सितंबर, 2022 माह में उत्तर रेलवे के प्रधान कार्यालय, कारखानों एवं अन्य कार्यालयों में राजभाषा पखवाड़ा का आयोजन किया गया जिसमें विभिन्न प्रतियोगिताओं का आयोजन किया गया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 19-11-2022 को जम्मूतवी रेलवे स्टेशन का तथा दिनांक 21-11-2022 को माता वैष्णोदेवी कटरा रेलवे स्टेशन का राजभाषा संबंधी निरीक्षण किया।

- उप महाप्रबंधक/राजभाषा की अध्यक्षता में दिनांक 27-11-2022 को प्रधान कार्यालय में साहित्यकार श्री हरिवंश राय बच्चन की जयंती का आयोजन किया गया। इस अवसर पर उनके साहित्य की प्रदर्शनी भी लगाई गई।

- महाप्रबंधक की अध्यक्षता में दिनांक 19-12-2022 को उत्तर रेलवे क्षेत्रीय राजभाषा कार्यान्वयन समिति की बैठक का आयोजन किया गया। इस अवसर पर उत्तर रेलवे, प्रधान कार्यालय की राजभाषा पत्रिका सरस्वती संगम 2022 का विमोचन भी किया गया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 02-12-2022 को कुरुक्षेत्र जंक्शन रेलवे स्टेशन एवं वहां स्थित हिंदी पुस्तकालय का निरीक्षण किया।

- प्रधान कार्यालय में दिनांक 8-12-2022 को क्षेत्रीय हिंदी वाक् प्रतियोगिता, दिनांक 9-12-2022 को क्षेत्रीय हिंदी निबंध प्रतियोगिता एवं दिनांक 12-12-2022 को क्षेत्रीय हिंदी टिप्पण एवं प्रारूप लेखन प्रतियोगिता का आयोजन किया गया जिसमें उत्तर रेलवे के विभिन्न कार्यालयों के कर्मचारियों ने भाग लिया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 24-01-2023 को उत्तर रेलवे के विधि अधिकारी की परीक्षा के प्रतिभागियों को राजभाषा नीति के संबंध में व्याख्यान दिया।

- उप महाप्रबंधक/राजभाषा ने दिनांक 06-02-2023 और 02-03-2023 को केन्द्रीय चिकित्सालय, उत्तर रेलवे, नई दिल्ली और वहां स्थित हिंदी पुस्तकालय का निरीक्षण किया।

- महाप्रबंधक की अध्यक्षता में दिनांक 29-03-2023 को उत्तर रेलवे क्षेत्रीय राजभाषा कार्यान्वयन समिति की बैठक का आयोजन किया गया। इस अवसर पर महाप्रबंधक के कर-कमलों द्वारा क्षेत्रीय प्रतियोगिताओं के विजेताओं को प्रमाण-पत्र से सम्मानित किया गया।

1.6.1 PARTICIPATION OF RAILWAY EMPLOYEES IN MANAGMENT

PREM Group of Zonal and Divisional level has been functioning to facilitate effective participation of workers in the management. Broadly, the functions include:

- To evaluate the functioning of Railway and exchange data and ideas on ways and means for improving the efficiency and viability of the enterprise.
- To apprise the investment programmes, particularly in regard to housing and other welfare services.
- To identity areas and devise action-oriented methods for maximizing organizational effectiveness, the use of technology and towards building up the image of the Railways as a service organization.
- To facilitate effective and meaningful participation of Railways employees in the management process.
- To give them a sense of involvement and pride in the organisation's works.
- To discuss and identify the measures for improving the quality of service to the rail passengers and safety of operations.

The staff matters including those which come within the preview of "Permanent Negotiating Machinery" and "Joint Consultative Machinery" are not normally discussed in the PREM Meeting.

At the Zonal Railway level & Divisional level, the groups consist of four representatives each from the recognized Unions and two representatives each from NROA, NRPOA and NRPFA. General Manager is the Chairman of the Group and All PHODs are the members of the Group. At the Divisional level, DRM is the Chairman and branch officers are members of this Group. Dy.GM/G is the Secretary of the group at Headquarters level and Sr.DPO is the Secretary of the group at Divisional level. The meetings of Zonal and Divisional PREM are held once in a quarter.

The numbers of PREM meetings held at Zonal/Divisional level of this railway during the year 01.04.2022 to 31.03.2023 are given below-

		No. of Meetings	**Date of Meeting**	**Remarks**
ZONAL LEVEL	-	Nil	Nil	-
DIVISIONAL LEVEL				
DLI	-	Nil	Nil	-
FZR	-	Nil	Nil	-
LKO	-	Nil	Nil	-
MB	-	01	28.07.2022	-
UMB	-	Nil	Nil	-

1.6.2 Railway User's Consultative Committee

Zonal Railway User's Consultative Committee and Divisional Railway User's Consultative Committee, Northern Railway.

These committees are consultative in character. The object is to provide more frequent opportunities for consultation on matters relating to the service provided by Railways and devising ways & means of effecting improvement.

The Zonal Railway User's Consultative Committee at Headquarter level was constituted for the term from 01.04.2022 to 31.03.2023 and the Divisional User's Consultative Committee on various Divisions of Northern Railway were constituted for the term from 01.04.2022to 31.03.2023.

In addition to the frequent informal meetings, the number of formal meetings of the ZRUCC and DRUCCs of various Divisions held during the year are indicated below-

MEETING		**DATE**
ZRUCC	-	18.05.2022
DRUCC		
DELHI	-	Nil
AMBALA	-	29.07.2022 & 19.01.2023
FIROZPUR	-	15.06.2022
MORADABAD	-	16.06.2022 & 16.12.2022
LUCKNOW	-	15.07.2022 & 30.12.2022

लेखा
ACCOUNTS







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

CHAPTER II

2.1 About the Department

- The Accounts department is headed by Principal Financial Advisor (Pr.FA).
- The Accounts Department is mainly responsible for :-

i) Keeping the accounts of the Northern Railway in accordance with the prescribed rules.

ii) Internal check of transactions affecting the receipt and expenditure of Northern Railway.

iii) Prompt settlement of proper claims against Northern Railway.

iv) Tendering, as part of its important functions, advice to the administration whenever required or necessary in all matters involving Railway finance.

v) Compilation of budgets in consultation with other departments and monitoring the budgetary control procedures as may be laid down in the relevant orders and Code rules from time to time.

vi) Generally discharging other management accounting functions such as providing financial data for management reporting, assisting inventory management, participation in purchase/contracting decisions and surveys for major schemes in accordance with relevant rules and orders.

2.2 Highlights of the year

Statement showing the changes in forms and classification during 2022-23.

Corr. Slip No.	**Particulars**	**Old classification of method of accounts**			**New classification of method of accounts**			**Primary Unit**	**Reference Authority**
		Minor Head	Sub Head	Detailed Head	Minor Head	Sub Head	Detailed Head		
1	2	3	4	5	6	7	8	9	10

- Changing in forms of accounting introduced during the year 2022-2023 - NIL
- Changes in classification introduced during the year 2022-2023 are as under: -

Advance Correction slip. 92

(RBA. No 32/2022)

Indian Railway Finance Code Vol. I (1995) Para 219:

1. Replace the existing class of assets and their average life in the table given under Para 219 Indian Railway Finance Code-Volume-1 (1998) as under.
2. Codal life of other items not covered in the ACS will remain as per extant instructions for those items.

(iii) ELECTRICAL ASSETS

S.No.	Class of Assets	Average Life	Remarks
14	Water Cooler, Refrigeration, Air Conditioner hospital and domestic appliance	10	Actual replacement shall be based on condition of the asset.
15	Internal wiring of building		Actual replacement shall be based on condition of the asset.
	a) Coastal area	15	
	b) Non-coastal area	20	
18	Electric Pumps	20	Actual replacement shall be based on condition of the asset.

B) Equipments required for replacement through DRF/Sinking Fund.

11) TRD Equipments				
iii)	Lighting Arrestor (Gapless Type)			
	(a) (42Kv)		15	Actual replacement shall be based on condition of the asset.
	(b) (96Kv/120Kv/198Kv)		20	Actual replacement shall be based on condition of the asset.
iv)	Battery Charger		20	Actual replacement shall be based on condition of the asset.
xii)	OHE conductor & components for Normal Zone			
b)	Other than fixed structures			
1)	a) Cantilevers assembly		45	Actual replacement shall be based on condition of the asset
i)	b) All type of insulators	a) Porcelain	40	Actual replacement shall be based on condition of the asset
		b) Composite	25	Actual replacement shall be based on condition of the asset
ii)	Isolators/ATD	a) Isolators	30	Actual replacement shall be based on condition of the asset
		b) ATD	32	Actual replacement shall be based on condition of the asset

e)	Wires		
ii)	Contact Wire	45	Actual replacement shall be based on condition of the asset
xiii)	OHE conductors & components-For Polluted Zone** Definition of Polluted Zone for xiii under OHE Conductors & Components (for polluted zone) - Zones having ESDD (Equivalent Salt Deposit Density) >0.3 should be considered as polluted zone.		

i)	Cantilever assembly and All type of insulators	Cantilever assembly	45	Actual replacement shall be based on condition of the asset.
		Insulators:		
		Composite	25	Actual replacement shall be based on condition of the asset.
ii)	ATD		24	Actual replacement shall be based on condition of the asset.
iii)	Contact Wire	a) Silver brazed/ERBW b) Continuous Cast(CC) Type	40 years/on the basis of condemning dia. Whichever is earlier. 45 years/on the basis of condemning dia. Whichever is earlier.	Actual replacement shall be based on condition of the asset.
xiv)	PSI Equipments			
(a)	Substation's Equipments			
iii)	Fixed Capacitor Bank		20	Actual replacement shall be based on condition of the asset

(vi) MECHANICAL ASSET

S.No	Class of Assets	Average life in years	Remarks
1	Machine tools like lathes, Planners, Drilling, Boring aid High Precision and special purpose machines like wheels	20	Actual replacement shall be based on condition of the asset
2	High Precision and special purpose machines like Wheels lathes	20	Actual replacement shall be based on condition of the asset
3	Tool room and testing Laboratory equipment	15	Actual replacement shall be based on condition of the asset

4	Foundry and Forge Equipment	20	Actual replacement shall be based on condition of the asset
5	Heat Treatment equipment	20	Actual replacement shall be based on condition of the asset
6	BOT Cranes	36	Actual replacement shall be based on condition of the asset
7	Power Generation Machinery & Switches	Deleted	
8	General purpose light machinery e.g., band saw, floor grinder etc.	15	Actual replacement shall be based on condition of the asset
9	Air compressors	20	Actual replacement shall be based on condition of the asset
10	Other miscellaneous machines eg. light cleaning machines, Deleted test equipment in loco sheds, workshops, depot & sick lines.	Deleted	
11	(i) Construction Machinery equipment	Deleted	
	(ii) Track Maintenance Equipment		
	(a) Tamping, Ballast cleaning & handling, DTS and relaying machines	20	Actual replacement shall be based on condition of the asset
	(b) Material handling Machines	25	Actual replacement shall be based on condition of the asset
	(c) Rail Grinding Machines	15	Actual replacement shall be based on condition of the asset
13	Miscellaneous machinery and equipment for hospital, offices etc.	10	Actual replacement shall be based on condition of the asset
14	Mechanical Weigh Bridges	Deleted	
15	Electronic in motion weigh Bridges	12	Actual replacement shall be based on condition of the asset
16	Wheel impact Load detector(WILD)	12	Actual replacement shall be based on condition of the asset

17	Diesel pumps	15	Actual replacement shall be based on condition of the asset
18	Welding equipments	10	Actual replacement shall be based on condition of the asset
19	Diesel Refrigeration equipment	Deleted	Actual replacement shall be based on condition of the asset
20	Material Handling equipment like FLT, Lister trucks etc.	10	Actual replacement shall be based on condition of the asset
21	Traversers	25	Actual replacement shall be based on condition of the asset
22	Fuel Station Dispensation Equipment	10	Actual replacement shall be based on condition of the asset
23	(i) Bulldozers and	20	Actual replacement shall be based on condition of the asset
	(ii) Other earth moving equipment	Deleted	
24	Motor Boats	15	Actual replacement shall be based on condition of the asset
25	Hydraulic Re-railing Equipment	16	Actual replacement shall be based on condition of the asset
ROAD VEHICLES			
26	Staff cars including Jeeps	7	Actual replacement shall be based on condition of the asset
27	Light motor Vehicles	10 years for Diesel and 15 Years for Petrol as per norms.	Actual replacement shall be based on condition of the asset
28	Heavy Motor Vehicles		Actual replacement shall be based on condition of the asset
29	Tractors		Actual replacement shall be based on condition of the asset

ROLLING STOCK

S No	Class of Assets	Average life in Years	Remarks
40	**Open Bogie wagons with air brakes and casual bogies**		
(A)	BOXN, BOY, BOBRN, BOBSN	35 Years (subject to outcome of structural and based on condition of the asset financial justification to be conducted for extension beyond 30 years)	Actual replacement shall be based on condition of the assets
b)	BOBYN	38	Actual replacement shall be based on condition of the assets
C)	Other open wagons	30	Actual replacement shall be based on condition of the assets
41.	Bogie tank wagons with air brakes and casual bogies		
a)	BTPN	45 Years (subject to outcome of structural audit based on condition of the assets to be conducted for extension beyond 40 years)	Actual replacement shall be based on condition of the assets
b)	Other tank wagons	40	Actual replacement shall be based on condition of the assets
42	All others types of bogies wagons with air brakes and casuals bogies		
a)	BCN	40 Years (Subject to outcome of structural audit justification to be conducted for extension beyond 35 years	Actual replacement shall be based on condition of the assets
b)	All others wagons	35	Actual replacement shall be based on condition of the assets
43	Open Wagons with vacuum brakes and UIC bogies	Deleted	
44	Others Wagons with vacuum brakes and UIC bogies	Deleted	
45	4-wheeler wagons (open and covered)	Deleted	

46	4–wheeler tank wagons (with plain bearings)	Deleted	
47	4–wheeler tank wagons (with roller bearings)	Deleted	

(V) SIGNAL & TELECOMMUCATION ASSETS

(A) SIGNALING SYSTEM

S No	Class of Assets	Average life in years	remarks
3	(i) Electronic signaling system like Axle Counter, AFTC IPS etc.	20 years / based on obsolescence	Actual replacement shall be based on condition of the assets
	(ii) Kavach (Automatic Train Protection-ATP)	15	Actual replacement shall be based on condition of the assets

(Authority Board's letter no 2022/ACII/2/1 dated 06.06.2022)

SUB:- Revised Codal life of Assets.

Kindly refer to Para 219 of Indian Railway Finance Code, Vol-1, detailing the normal life of various assets. In this regard proposals received from Electrical Department and Mechanical Department for revision of Codal life certain assets have been examined by the multidisciplinary Executive Director's committee set in Railway Board for this purpose and their recommendations have been accepted by Board.

Accordingly, Advance Correction Slip no. 93 amending Para 219, Indian Railway Finance Code Vol-1 is placed below for information and necessary action. (Codal life of other items not covered in the ACS will remain as per latest extant instructions for those items.)

Advance Correction Slip No. 93 (RBA. NO 42/2022)

Indian Railway Finance Code- Volume 1 (1998) Para 219

1. Replace the existing class of assets and their average life in the table given under Para 219, Indian Railway Finance Code – Volume 1 as under:

2. Codal Life of other item not covered in this ACS will remain as per extent instructions for those items.

iii) Electrical Assets

S.No	Class of Assets	Average life in Years	Remarks
24	(a) Coach wiring (old)	12	Actual replacement shall be based on condition of the assets
		18	Actual replacement shall be based on condition of the assets
27	Carriage Fan	10	Actual replacement shall be based on condition of the assets

B) Equipments required for replacement through DRF/Sinking Fund:

1 AC EQUIPMENT			
i)	25 KVA Inverter	15	Actual replacement shall be based on condition of the assets
ii)	AC control Panel	15	Actual replacement shall be based on condition of the assets
iii)	Inverter Panel	15	Actual replacement shall be based on condition of the assets
2	TL POWER EQUIPMENT		
i)	4.5/25 KW Alternate	12	Actual replacement shall be based on condition of the assets
ii)	800 A.HL.A Battery	Deleted	Actual replacement shall be based on condition of the assets
iii)	1100 AH VRLA (SMF) Battery	4.5	Actual replacement shall be based on condition of the assets
iv)	Diesel Engine for Power Cars	20 Years for those assets which have completed less than 10 year. 16 years for those assets which have completed over 10 years	Actual replacement shall be based on condition of the assets
(v)	Alternate for Power Car		

C) Equipments required for replacement through Revenue

S.No	Existing Class of assets	Average life	Remarks
2. AC Equipment			
1	Compressor ACCEL/ CARRIER	Deleted	
2	Sealed Compressor KCL make	Deleted	

3	Sealed Compressor Man Europe make	Deleted	
4	Compressor Motor DC	Deleted	
5	Compressor Motor AC	Deleted	
6	Condenser Fan Motor DC	Deleted	
7	Condenser Fan Motor AC	Deleted	
8	Condenser Fan Motor (RMPU)	12	Actual replacement shall be based on condition of the assets
9	Evaporator Fan Motor (AC)	Deleted	
10	Evaporator Fan Motor (DC)	Deleted	
11	Evaporator Fan Motor (RMPU)	12	Actual replacement shall be based on condition of the assets
12	Compressor (Scroll)	12	Actual replacement shall be based on condition of the assets
13	Condenser Fan	12	Actual replacement shall be based on condition of the assets
14	Condenser Unit	Deleted	
15	Condenser Unit (RMPU)	12	Actual replacement shall be based on condition of the assets
16	Evaporator Unit	deleted	
17	Evaporator Unit (RMPU)	12	Actual replacement shall be based on condition of the assets
18	Mercury in glass thermostat	Deleted	
19	Evaporator Blower Drum	12	Actual replacement shall be based on condition of the assets
20	Microprocessor Controller	12	Actual replacement shall be based on condition of the assets
	TL/ POWER EQUIPMENT		
1	4.5/25 KW alternate regulator	12	Actual replacement shall be based on condition of the assets

2	Emergency 90 AH VRLA (SMF) Battery	4	Actual replacement shall be based on condition of the assets
3	120 AH VRLA (SMF) Batteries	4.5	Actual replacement shall be based on condition of the assets
4	290 AH Starting LMLA Batteries of Power Car	4	Actual replacement shall be based on condition of the assets
5	70 AH VRLA Batteries	4.5	Actual replacement shall be based on condition of the assets
6	Power Car Power Panel	15	Actual replacement shall be based on condition of the assets
7	Power Panel (Ac coaches)	15	Actual replacement shall be based on condition of the assets
8	Pre Cooling cum battery charging transformer rectifier unit	12	Actual replacement shall be based on condition of the assets
9	50 KVA/60 KVA(750/415V) Transformer unit	15	Actual replacement shall be based on condition of the assets
10	3 KVS 415/190V transformer	Deleted	Actual replacement shall be based on condition of the assets
11	15 KVA, 9KVA, 5KVA, 3KVA coach transformer and control metering transformer (1KVA, 500VA, 250VA, 200VA,100KVA	15	Actual replacement shall be based on condition of the assets
12	Water Raising Apparatus (WRA)	5	Actual replacement shall be based on condition of the assets
13	Water Boiler For Pantry	5	Actual replacement shall be based on condition of the assets
14	Hot case for Pantry	5	Actual replacement shall be based on condition of the assets
15	Bottle cooler cum deep freezer	5	Actual replacement shall be based on condition of the assets

16	Ventilation Blower Motor for power Car	12	Actual replacement shall be based on condition of the assets
17	Radiator for Power Car	15	Actual replacement shall be based on condition of the assets
18	Radiator Motor for Power Car	15	Actual replacement shall be based on condition of the assets
19	Pump controller	12	Actual replacement shall be based on condition of the assets
20	I.V Coupler 400A/500A	18	Actual replacement shall be based on condition of the assets

(4)	**MECHANICAL ASSETS**		
S.No	**Existing Class of assets**	**Average life**	**Remarks**
12	Station machinery like weighing	15	Actual replacement shall be based on condition of the assets

(Authority Railway Board's letter no 2022/ACII/2/1 dated 12.08.2022)

Sub: ACS No. 1 Indian Railway Finance Code Vol.11, 2022 edition.

(RBA. No 53/2022

Attention is invited to Board's letter of even no. dated 16.8.2021 IRDA No.16/2021) renaming Plan Head 5300- Passenger Amenities as "Customer Amenities" so as to include works of Freight amenities also.

The matter regarding clarification about works/activities to be included under Plan Head-16C0 Traffic facilities and 5300-Customer Amenities was under Board's consideration for quite some time. The matter has since been examined and the revised scope of works under these Plan heads is described in the enclosed Advance Correction Slip No. 1 modifying Indian Railway Finance Code Vol. II. Further, It is also clarified that no financial justification as such need be given when the expenditure is incurred on Passenger Amenity works, in terms of Para 202 (c) of IRFC-Vall. Further, for works other than Passenger Amenity works, financial justification is necessary as laid down In l'ara 220 of IRFC-Vol-1.

Indian Railway Finance Code Vol. II Reprint Edition 2022)

Classification of Capital and Other Works Expenditure (Appendix-II)

Please modify Plan Heads 1600 and 5300 as follows:

Advance Correction Slip No:- 01

Plan Head	Existing	Revised
1600	Traffic Facilities (i) Development & Up gradation of Freight terminals (ii) Other Works	All traffic facilities other than (1) Development & those covered under Plan 5300
5300	Customer Amenities	Customer amenities passenger/ other railway user amenities and development & upgradation of freight terminals including Circulating area for movement of road vehicles approach illumination for night working. platforms, covering of crane /loose consignments facilities/ warehousing, office related works (viz. works like direct area for movement of road roads, parking space for trucks, platforms, infrastructure for handling of commodities, drainage in go down area, storage and waiting halls, facilities for labour but excluding track providing of full rake length capacity spurs, entry/dispatch of rakes).

(Authority Board's Letter no. 2020/AC-II/2/5 dated: 2020/AC-11/2/5 DT. 28.11.2022)

Sub: Modification under SMH-6 for separate budgeting and accountal of expenditure on linen Management. ACS No. 02 to Indian Railway Finance Code Vol. 11-2022 Edition

(RBA.No (56/2022)

In order to facilitate separate budgeting and accountal of expenditure on Linen management activities under SMH-6 operating expenses- rolling Stock & Equipments (Erstwhile Demand no.8), it has been decided to modify the existing Details Heads vide ACS No. 02 to Indian Railways finance Code Vol. II (Reprint edition2022). These will be effective from current Financial Year (FY-2022-23)

Advance correction Slip No.02

Indian Railway Finance Code Vol. II Reprint Edition 2022

Classification of Revenue Expenditure (appendix-I) Please modify existing Minor Head 500-Carriage and wagons (under SMH-6- erstwhile Demand-8) as follow:

Existing Classification			Revised Classification		
Minor Head	**Sub Head**	**Detailed Head**	**Minor Head**	**Sub Head**	**Detailed Head**
500 Carriage and Wagons	580-Misc exp.	581-585 as in 291-295	500 Carriage and Wagons	580- Linen Management	581-Cost of Linen
					582-washing expense-Departmental
					583- washing expenses Boot Laundry
					584- washing expenses outsourced/ Contractual
					585- Other expenses
	590- Coaches Sanitation and Linen Management etc.	591- Cost of linen		590- Coaches Sanitation	591- sanitation /conservancy of Coaches Departmental
		592- Washing and Other Expenditure on linen Management			592- sanitation/ Conservancy of coaches outsourced/ Contractual
		593- Sanitation Conservancy of coaches			593- Other Expenses
		594- Others			

(Authority: Board's Letter no. 2022/AC-II/1/18 Dated: 21.12.2022)

Sub: ACS No.01 to Indian Railway Financial Code Volume-1 (Second Revised Edition 2022)

(NON RBA)

The Indian Railway Finance Code Volume -1 has recently been updated Para (c) of IRFC Volume -1 (Second Revised Edition 2022) is now modified in the form Advance correction Slip No.01

Advance Correction Slip No.01

Indian Railway Finance Code Volume -1 (Second Revised Edition 2022)

Para Number of IRFC Volume-1	Existing	Revised
202(C)	202. as an exception to Para 201, While no finance justification as such need be given in the following cases, it should be seen that the scale of expenditure incurred is as economical as possible consistent with the extent orders, if any, on the subject:- a) When the expenditure is incurred a on a statutory obligation; b) When the expenditure is unavoidable on considerations of safety; c) When the expenditure is incurred c on customer amenity works; and…… d) When the expenditure is incurred on labour welfare works except residential buildings for which rules are applicable…….	202. as an exception to Para 201, While no finance justification as such need be given in the following cases, it should be seen that the scale of expenditure incurred is as economical as possible consistent with the extent orders, if any, on the subject:- a) When the expenditure is incurred on a statutory obligation; b) When the expenditure is unavoidable on considerations of safety; c) When the expenditure is incurred on passenger amenity works and…… d) When the expenditure is incurred on labour welfare works except residential buildings for which rules are applicable…….

(Authority Board's letter no. 2023/F(X)II/10/1 dated 01/02/2023)

Para No. 3.02

Financial Results of Working

(figs. in lakhs of Rs.)

Particulars	2021-2022	2022-2023	Increase/Dec.
(A) Coaching Passenger	520729	828748	308019
(B) Other Coaching	73294	92145	18851
(C) Goods	982338	1254729	272391
(D) Sundries	27284	61981	34697
Total	**1603645**	**2237603**	**633958**
Add credits to suspense TA & other Railways	6756987	9184528	2427541
Total Gross Receipts	**8360632**	**11422131**	**3061499**
Deduct-Debit to suspense TA & Other Railways.	6755577	9183352	2427775
Total Gross Receipts	**1605055**	**2238779**	**633724**

1. Passenger earnings	Passenger Earnings shown an increase of 59.15% in comparison to corresponding period of last year.
2. Other Coaching	Other coaching earning has shown an increase of 25.72% in comparison to corresponding period of last year.
3. Goods	Goods earning showing an increase of 27.73% in comparison to corresponding period of last year.
4. Sundry	Sundry earning shown an increase of 127.17% in comparison to corresponding period of last year.

Para No. 3.03(A)

Statement of comparative position of the Revised Budget Estimate and Gross Traffic Receipts for the year 2022-23

(Figs in Lakhs of Rs.)

Head of Earnings	Revised Budget Estimates for 2022-2023	Actuals for 2022-2023	Variation between Col. 2&3
1.	2	3.	4.
Passengers	840077	828748	-11329
Other coaching	95064	92145	-2919
Goods	1148972	1254729	105757

Sundries	68232	61981	-6251
Total Gross earnings	**2152345**	**2237603**	**85258**
Traffic Suspense	1100	1176	76
Total Gross Receipts	**2153445**	**2238779**	**85334**

Para No. 3.03 (B)

Comparative position of quantum of traffic carried in 2022-23

(figs in Lakhs of Rs.)

Category	**Year**	**Year**	**Variation**
	2021-22	**2022-23**	**(Inc / Dec)**
Passenger carried	3046	5480	2434
Passenger kilometers	563647	932951	369304
Tonnes Carried (on system in 000's)	2026	2293	267
Net Tonnes K.M.	652028	775315	123287

Para No.3.03(C)

Statement showing comparative position Gross Traffic Receipt for the year 2021-2022 & 2022-2023

(Figs in Lakhs of Rs.)

Head of Revenue	**Actuals for the year 2021-22**	**Actuals for the year 2022-23**	**Variation between Col 2 & 3**
1	2	3	4
Passengers	520729	828748	308019
Other Coaching	73294	92145	18851
Goods	982338	1254729	272391
Sundries	27284	61981	34697
Total Gross Revenue	**1603645**	**2237603**	**633958**
Traffic Suspense	1410	1176	-234
Demand Recoverable	-498	187	-311
Total Gross Receipts	**1604557**	**2238779**	**633413**

1. Passenger earning	Passenger earning shown an increase of 59.15% in comparison to corresponding period of last year.
2. Other coaching	Other coaching earning has shown an increase of 25.72% in comparison to corresponding period of last year.
3. Goods	Goods earning shown an increase of 27.73% in comparison to corresponding period of last year.
4. Sundry	Sundry earning shown an increase of 127.17% in comparison to corresponding period of last year.

Para No-3.04

Demand No.-3 General Supdtt. and Services

(Figs in Lakhs of Rs)

Total Expenditure			
Main Heads	**2021-2022**	**2022-2023**	**Variation Inc/Dec**
100-General Management incl. General Services	5507	5540	33
200-Financial Management	22356	22292	-64
300-Personnel Management	13741	14865	1124
400-Material Management	12402	15360	2958
500-Ways & Works Management	7270	7599	329
600-Rolling Stock Management	4573	4806	233
700-Electrical Management	3521	3274	-247
800-Sig. & Tele-Communication Management	2602	2753	151
900-Traffic Management	11975	10492	-1483
Total	**83947**	**86981**	**3034**
900-Credits & Recoveries	165	222	57
Grand Total	**83782**	**86759**	**2977**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23 Demand No.03 General Superintendence & Services

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
Increase in Pay, DA & Annual Increments	83782	86759	2977
More Commercial Advertisement & Publicity,			2686

Legal Expenses and Misc. Expenses			33
More contingent expenses			315
Total			**3034**
More Credits & Recoveries			57
Grand Total			**2977**

Para No. 3.05

Demand No. 4 Repair & Maintenance of Permanent Ways & Works.

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation Increase/ Decrease
100 - Establishment in Offices	11731	12347	616
200 - Maintenance of P.Way.	118328	136104	17776
300 - Maintenance of Bridges Work & Tunnels (incl. Road Over/Under Bridges).	4492	5631	1139
400 – Maintenance of Service Buildings. (Other than colonies, staff quarters & welfare Buildings).	26653	29084	2431
500 - Water Supply, Sanitation & Road (Other than colonies, staff quarters. & Welfare Buildings).	2214	2312	98
600 - Other Repairs & Maintenance.	963	1059	96
700 - Special repairs pertaining to breaches, accidents etc. incl. special revenues works.	308	352	44
Total	**164689**	**186889**	**22200**
900 - Credit & Recoveries	44	40	-4
Grand Total	**164645**	**186849**	**22204**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
1. Increase in DA & Annual Increments	164645	186849	22204
2. More contractual payment.			616

3. Decrease in cost of stores.			21346
			194
4. Less other works.			44
Total			**22200**
Less Credit & Recoveries.			-4
Grand Total			**22204**

Para No. 3.06

Demand No. 5. Repairs & Maintenance of Motive Power

(Figs. in Lakhs of Rs.)

Main Head	Total Expenditure		Variation (Inc/Dec)
100 - Establishment in Offices	8811	10018	1207
200 - Steam Power	0	-1	-1
300 - Diesel Locomotives	47618	50089	2471
500 - Electric Locomotives	26924	55063	28139
600 - Rail Cars, Ferries, Steamers and other maintenance Expenses.	12	17	5
Total	**83365**	**115186**	**31821**
900 - Credit & Recoveries	274	83	-191
Grand Total	**83091**	**115103**	**32012**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
1. More Pay ,DA and contingent expenses			1207
2 More Nos. of POH of Diesel locomotives			2475
3. More POH of Elect Locomotives & increase in cost of stores			28139
Total			**31821**
Less Credits & Recoveries			-191
Grand Total			**32012**

Para No. 3.07

Demand No.6. Repair & Maintenance of Carriage & Wagons

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
100 - Establishment in Offices	20376	24353	3977
200 - Carriages	86514	102582	16068
300 - Wagons	31893	30702	-1191
400 - Electric Multiple unit Coaches	8100	7889	-211
500 - Electric Genl. Services Train lighting Fans & Air conditioning	48794	53218	4424
600 - Misc. Repairs & Maint. Expenses.	6	9	3
700 - DMU Coaches	13186	16168	2982
Total	**208869**	**234921**	**26052**
900 - Credit & Recoveries	2862	2568	-294
Grand Total	**206007**	**232353**	**26346**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	206007	232353	26346
1. Decrease in DA & Annual increments and Less Expenditure under TA, OT & other Allowance			3977
2. More consumption of material			14666
3. More booking of staff in AC coaches			2982
4. More POH & Special repairs of carriage & wagons			4427
Total			**26052**
Less Credits and Recoveries			-294
Grand Total			**26346**

Para No. 3.08

Demand No. 7. Repairs & Maintenance of Plant & Equipments

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Establishment in Offices	13506	15400	1894

200 - Plant & Equip.(Way & Works)	-24081	-40118	-16037
300 - Plant & Equip.(Mech.)	6377	5726	-651
400 - Plant & Equip.(Electrical)	31180	35994	4814
500 - Plant & Equip.(Signaling)	31326	37312	5986
600 - Plant & Equip. (Telecom.)	6957	8062	1105
700 - Rental of P&T for Sign. & Tele. Circuits.	3083	2909	-174
800 - Other Plant Equip.(Genl. & Traffic Deptt.)	10710	5895	-4815
Total	**79058**	**71180**	**-7878**
900 - Credit & Recoveries	294	99	-195
Grand Total	**78764**	**71081**	**-7683**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	78764	71081	-7683
1. Decrease in DA & Annual increments			1894
2. Due to more Debits received from stores			-16688
3. More contractual works			4814
4 Spl. works and less repairs			6917
5 Less other expenses			-4815
6 Decrease in cost of stores			0
Total			**-7878**
Less Credits and Recoveries			-195
Grand Total			**-7683**

Para No. 3.09

Demand No.8 Operating Expense (Rolling Stock & Equipment)

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Steam Locomotives.	0	1	1
200 - Diesel Locomotives.	111072	119379	8307
300 - Electric Locomotives.	27138	33589	6451

400 - Electrical Multiple units Coaches.	15	11	-4
500 - Carriages & Wagons	20313	31160	10847
600 - Traction (Other than Rolling Stock & Electrical services)	33993	47935	13942
700 - Signaling & Telecommunication.	768	332	-436
800 - Ferry Services & Rail Cars.	188	94	-94
Total	**193487**	**232501**	**39014**
900 - Credit & Recoveries	4022	4402	380
Grand Total	**189465**	**228099**	**38634**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	189465	228099	38634
1. More payment due to Operation of Diesel locomotives, Electric locomotives, yards & sheds			14759
2. Due to More debit received			24785
3. More contractual payments			-530
Total			**39014**
Less Credits and Recoveries			380
Grand Total			**38634**

Para 3.10

Demand No.9 Operating Expenses (Traffic)

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Establishment in Offices.	678	1061	383
200 - Station Operation	174676	193763	19087
300 - Yard Operation.	837	861	24
400 - Transshipments & Repaneling Operation	0		0

500 - Trains Operation.	41041	39350	-1691
600 - Safety.	24	36	12
700 - Misc. Expenses (Others)	135728	195355	59627
Total	**352984**	**430426**	**77442**
900 - Credit & Recoveries	13	13	0
Grand Total	**352971**	**430413**	**77442**

Explanation for variation of Working Expenses between the figures for the year 2021-2022 & 2022-2023.

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	352971	430413	77442
1. More payments of Pay, DA, OT & Other Allowances			17779
2. More payments debits for IRFA , IRFC etc.			59627
3.Less expenditure relating to container services			36
Total			**77442**
Less Credit & Recoveries			0
Total			**77442**

Para No. 3.11

Demand No.10 Operating Expenses (Fuel)

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Steam Traction.	0	0	0
200 - Diesel Traction.	226240	200451	-25789
300 - Electric Traction.	94630	153345	58715
Total	**320870**	**353796**	**32926**
900 - Credit & Recoveries	0	0	0
Grand Total	**320870**	**353796**	**32926**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	320870	353796	32926
1 Decrease in cost of Diesel oil HSD & LSD and more expenditure on Freight and Handling charges.			-25789
2 Less consumption of Electric Current			58715
Total			**32926**
Less Credit & Recoveries.			0
Grand Total			**32926**

Para No. 3.12

Demand No. 11 Staff Welfare & Amenities.

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Educational Facilities.	17338	18799	1461
200 - Medical Services.	52876	55014	2138
300 - Health & Welfare Services.	9087	8829	-258
400 - Canteen & Other Staff Amenities.	783	742	-41
500 - Welfare Bldgs. and Repairs & Maint.	14778	16770	1992
600 - Misc. Expenses.	0	0	0
Total	**94862**	**100154**	**5292**
900 - Credit & Recoveries	102	110	8
Grand Total	**94760**	**100044**	**5284**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23.

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	94760	100044	5284
1 More claims of Tution Fees etc.			1461
2 Increase of cost of medicines, surgical instruments etc.			2138

3 Less Expenses on Sanitation and Maintains of permanent buildings			1734
4 Less payments due to electrical repair & maintenance			-41
Total			**5292**
More Credit and Recoveries.			8
Grand Total			**5284**

Para No. 3.13

Demand No.12 Misc. Working Expenses

(Figs. in Lakhs of Rs.)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Security	83792	97349	13557
200 - Compensation Claims.	6959	6462	-497
300 – Workmen's & Other Compensation Claims.	431	529	98
400 - Catering.	8652	12028	3376
500 - Cost of Training of Staff.	6217	3183	-3034
600 - Other Expenses.	3949	11067	7118
700 - Hospitality & Entertainment Expenses.	6	7	1
800 Contribution to Provident Fund			0
Total	**110006**	**130625**	**20619**
900 - Credit & Recoveries	2	1	-1
Grand Total	**110004**	**130624**	**20620**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	110004	130624	20620
1. More Payments on protection of Railways properties			13557
2. Less compensation claims			-497
3. More Misc. charges including catering charges			440

4. Less Other Expenses		.	7119
Total			**20619**
Less Credit & Recoveries.			-1
Grand Total			**20620**

Para No. 3.14

Demand No. 13 Provident Fund, Pension & Other Retirement Benefits

(Figs. in Lakhs of Rs)

Main Head	Total Expenditure		Variation (Inc/Dec)
	2021-22	2022-23	
100 - Superannuation & Retiring Pension	279005	295309	16304
200 - Commuted Pension	43027	46515	3488
300 - Ex-Gratia Pension.	71	229	158
400 - Family Pension.	4855	5416	561
500 - Death-cum-Retiring Gratuity.	56016	58491	2475
600 - Other allow., Other Pension & Other Exp.	7460	8490	1030
700 - Gratuities & Special contribution to P.F.	28798	31821	3023
800 - Contribution to P.F.	59576	63905	4329
890-New Pension Scheme			0
Total	**478808**	**510176**	**31368**
900 - Credit & Recoveries	2138	446271	444133
Grand Total	**476670**	**63905**	**-412765**

Explanation for variation of Working Expenses between the figures for the year 2021-22 & 2022-23

Main Head	Actuals 2021-22	Actuals 2022-23	Variation (Inc/Dec)
	476670	63905	-412765
1. More Superannuation & Retiring Pension			16304
2. More Payment of Family Pension and Other Expenses.			561
3. More Commutation Pension.			3646

4. More Payment of DCRG			2475
5. More payments of Gratuities			8382
Total			**31368**
More Credit & Recoveries			444133
Grand Total			**-412765**

Para 3.15

Operating Ratio.

Operating Ratio for the year 2022-2023 comes to 118.38% as compared to 147.94% during the year 2021-2022.

Para No. 3.16

Statement showing abstract-wise expenditure for the year 2022-23

(Figures in lakhs of Rs)

S.No.	Particulars	2021-22	2022-23	Increase / Decrease
1	A - Genl. Superintendence & Service	83782	86759	2977
2	B - Repair & Maintenance of P.Way & Works.	164645	186850	22205
3	C - Repair & Maintenance of Motive Power	83091	115103	32012
4	D - Repair & Maintenance of Carriage & Wagons	206007	232353	26346
5	E - Repair & Maintenance of Plant & Equipment	78764	71081	-7683
6	F- Operating Expenses Rolling Stock & Equipment.	189465	228099	38634
7	G - Operating Expenses Traffic.	352971	430413	77442
8	H - Operating Expenses Fuel.	320870	353796	32926
9	J - Staff Welfare Amenities.	94760	100044	5284
10	K - Misc. Working Expenses.	110004	130624	20620
11	L - Provident Fund, Pension & Other retirement benefits.	476670	505045	28375
12	M - Appropriation to DRF.	0	18100	18100
13	N - Pension Fund.	599320	631700	32380
Total		**2760349**	**3089967**	**329618**

Para No.3.17

Review of Losses of Stores

(Figures in Lakhs of Rs.)

Main Head	Fuel	Others	Total
2021-22	0	627	627
2022-23	0	474	474

The above losses are due to:-

1. Theft of Rolling Stock.
2. Theft to Train fitting from the Coaches.
3. Theft on P. Way Materials
4. Losses of Stores in Transit
5. Cross out Accident

Para No.3.18

Results indicating trend since formation of Northern Railway

(Fig. In lakhs of Rs)

Year	Capital Outlay	Gross Earnings	Inc./Dec. % age Over Prev. Year	Gross Working Expenses	Inc./Dec. % age Over Prev. Year	Net Earnings	Inc./Dec. % age Over Prev. Year	% age return on outlay system
1953-54	13690	4569	0.37	3420	3.96	1140	0.97	8.33
1954-55	14025	4285	-6.22	3517	2.84	768	67.37	5.48
1955-56	14969	5009	16.90	3935	11.89	1074	139.84	7.17
1956-57	16401	5981	19.41	4313	9.61	1168	108.75	7.12
1957-58	18136	6052	1.19	4647	7.74	1414	121.06	7.80
1958-59	20027	6050	-0.03	4776	2.78	1278	90.38	6.38
1959-60	20921	6329	4.61	4950	3.64	1379	107.90	6.59
1960-61	22269	6464	2.13	5275	6.57	1171	84.92	5.26
1961-62	24123	7169	10.91	5895	11.75	1274	108.80	5.28
1962-63	26522	8094	12.90	6326	7.31	1768	138.78	6.67
1963-64	29205	9210	13.79	7000	10.65	2210	125.00	7.57
1964-65	33115	9232	0.24	7739	10.56	1473	66.65	4.45
1965-66	34928	10458	13.28	8592	11.02	1866	126.68	5.34
1966-67	37275	11008	5.26	9513	10.72	1495	80.12	4.01

1967-68	39555	11414	3.69	10358	8.88	1056	70.64	2.67
1968-69	41677	13414	17.52	11188	8.01	2226	210.80	5.34
1969-70	43119	14197	5.84	11848	5.90	2349	105.53	5.45
1970-71	43352	14680	3.40	12463	5.19	2217	94.38	5.11
1971-72	47886	16338	11.29	13432	7.78	2906	131.08	6.07
1972-73	50754	17836	9.17	14884	10.81	2952	101.58	5.82
1973-74	52951	16563	-7.14	16195	8.81	368	12.47	0.69
1974-75	56053	21300	28.60	20191	24.67	1112	302.17	1.98
1975-76	58721	27464	28.94	24946	23.55	2518	226.44	4.29
1976-77	61205	31395	14.31	26582	6.56	4813	191.14	7.86
1977-78	65661	33654	7.20	27525	3.55	6129	127.34	9.33
1978-79	68625	33322	-0.99	29671	7.80	3651	59.57	5.32
1979-80	72738	36760	10.32	35017	18.02	1743	47.74	2.40
1980-81	80386	42386	15.30	41489	18.48	878	50.37	1.09
1981-82	86174	58531	38.09	50702	22.21	7829	891.69	9.09
1982-83	92913	74066	26.54	64168	26.56	9898	126.43	10.65
1983-84	96308	81346	9.83	76292	18.89	4954	50.05	5.14
1984-85	105670	87549	7.63	80984	6.15	6565	132.52	6.21
1985-86	112976	106007	21.08	91543	13.04	14474	220.47	12.81
1986-87	132640	130222	22.84	108910	18.97	21313	147.25	16.07
1987-88	154114	149116	14.51	122331	12.32	26785	125.67	17.38
1988-89	179757	154161	3.38	135569	10.82	18592	69.41	10.34
1989-90	208861	183503	19.03	152916	12.80	30587	164.52	14.64
1990-91	232706	198580	8.22	179029	17.08	19551	63.92	8.40
1991-92	262855	227079	14.35	199469	11.42	27610	141.22	10.50
1992-93	301202	270292	19.03	233576	17.10	36716	132.98	12.19
1993-94	306575	308505	14.14	251532	7.69	56973	155.17	18.58
1994-95	326255	328990	6.64	274851	9.27	54139	95.03	16.59
1995-96	326781	380762	15.74	304801	10.90	75961	140.31	23.25
1996-97	346467	421085	10.59	351752	15.40	69333	91.27	20.01
1997-98	374402	479107	13.78	435845	23.91	43262	62.40	11.55
1998-99	397330	531780	10.99	472199	8.34	59581	137.72	15.00
1999-2000	448688	622173	17.00	514369	8.93	107804	180.94	24.03
2000-01	521433	630156	1.28	568336	10.49	61820	57.34	11.86
2001-02	652129	657589	4.35	590650	3.93	66939	108.28	10.26
2002-03	740855	731571	11.25	619191	4.83	112380	167.88	15.17
2003-04	902074	500275	-31.62	453390	-26.78	46885	41.72	5.20
2004-05	835519	534379	6.82	496036	9.41	38343	81.78	4.59
2005-06	997009	631869	18.24	518201	4.47	113668	296.45	11.40

2006-2007	425184	675692	6.94	579110	11.75	675692	594.44	158.92
2007-2008	442293	695510	2.93	646449	11.63	712208	105.40	161.03
2008-2009	233595	748140	7.57	647254	0.12	100886	85.86	43.19
2009-2010	373473	876840	17.20	988184	52.67	111344	210.36	29.81
2010-2011	516705	977580	11.49	1096806	10.99	119226	106.61	23.07
2011-2012	575461	1049845	7.39	1269940	15.79	220095	184.60	38.25
2012-2013	659049	1233307	17.48	1395459	9.88	162152	73.67	24.60
2013-2014	794147	1500917	21.70	1652768	18.44	-151851	-93.65	-19.12
2014-2015	848634	1508549	0.51	1774789	7.38	-266240	175.33	-31.37
2015-2016	1628644	1588961	5.33	1826882	2.94	-237921	89.36	-14.61
2016-2017	1473089	1626100	2.34	1932574	5.79	-306474	128.81	-20.80
2017-2018	798608	1760950	8.29	2061913	6.69	-300963	98.20	-37.69
2018-2019	1480209	1642492	-6.73	2167313	5.11	-524821	174.38	-35.46
2019-2020	2282567	1295898	-21.10	2005906	-7.45	-710008	135.29	-31.11
2020-2021	1824308	1020486	-21.25	1567982	-21.83	-547496	77.11	-30.01
2021-2022	3613637	1603645	57.15	2343262	49.44	-739617	135.09	-20.47
2022-2023	3637998	2237603	39.53	2648827	13.04	-411224	55.60	-11.30

Para 3.19

Statement of Capital-at-Charge 2022-23

(Figures in Lakhs of Rs.)

The Capital-at-Charge of this Railway stood at the net increment of Rs. 5184933 lakhs

A. The Capital expenditure of Rs Lakhs during the year incurred as:-

1. Construction of New Lines (Plan Head 11)	1116344
2. Gauge Conversion (Plan Head 14)	0
3. Doubling (Plan Head 15)	143813
4.Traffic facilities & Yard remodeling and others (Plan Head 16)	57496
5. Computerisation (Plan Head 17)	33003
6. Railway Research (Plan Head 18)	3912
7. Rolling Stock (Plan Head 21)	384277
8 IRFC lease Charges (Plan Head 22)	276088
9 RSW (Unmanned, Plan Head 29)	2647
10 RSW (ROB/RUB, Plan Head 30)	52958
11 Track Renewal (Plan Head 31)	236984

12 Bridge Works. (Plan Head 32)	8030
13 Signalling & Telecommunication. (Plan Head 33)	30775
14 Other Electrical Works (Plan Head 36)	5976
15 Electrical Traction (Plan Head 37)	0
16 Machinery & Plant (Plan Head 41)	3837
17 Workshop Repairs (Plan Head 42)	21536
18 Staff Quarters (Plan Head 51)	4138
19 Amenities for Staff (Plan Head 52)	0
20 Amenities for Passengers (Plan Head 53)	39057
21 Investment in Govt./ Commercial Undertakings (Road Service) (Plan Head 61)	2753293
22 Investment in Govt. Undertakings (Plan Head 62)	0
23 Other Specified Works (Plan Head 64)	5156
24 HRD Training (Plan Head 65)	552
Total	**5179872**
Suspense	5061
Less credit including receipt of Capital A/C	0
Grand Total	**5184933**

Para 3.20

Depreciation Reserve Fund 2022-23

(Figures in Lakhs of Rs)

The details of expenditure on Renewal & Replacement from the Fund are given below:-

1. New Lines	0
2. Locomotives	0
3. Gauge Conversion	0
4. Doubling	0
5. Traffic Facilities & Yard remodelling and others	1347
6. Computerisation	175
7 Railway Research	802
8. Carriages	0
9. Wagons	0

10 HRD/ Training	0
11 Machinery & Plant	1768
12.Bridge Works	0
13 Track Renewal	0
14. Other Elect. Works	53
15.Signalling & Telecommunication	0
16. Workshop Incl. Production Units.	580
17 Staff Quarters	943
18 Amenities for Staff	0
19 Amenities for Passengers	210
20 Other Specified Works	218
21 Rolling Stock	2380
22 Traction Distribution	0
Total	**8476**
Less credit for released Material	887
Net Withdrawals	**7589**

Para No. 3.21

Open Line Works Revenue 2022-23

(Figs in lakhs of Rs)

1. Staff Amenities	0
2. Traffic facilities	0
3. Staff Quarters	0
4. Computerisation	0
5. Workshop	0
6. Railway Research	0
7. Signalling	0
8. Other Works	0
9. Other Electrical works	0
10. M. Plant	0
11. Passenger Amenities	0
12. Bridge works.	0
Total	**0**

Para No. 3.22

Development Fund 2022-23

(Figs in lakhs of Rs)

Passengers welfare works and other Railway user works	7900
Labour/Staff Welfare works costing (DF-II)	431
Un-remunerative works (DF-III)	26854
Safety Works(DF-IV)	4
Total	**35189**

Para. No. 3.23

Schedule of Expenditure for the Year 2022-23 Under Plan Head Development Fund

(Figs i lakhs of Rs)

Items Particular	2022-23
1 Traffic Facilities- Yard Remodelling	4474
2 Computerisation	23463
3 Railway Research	3110
4 Bridge Works	0
5 Signalling & Telecommunication Works	0
6 Other Electrical Works	261
7 Electrical Traction Works	0
8 Machinery & Plant	268
9 Workshops including Production Works	243
10 Staff Quarters	284
11 Amenities for Staff	0
12 Passengers Amenities	2190
13 Other Specified Works	593
14 Rolling Stock	0
15 HRD / Training	303
Total	**35189**

STATEMENT No 3.24 OF WORKS EXPENDITURE (DEMAND NO.16) FOR THE YEAR 2022-2023

SUB-HEAD OF DEMAND		CAPITAL	DRF	DF-I	DF-II	DF-III	DF-IV	SAFETY FUND	RRSK	CAPITAL COVID	SGF	CAPITAL N	TOTAL
11. NEW LINES	(VOTED)	169191						940978					1110169
11.NEW LINE (CONSTRUCTION)	(CH)	6175											6175
14. GAUGE CONVERSION	(VOTED)	0											0
14.GAUGE CONVERSION (CH)	(CH)	0											0
15. DOUBLING	(VOTED)	143417											143417
15. DOUBLING	(CH)	396											396
16.TRAFFIC FACILITIES-YARD REMODLING	(VOTED)	44430	1347	187		4288			6865				57117
16.TRAFFIC FACILITIES-YARD REMODLING	(CH)	379											379
17.COMPUTERISATION.	(VOTED)	9365	175	5057		18407							33004
17.COMPUTERISATION.	(CH)												0
18.RAILWAY RESERCH.	(VOTED)	0	802		260	2850							3912
18.RAILWAY RESERCH. (CH)	(CH)	0											0
21 ROLLING STOCK	(VOTED)	176201	2380						13517		192179		384277
22 ROLLING STOCK (Lease Charge)	(VOTED)	276088											276088
29.RSW LXING.	(VOTED)							2647					2647
30.ROAD SAFETY	(VOTED)							27036	25682				52718
30.ROAD SAFETY (CH)	(CH)								240				240
31.TRACK RENEWALS.	(VOTED)							804	236180				236984
31.TRACK RENEWALS.	(CH)												0
32.BRIDGE WORKS.	(VOTED)								8030				8030
33. SIGNALLING & TELECOM WORKS	(VOTED)	399							30376				30775
33. SIGNALLING &	(CH)	0											0
TELECOM WORKS													0
36.OTHER ELECTRIC WORKS	(VOTED)	881	53			261			4781				5976

36.OTH ELECT WORKS (CH)	(CH)	0											0
41.MACHINERY & PLANT	(VOTED)	1179	1768	84	45	139			623				3838
37.TRACTION DISTRIBUTION	(VOTED)												0
42.W/SHOPNCL.PROD. UN	(VOTED)	19639	580	34		205	4		1074				21536
42.W/SHOP INCL. PROD. UN	(CH)	0											0
51.STAFF QUARTERS	(VOTED)	2910	943	172	112								4137
51.STAFF QUARTERS (CH)	(CH)	0											0
52.AMENITIES FOR STAFF	(VOTED)	0											0
52.AMENITIES FOR STAFF (CH)	(CH)	0											0
53.PASSANGER AMENTIES	(VOTED)	28040	210	2172	14	4			8619				39059
53.PASSANGER AMENTIES (CH)	(CH)	0											0
61.INVESTMENT IN GOVT. COMM.	(VOTED)	2753292											2753292
UND.-ROAD SERVICES													
63. COML. U/TAKING													0
64.OTHER SPECIFIC WORKS	(VOTED)	955	218	194		398			3391				5156
64.OTHER SPECIFWORK (CH)	(CH)	0											0
83.New LINE CONST (CH)	(CH)												0
83-NEW LINE CONT (DIV FREE)													0
65-HRD /TRAINING	(VOTED)					303			248				551
65-HRD /TRAINING	(CH)												0
TOTAL FINAL HEAD INCLUD.													
TOTAL	(VOTED)	3625987	8476	7900	431	26855	4	971465	339386	0	192179	0	4925022

	(CH)	6950	0	0	0	0	0	0	240	0	0	0	7190
(DETAIL ATTACH) R.D.S.O.		0	802	0	260	2850	0	0	0	0	0	0	3912
TOTAL EXCLUDING R.D.S.O.		3625987	7674	7900	171	24005	4	971465	339386	0	192179	0	4921110
TOTAL EXCLUDING CHARGED		6950	0	0	0	0	0	0	240	0	0	0	7190

SUSPENSE HEAD		**CAPITAL**	**DRF**	**DF-I**	**DF-II**	**DF-III**	**DF-IV**	**SAFETY FUND**	**RRSK**	**CAPITAL FUND**	**CAPITAL N**	**TOTAL**
_DEBIT												
71. PURCHASE.		268731										268731
SALES.		146525										146525
												0
STORES.												410438
												0
72. W/SHOP SUSPENSE		193735										193735
Other MGF.SUSPENSE.		110										110
												0
73. MISC. ADVANCE		24548										24548
MTP /Railways		0										0
TOTAL-DEBIT SUSPENSE.		1044087										1044087
VOTED.												0
CHARGED.												0
												0
CREDIT												0
71.PURCHASE.		285328										285328
												0
SALES		150793										150793
												0
STORES.		390527										390527
72.W/SHOP SUSPENSE.		189005										189005
Other MFG.SUSPENSE.		12										12
												0

73.MISC. ADVANCE.		23361										23361
TOTAL- CREDIT SUSPENSE		1039026	0	0	0	0	0	0	0		0	1039026
	VOTED.											0
	CHARGED.											0
TOTAL FINAL SUSP. HEAD	0	5061	0	0	0	0	0	0	0		0	5061
TOTAL FINAL SUSP HEAD (CH)		6950						240				7190
DEDUCT CREDITS INCLUD												
RECEIPT OF CAPITAL A/C												
RECEIPT OF CAPITAL A/C												
NET FINAL SUSPENSE HEAD.	0	3631048	7588	7900	431	26855	4	922345	320752	0	0	4916923
NET FINAL SUSP HEAD (CH)		6950	0	0	0	0	0	0	240	0	0	7190
ADD LOSS BY EXCHANGE												
DEDUCT GAIN BY EX-CHANGE												
	0	3631048	7588	7900	431	26855	4	922345	320752	0	0	4916923
TOTAL CH		6950	0	0	0	0	0	0	240	0	0	7190
DEDUCT EXP.												
NET CAPITAL OUTLAY (VOTED)		3631048	7588	7900	431	26855	4	922345	320752	0	0	4916923
NET CAPITAL OUTLAY (CH)		6950	0	0	0	0	0	0	240	0	0	7190

(CRM STATEMENT)

SUB-HEAD OF DEMAND	DRF FOR Mar-23	DRF TO END OF Mar-23	RSF FOR Mar-23	RSF TO END OF Mar-23	CAPITAL FOR Mar-23	CAPITAL TO END OF Mar-23	RRSK FOR Mar-23	RRSK TO END OF Mar-23	CAPITAL FUND FOR Mar-23	CAP. FUND TO END OF Mar-23	TOTAL FOR Mar-23	TOTAL TO END Mar-23
11. NEW LINES (CONSTRUCTION)	0	0	0	32620	0	0	0	0	0	0	0	32620
14. GAUGE CONVERSION	0	0	0	0	0	0	0	0	0	0	0	0
15. DOUBLING	0	0	0	0	0	0	0	0	0	0	0	0
15 DOUBLING CH	0			0	0	0	0	0	0	0	0	0
16.TRAFFIC FACILITIES YARD REMODLING	0	0	0	0	0	0	0	0	0	0	0	0

17.COMPUTERISATION.	0	0	0	0	0	0	0	0	0	0	0	0
18.RAILWAY RESERCH.	0	0	0	0	0	0	0	0	0	0	0	0
21. ROLLING STOCK	173	888	0		0	0	0	0	0	0	173	888
31.TRACK RENEWALS.	0	0	6759	16500	0	0	3921	18633	0	0	10680	35133
32.BRIDGE WORKS.	0	0	0	0	0	0	0	0	0	0	0	0
33. SIGNALLING & TELECOM WORKS	0	0	0	0	0	0	0	0	0	0	0	0
36.OTHER ELECTRIC WORKS	0	0		0	0	0	0	0	0	0	0	0
41.MACHINERY & PLANT	0	0	0	0	0	0	0	0	0	0	0	0
42.W/SHOP INCL. PRODUCTION UNITS	0	0	0	0	0	0	0	0	0	0	0	0
51.STAFF QUARTERS	0	0	0	0	0	0	0	0	0	0	0	0
52.AMENITIES FOR STAFF	0	0	0	0	0	0	0	0	0	0	0	0
53.PASSANGER AMENTIES	0	0	0	0	0	0	0	0	0	0	0	0
62.INVESTMENT IN GOVT. COML. U/TAKING	0	0	0	0	0	0	0	0	0	0	0	0
64.OTHER SPECIFIC WORKS	0	0	0	0	0	0	0	0	0	0	0	0
83. NEW LINE (Const.) Dividend Free	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FINAL HEAD	173	888	6759	49120	0	0	3921	18633	0	0	10853	68641
TOTAL EXCLUDING R.D.S.O.	173	888	6759	49120	0	0	3921	18633	0	0	10853	68641

Para No.3.25

Statement of Expenditure under Grant No.16 to end of March 2022 Accounts.

(Fig. in Lakhs of Rs.)

Grant No.	Gross		Cr. & Recov.	Net.
16-Open Line works Revenue	(V)	0	0	0
	(Ch)	0	0	0
16-Capital.	(V)	4087622	456574	3631048
Capital Final Head		0	0	0
Capital	(Ch)	6950	0	6950
Capital Fund	(V)	0	0	0
16-DRF	(V)	8476	888	7588
	(Ch)	0	0	0
16-Development Fund-I	(V)	7900	0	7900
	(Ch)	0	0	0
16-D.F.-II	(V)	431	0	431
	(Ch)	0	0	0
16-D.F.III	(V)	26639	0	26639
	(Ch)	216	0	216
16-D.F.-IV	(V)	4	0	4
	(Ch)	0	0	0
16-Safety fund	(v)	971464	49120	922344
	(ch)	0	0	0
16-SRPF	(V)	0	0	0
	(Ch)	0	0	0
16- RRSK	(V)	339386	18634	320752
	(Ch)	240	0	240
16- Capital COVID	(V)	0	0	0
16-SGF	(V)	192179	0	192179
Total	**(V)**	**5634101**	**456574**	**5108885**
CRM		0	68642	
Total	**Voted**	**5634101**	**525216**	**5108885**
	Charged	**7190**	**0**	**7190**

Details of Capital Expenditure

No.16-Capital	(V)	3625987	0	3625987
	(Ch)	6950	0	6950
Stores Susp.	(V)	334939	335891	-952
	(Ch)	0	0	0
Manufactures Susp.	(V)	102149	97321	4828
	(Ch)	0	0	0
Misc. Advance	(V)	24548	23361	1187
	(Ch)	0	0	0
Total	**Voted**	**4087623**	**456573**	**3631050**
	CRM			
Total	Voted	**4087623**	**456573**	**3631050**
	Charged	**6950**		**6950**

Para 3.26

NORTHERN RAILWAY

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDING 31-03-2023 (COMMERCIAL LINES)

(FIG. IN UNITS OF Rs.)

S. NO.	DEBITS PARTICULAR	2021-2022 AMOUNT	2022-2023 AMOUNT	S. NO.	CREDITS PARTICULAR	2021-2022 AMOUNT	2022-2023 AMOUNT
1	WORKING EXPENSES	233118455822	263425636554	1	GROSS EARNINGS	159201307944	222486526316
2	SURVEYS	260989751	33910139	2	MISC. RECEIPTS.	1003747318	1106748190
3	STATUTORY AUDIT	371407860	389450250	3	SUBSIDY RECEIVED FROM CENTRAL GOVT.	0	0
4	GOVT. INSPECTION	0	0	4	DIST. RECEIPTS	5699773	2865716
5	COST OF RLY. BOARD	1013788585	1302741293	5	LOSS	74650560248	41660778148
6	MISC. ESTABLISHMENT (A)	96673265	105180134				
7	OPEN-LINE-WORKS (REV.)	0	0				
8	DIVIDEND PAYABLE TO GENL. REVENUE	0	0				
9	PROFIT	0	0				
	TOTAL	**234861315283**	**265256918370**			**234861315283**	**265256918370**

Para 3.26 (A)

NORTHERN RAILWAY

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDING 31-03-2023 (STRATEGIC LINES).

(Figs in Lakhs of Rs)

S. NO.	DEBITS PARTICULAR	2021-2022 AMOUNT	2022-2023 AMOUNT	S. NO.	CREDITS PARTICULAR	2021-2022 AMOUNT	2022-2023 AMOUNT
1	WORKING EXPENSES	1207750519	1457039433	1	GROSS EARNINGS	1163132734	1273787865
2	STATUTORY AUDIT	0	0	2	MISC. RECEIPTS	0	0
3	DIVIDEND PAYABLE TO GENL. REVENUE	0	0	3	SUBSIDY RECEIVED FROM CENTRAL GOVT.	0	0
4	PROFIT	0	0	4	LOSS	44617785	183251568
	TOTAL	1207750519	1457039433		TOTAL	1207750519	1457039433

Para No.3.27(A)

Financial Survey 2022-2023

(I) Pattern and Trend of Earnings

The pattern and trend of earnings of Northern Railway is given below-

(Figs in Lakhs of Rs)

Particulars	2021-2022	% age	2022-2023	% age
Passenger	520729	32.47%	828748	37.04%
Other Coaching	73294	4.57%	92145	4.12%
Goods	982338	61.26%	1254729	56.07%
Sundries	27284	1.70%	61981	2.77%
Total	**1603645**	**100.00%**	**2237603**	**100.00%**

Reasons for variation in Traffic Earnings

1. Passenger Earning	Passenger Earning shown an increase of 59.15% in comparison to corresponding period of last year.
2. Other Coaching	Other coaching earning has shown an increase of 25.72 % in comparison to corresponding period of last year.
3. Goods	Goods earning showing an increase of 27.73 % in comparison to corresponding period of last year.
4. Sundry	Sundry earning shown an increase of 127.77% in comparison to corresponding period of last year.

Para No.3.27(B)

Financial Survey 2022-2023

(II) Pattern & Trend of Expenditure

The working expenses have been analysed in the table to indicate the essential subject on which the expenditure was incurred

(Figs in lakhs of Rs.)

Working Expenses	**2021-22**	**% of Total.**	**2022-23**	**% of Total.**
Rolling Stock & Equipments	189465	5.46	228099	8.61
Traffic	352971	10.17	430413	16.25
Fuel	320870	9.25	353796	13.36
Total	**863306**	**24.88**	**1012308**	**38.22**

Genl Supdt. & Services	83787	2.42	86759	3.28
Repair & Maintenance	1241381	35.78	605387	22.85
Staff Welfare & Amenities	94760	2.73	100045	3.78
Misc. Working Exp.	110005	3.17	130624	4.93
Provident Fund & other retirement benefits.	476669	13.74	63905	2.41
Appropriation to D.R.F.	0	0.00	18100	0.68
Appropriation to Pension Fund	599320	17.28	631700	23.85
Total	**3469228**	**100**	**2648828**	**100**

Operating Ratio	**2021-22**	**2022-23**
% of Ordinary Working Expenses + Appr. To (DRF + Pension Fund.) to Gross Earnings	147.94%	118.38%

Para No.3.28

PERFORMANCE OF ACCOUNTS DEPARTMENT.

(FROM APRIL 2022 TO MARCH 2023)

(Figures in crores of Rs.)

S. No	PARTICULAR	Target for 2023-2024	Actual 2012-2013	Actual 2013-2014	Actual 2014-2015	Actual 2015-2016	Actual 2016-2017	Actual 2017-2018	Actual 2018-2019	Actual 2019-2020	Actual 2020-2021	Actual 2021-2022	Actual 2022-2023
1	Captial at Charge Investment from Capital Fund		29710.62	36850.33	44364.76	53329.71	66410.13	73553.57	88699.54	111542.85	104107.32	165939.00	202319.00
2	Traffic Earning	24327.95	12333.07	15009.17	15085.49	15889.61	16261.00	17609.50	16424.92	12958.98	10204.86	16036.45	22376.03
	Suspense	11.00	12.08	12.26	6.00	6.23	6.11	18.12	11.24	-146.72	24.72	14.10	11.76
	Gross Traffic Receipt	24338.95	12345.15	15021.43	15091.49	15895.84	16267.11	17627.62	16436.16	12812.26	10229.58	16050.55	22387.79
3	**Ordinary Working Expenses Excl. Suspense**	21232.78	10111.59	11906.77	12678.89	12792.82	13964.74	14837.41	16391.63	17253.29	15511.00	17432.00	19996.07
	Appropriation to Depreciation Reserve and Pension fund	8412.00	3843.00	4620.91	5069.00	5476.00	5361.00	5781.72	5281.50	2777.55	105.00	599.00	6498.00
	Total Working Expenses Excl. Suspense	29644.78	13954.59	16527.68	17747.89	18268.82	19325.74	20619.13	21673.13	20030.84	15616.00	18031.00	26494.07
4	Net Revenue		-1508.70	1506.25	2656.40	-2372.98	-3058.63	-2991.51	-5236.97	-7218.58	-5386.42	-1980.45	-4106.28
5	Payment of Genl. Revenue		1072.81	1660.59	2026.99	1946.03	0.00	0.00	0.00				
6	Surplus		-1621.51	-1441.75	-2662.40	-4319.01	-3058.63	-2991.51	-5236.97	-7218.58	-5386.42	-1980.45	-4106.28
7	Operating Ratio	121.90	113.15	110.12	117.65	114.97	118.85	117.09	131.95	154.8	153.65	147.94	118.38
8	Ratio of Net Revenue to Capital Charges		-5.08	4.09	5.99	-4.45	-4.61	-4.07	-5.90	-6.47	-5.17	-1.19	-2.03
	Ratio of Net Revenue to Capital Charges & Invest. from Capital Fund			4.09	5.99	-4.45	-4.61	-4.07	-5.90	-6.47	-5.17	-1.19	-2.03
9	Credit Released fund		100.82	104.82	110.89	169.08	192.95	27.83	3.52	3.38	3.57	10.94	8.87
	Material (Revenue Expenses) Grant Credit Released Fund) Material Works Grant		269.33	193.77	236.38	169.19	193.42	144.7	84.16	241.11	280.54	408.44	686.41

Note: Target for Capital at charge are based on budgetary figures contained in Integrated Budgetary financial figures 2022-23

यातायात
TRAFFIC







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

CHAPTER III

3.1.1 About the Department

The Commercial department is headed by Principal Chief Commercial Manager (PCCM). This department is concerned with all facets of Commercial working, from selling tickets and booking goods through rendering services to passengers at stations and o¬n board trains to dealing with compensation claims.

3.2.1 Highlights of the year

3.1.2.APassenger Marketing

Computerized Ticketing System over Northern Railway

a) Passenger Reservation System (PRS).

At present, 397 PRS location are functioning over Northern Railway

b) Yatri Ticket Suvidha Kendra (YTSK)

With a view to expanding the facilities for issue of tickets (both reserved and unreserved) it has been decided by Railway Boards to allow establishment and operation of computerized PRS-cum UTS terminals at centers which are known as Yatri Ticket Suvidha Kendra.

At present, YTSKs are functioning at 112 locations over Northern Railway. Division wise details of YTSK are as under:-

Division	No. of YTSK Locations
DLI	97
FZR	05
UMB	01
MB	03
LKO	06
Total	**112**

c) Report of S&T Unit

- PRS/UTS working during 2022-2023 have been satisfactory and efficiency has been 99.5% to 99.8%.
- No. of works done/circuits commissioned are as under:-

S. No.	Name of work	Status of work
1.	2Mbps Railway data circuit commissioned	11 nos.
2.	New Routers installed	06 locations
3.	Shifting of PRS terminal Room	06
4.	Temporary PRS/UTS provided at NDLS & ANVT for Diwali and Chhat puja rush.	NDLS – 09 nos. ANVT - 09 nos.
5.	Temporary PRS/UTS Provided 12 nos. at BHODDAL MAJRI	12 Nos.
6.	Shifting of PRS/UTS in New Building at MOZ	
7.	YTSK Installed	25 Nos.
8.	Telephone Surrender	06 Nos.
9.	Release/Condemnation data equipment 85 Nos. deposit at SSB/DPT condemnation.	85 Nos.
10.	Shifting of 2mb for OSPF implement	07 Nos. Locations

d) Unreserved Ticketing System (UTS)

The computerized un-reserved system (UTS) for issuing of Railway Unreserved journey tickets to passengers has been implemented on Northern Railway. Under this system passengers can purchase unreserved journey tickets 3 (Three) days in advance (Excluding the day of journey) from any station of that particular cluster (A specific group of many stations) station to any destination station subject to involving journey of 200 (Two Hundred) kilometers or above 200 (Two Hundred) kilometers. The passengers can purchase unreserved journey tickets involving journey of any distance on the same day on journey originating station. Regarding season tickets, with effect from 01/04/2013, new facilities of issuing half yearly (HST) & yearly (YST) season tickets have been provided to the passengers i.e. the passengers can purchase now half yearly (HST) & yearly (YST) season tickets also as per their requirement.

The locations having UTS facility are connected to zonal server through Terminal Server. In addition, Thin Clients have also been provided at all NSG-6 categories of stations where UTS has been commissioned and also at other NSG-1, NSG-2, NSG-3, NSG-4 & NSG-5 category of stations to render hassle free service.

Dispensing of UTS tickets is allowed at UTS tickets counter at the stations, UTS-on-Mobile App., STBAs and ATVM/ Co-TVM. Further, Sale of UTS tickets through JTBS were enabled w.e.f 28.9.2022.

To facilitate Station Managers/ Assistant Station Managers to concentrate better on train operations and also to facilitate passengers to get tickets it has been decided to appoint **Station Ticket Booking Sewaks (STBS)** at 'E'-Category stations as a pilot project for one year only. Later this scheme was changed into **STBA i.e. Station Ticket booking Agents** and initially the period of contract would be 3 years. During FY 2022-23, 35.41 lakh tickets have been issued through STBA generating revenue of Rs. 28.59 Cr. Vide Railway Board's circular No. 4 of 2022, the scheme to appoint STBA was extended for NSG-4 category stations also as a pilot project. Accordingly divisions have been instructed to engage STBA

at NSG-4, NSG-5 and NSG-6 category stations. Divisions have engaged 88 STBAs as per the new policy.

During FY 2022-23, 160.65 lakh tickets have been issued through ATVMs generating revenue of Rs. 191.76 Cr. Procurement of 117 ATVMs for various locations of Northern Railway is under process. In addition to its divisions are also planning to procure ATVMs as per their requirements.

Co-TVMs were commissioned during the FY 2015-16. **60 Co-TVMs** were installed at **14 locations** over Northern Railway. During FY 2022-23, 6.73 lakh tickets have been issued through Co-TVM generating revenue of Rs. 9.3 cr.

Booking of **UTS ticket through Mobile Phone** on NDLS-PWL section of Delhi division over Northern Railway was started w.e.f. 01.09.2015. On 01.11.2018, UTS-on-Mobile App was expanded on PAN-India basis. During FY 2022-23, 19.13 lakh tickets have been issued through UTS-on-Mobile App. generating revenue of Rs. 22.41 Cr.

Yearly Performance of UTS

FY Year	Location sanctioned	No. of Location commissioned
2002-03	23	22
2003-04	23	21
2004-05	25	07
2005-06	26	45
2006-07	45	20
2007-08	656	25
2008-09	No further UTS locations were sanctioned.	35
2009-10		385
2010-11		98
2011-12		16
2012-13		10
2013-14		07
2014-15		14
2015-16		06
2016-17		15
2017-18		NIL
2018-19		04
2019-20		14
2020-21		05
2021-22		NIL
2022-23		1
TOTAL	**798**	**745**

NOTE: UTS has been disabled at 16 UTS locations over NR and enabled at 2. UTS locations upto end of March-2023 were 731 over NR.

e) Achievement of PPM Northern Railway/ IRCA/ NDLS

Achievements from 01.04.2022 to 31.03.2023 as compared with previous year are given as under:-

i. Passenger Earnings

S. No	Heads	2022-2023 (April-March)	2021-2022 (April-March)	Variation	
				In figure	In %
1	Originating Passenger Booked (in Lacs)	1101421	692743	408678	58.99
2	Originating Passenger Earnings(in Lacs)	3689	1906	1783	93.55

ii. Reserved Special Trains

S. No	Heads	2022-2023 (April-March)	2021-2022 (April-March)	Variation	
				In figure	In %
1	Total Trips	2914	56109	-53195	-94.81
2	Earnings (in Lacs)	21440	423123	-401683	-94.93

iii. Temporary Augmentation

S. No	Heads	2022-2023 (April-March)	2021-2022 (April-March)	Variation in Figures.	
				In figure	In %
1	No.of Coaches/ Trips	63870	27134	36736	135.39
2	Earnings (in Lacs)	20585	6184	14401	232.88

During the FY 2021-22, maximum regular trains were run as Special Trains. Hence the comparative figure in regard to Special Trains seems to be quite lesser.

f) Reservation On Internet (IRCTC) (As received from IRCTC)

IRCTC Online Ticket booking system is a boon to the common man, empowering the user

through technology. Launched in 2002, IRCTC booked a mere 27 i-tickets on the first day of commencement of online ticketing service in the country. E-ticket booking service was started in August 2005. From 27 i-tickets booked in 2002 (the year of launch), IRCTC online ticketing has reached to a record of 15.88 lakhs tickets booked on 21st March, 2022. Now after more than 20 years of a sparkling journey, it has emerged as one of the largest e-commerce website in the country and Asia Pacific.

The spirit behind the project was that instead of the customers going to Passenger Reservation System (PRS), the PRS should be brought to the customers. The booking of Railway tickets through internet is now available 24*7*365. The Website remains closed only for 35 minutes from 23.45 hrs to 00.20 hrs for day closure activities.

In E-ticketing scheme, there is no physical ticket. Passenger get their reservation booked through Internet while sitting at home and occupy their reserved seats based on computer generated slip taken out from their own computer along with the Identity Card. One of the Passengers booked an E-Ticket is required to present any of the Ten ID cards mentioned below in original during the train journey and same will be accepted as a proof of Identity card failing which all the passengers will be treated as travelling without ticket and shall be dealt as per extant Railway Rules. SMS sent by IRCTC is also a valid travel authority along with ID Proofs.

Valid IDs: Voter ID Card/Passport/PAN Card/Driving License/Aadhaar Card, Photo ID Card issued by Central/State Govt. for their employees/Student ID Card with photograph issued by recognized school/college for their students/Nationalized Bank passbook with photographs. Credit Cards issued by Banks with laminated photograph/m-Aadhaar when shown through m-Aadhaar mobile app/Photo identity cards having serial number issued by public sector Undertakings of State/Central Government, District Administrations, Municipal bodies and Panchayat Administrations/Passenger showing the Aadhaar/Driving Licence from the “Issued Document” section by logging into his/her Digi locker account considered as valid proof of identity. (Documents uploaded by the user i.e. the document in “Uploaded Document” section will not be considered as a valid proof of identity).

The accommodation booked is not transferrable and is valid only if one of the ID card mentioned above is presented during journey. The passenger should carry with him the Electronic Reservation slip print out or SMS sent by IRCTC. In case the passenger does not carry the Electronic Reservation Slip or SMS sent by IRCTC, a charge of Rs. 50/- per ticket shall be recovered by the ticket checking staff and an excess fare ticket will be issued in lieu of that.

E-ticket cancellations are permitted through www.irctc.co.in by the user. Tickets booked through Passenger Reservation Counters can also be cancelled through www.irctc.co.in by the passengers. In case e-ticket is booked through an agent, the cancellation is required to be done through the respective agent only.

g) Next Generation E-Ticketing (NGeT) System

The IRCTC e-Ticketing System was replaced with Next Generation E-Ticketing (NGeT) System

on 28-Apr-2014 with new state of art Data Centre set up in CRIS premises at Chankyapuri, New Delhi, planned for 5 years. The capacity of per minute ticket booking was increased from 2000 tickets to 7200 tickets per minute. The system is being upgraded regularly and is supported by high capacity servers which have a capacity to book more than 28,000 tickets in a minute, with a record booking of 28,434 tickets in a minute on 12.11.2022 at 11.02 AM. On an average, 11.82 lakh tickets are being sold daily through IRCTC's Website/Mobile App in Financial Year 2022-23.

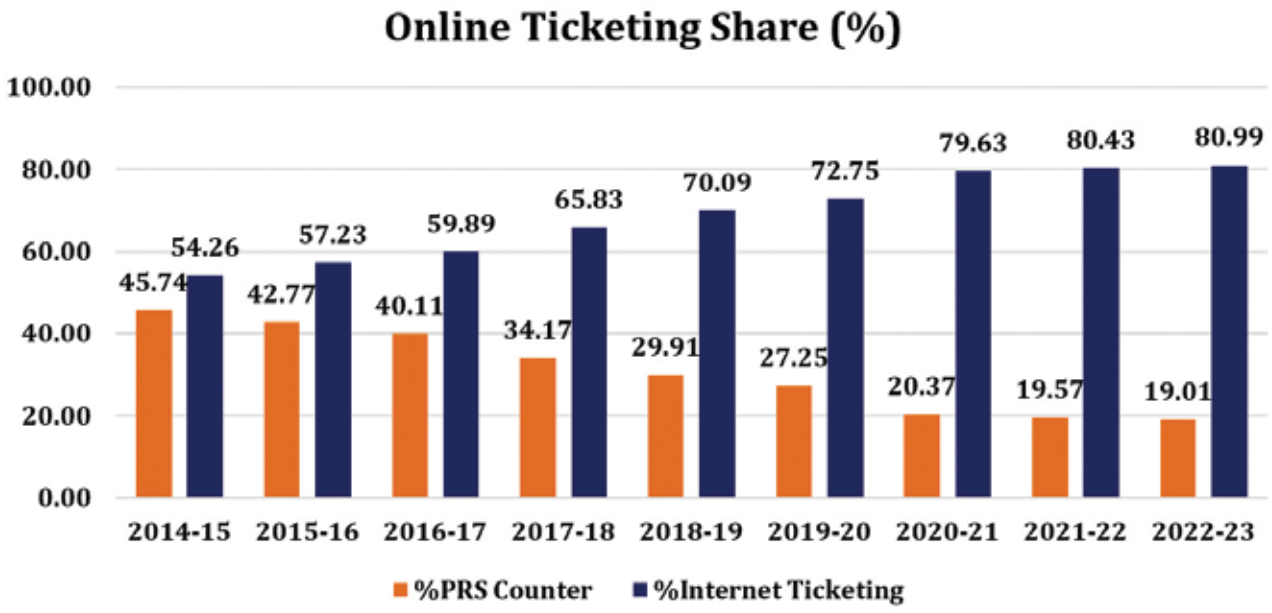
h) Details of E-Ticket Booking

Growth of e-ticketing on IRCTC Website/Mobile App has been phenomenal since its launch in year 2002-2003. During the financial year 2022-23, 4,313.00 lakh tickets for 7,706.40 Lakh passengers, have been booked through IRCTC Website (www.irctc.co.in) and Rail Connect Mobile App,. A total amount of Rs. 54,313.46 Crores was collected as Railway Ticket Fare through IRCTC Website and Mobile App for e-ticketing for the Financial Year 2022-23.

i) Few important E-ticketing Statistics

- Registered Active Users — 9.14 Crores
- Online Booking Share — 80.99 % of total reserved tickets
- Highest Ticket in a day (Overall) — 15,88,592 on 21/03/2022
- Highest Ticket in a minute — 28,434 tickets on 12/11/2022 (11.02 AM)

j) Online Ticketing Share



k) Convenience Fee

IRCTC used to levy a service charge of Rs. 20 + Tax (2S &Sleeper Class) and Rs.40 + Tax in case of all other classes (1AC, EC, 2AC, 3AC, CC, 3E, FC) irrespective of the number of passengers booked on E-Ticket. However, the same was withdrawn w.e.f. 23.11.2016 to 31.08.2019.

IRCTC has started levying Convenience Fee w.e.f. 01- Sep- 2019 @ Rs.15/- + GST per ticket for Non-AC Classes and @ Rs.30/- + GST per ticket for AC Classes (including First Class) on the online tickets booked through IRCTC, irrespective of the number of passengers booked on a ticket;

For those Users, who make online payment for e-tickets through BHIM/UPI payment mode, the Convenience Fee is charged @ Rs.10/- + GST per ticket for Non- AC Classes and Rs.20/- + GST per ticket for AC Classes (including First Class), to promote digital payments as a Digital India initiative.

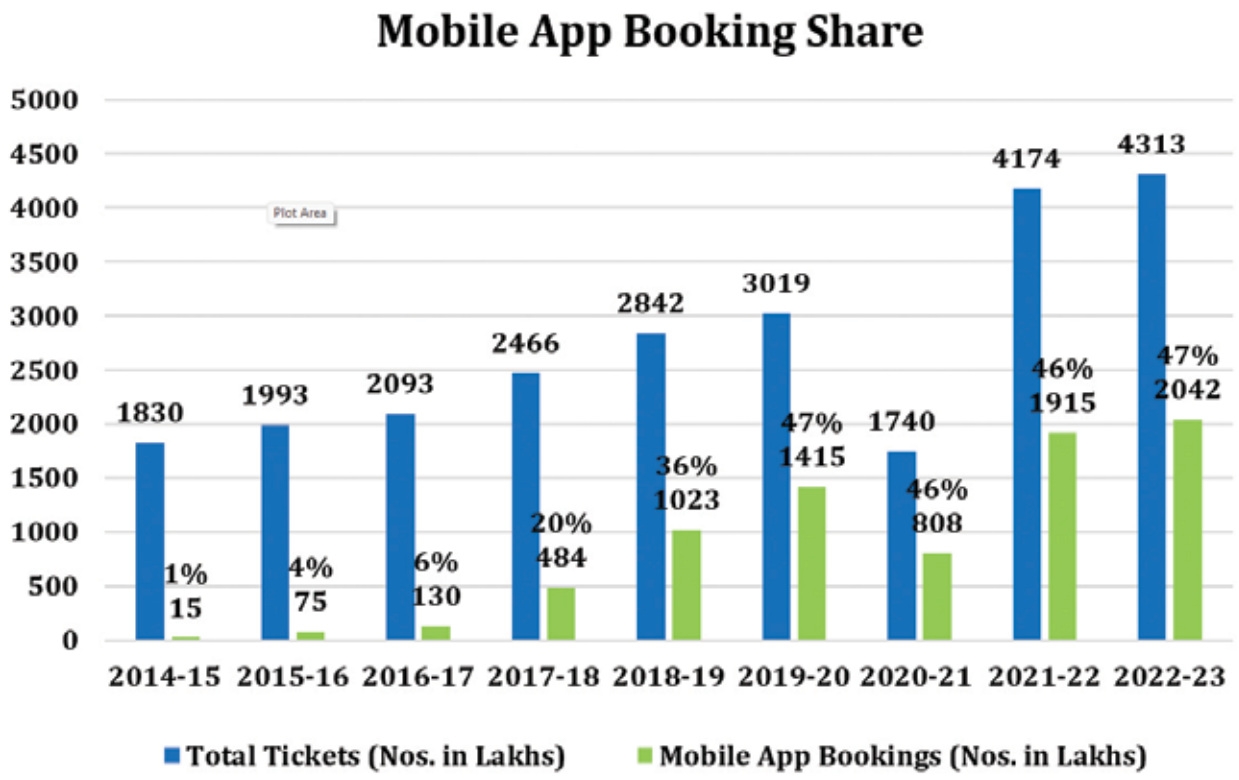
l) IRCTC Rail Connect Mobile App

E-tickets can also be booked on IRCTC Rail Connect Mobile Apps (Android & iOS Platforms. In order to capture the ever increasing popularity and customer base and to address need of this market segment, IRCTC had launched new Android App on Next Generation e-ticketing system in January 2017. During the year 2015-16, the average mobile ticket booking was 30000 per day which has been increased to 5.60 Lakh tickets per day. There were a total of 9.95 Crore downloads of the Mobile App. Daily Mobile Logins were 42.24 Lakhs. 47.36% of online tickets are being booked through IRCTC Rail Connect Mobile App.

m) Mobile App Statistics are given below

Period	Tickets (Nos. in Lakhs)	Downloads (Nos. in Lakhs)
2014-15	15.17	25.47
2015-16	74.57	47.91
2016-17	129.90	94.71
2017-18	483.77	130.61
2018-19	1023.43	139.85
2019-20	1415.24	140.58
2020-21	808.47	128.47
2021-22	1915.37	185.01
2022-23	2042.47	213.94

n) IRCTC Mobile App Booking Share



o) Payment System

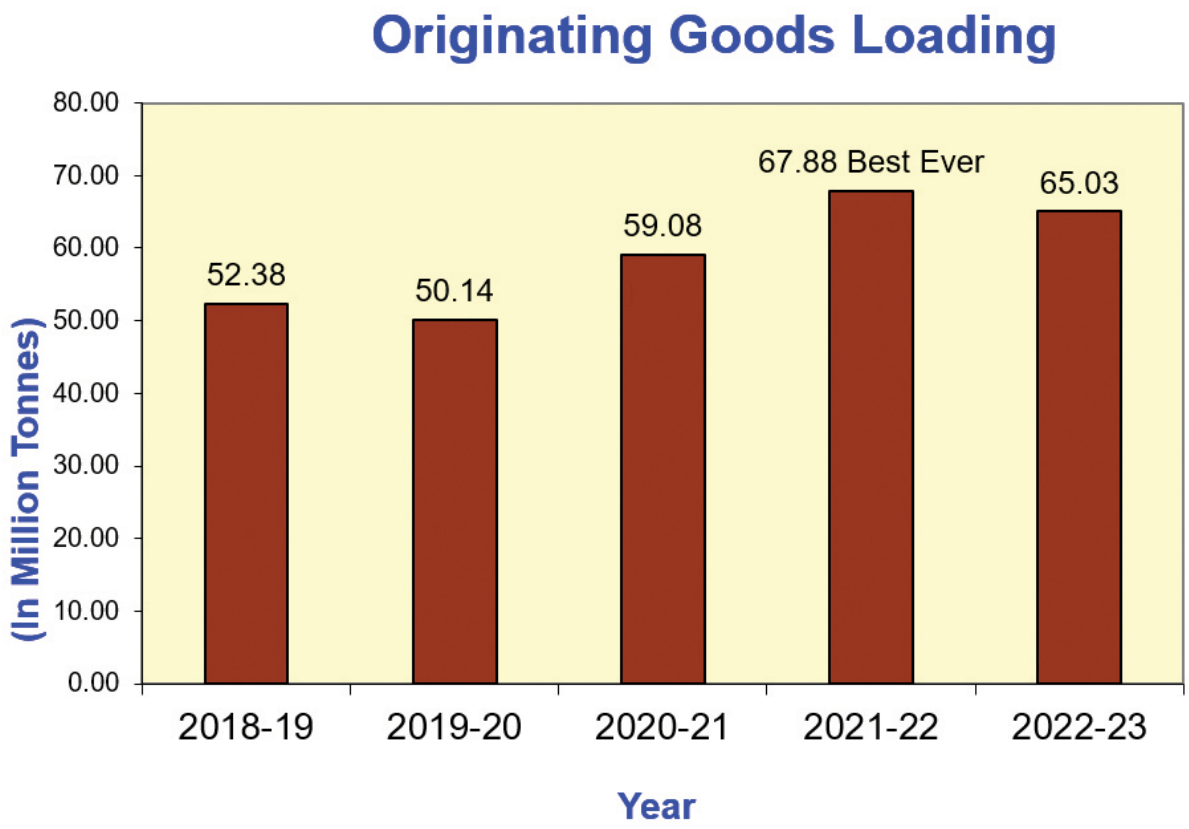
IRCTC has a robust system of payment gateways with various payment options viz., Net Banking/Credit & Debit Card/Wallets/BHIM/UPI. The transaction on this website is completely safe and secure. Bank Account or Card Account details of User are not saved in the server of IRCTC at the time of booking tickets thereby ensuring preventing any misuse. Even, foreign user can book tickets using International Credit Card (Issued outside India).

3.1.2.B Freight Marketing

Annexure "A"

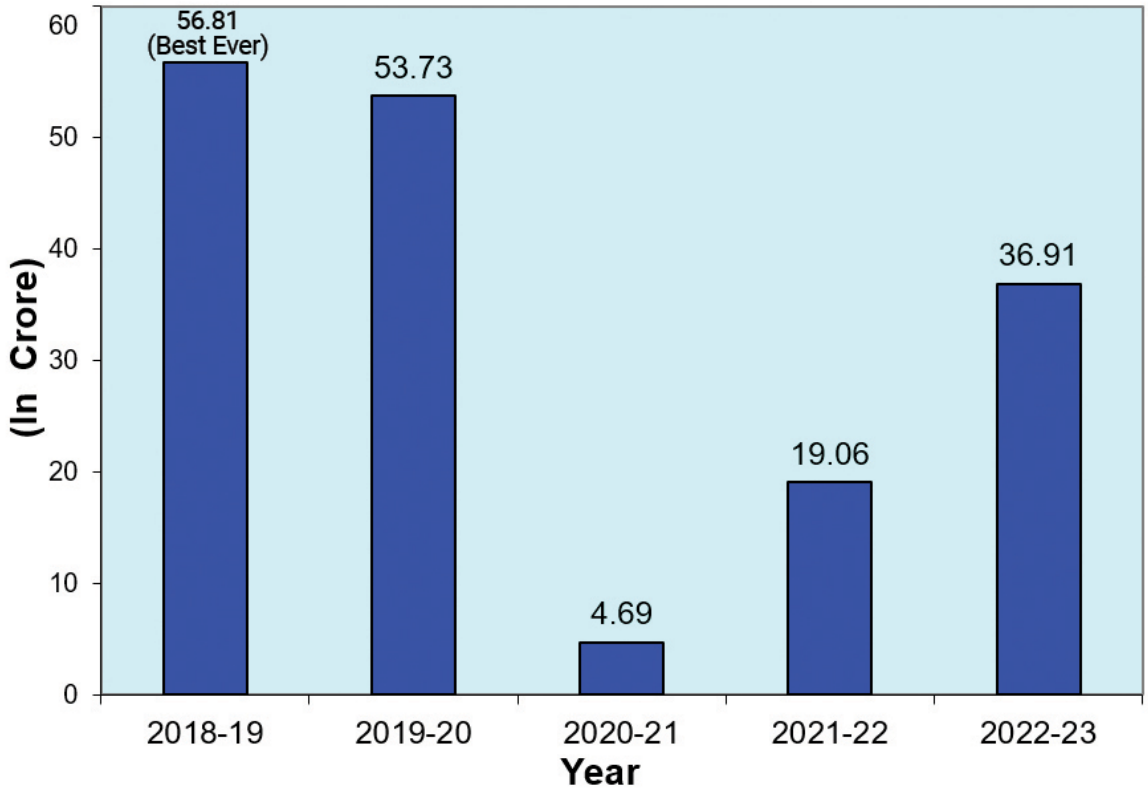
S.No	Item	Target 2022-23	2018-19	2019-20	2020-21	2021-22	2022-23	Best Ever	
								Figure	Year
1	Originating Goods Loading (in MT)	64.77	52.38	50.14	59.08	67.88	65.03	67.88	2021-22
2	Originating Goods Earning (in Cr)	8638.44	8454.60	6498.70	8109.15	9497.10	8653.87	9497.10	2021-22
3	Originating No.of Pass. (in Crs of Rs.)	37.34	56.81	53.73	4.69	19.06	36.91	56.81	2018-19
4	Originating Total Earning (In Crs of Rs.)	20313.76	19256.74	15029.23	12372.91	17439.44	21391.32	21391.32	2022-23
5	Originating Passenger Earning (In Crs of Rs.)	10168.00	9099.94	8781.87	3027.76	6933.91	11016.33	11016.33	2022-23
6	ISO Container in TEUs		433259	518985	467860	547548	537947	547548	2021-22
7	ISO earnings (Fig. in Crore of Rs.)		1189.11	851.11	975.93	1131.04	1233.01	1233.01	2022-23

- **Graphs are as per summary above**

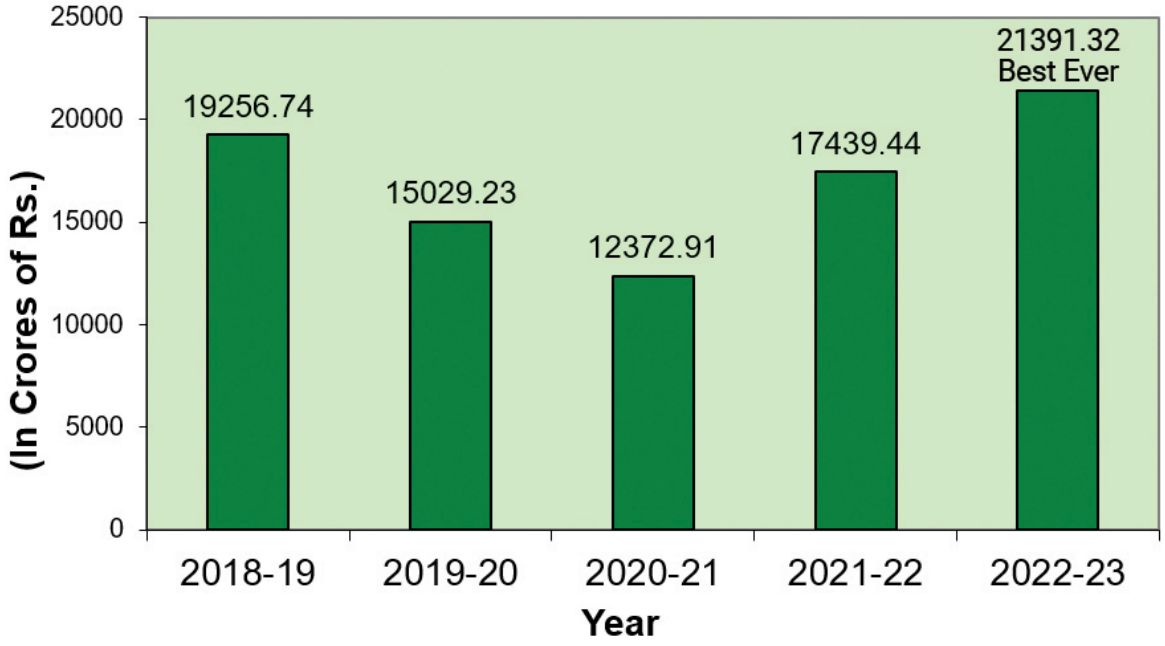




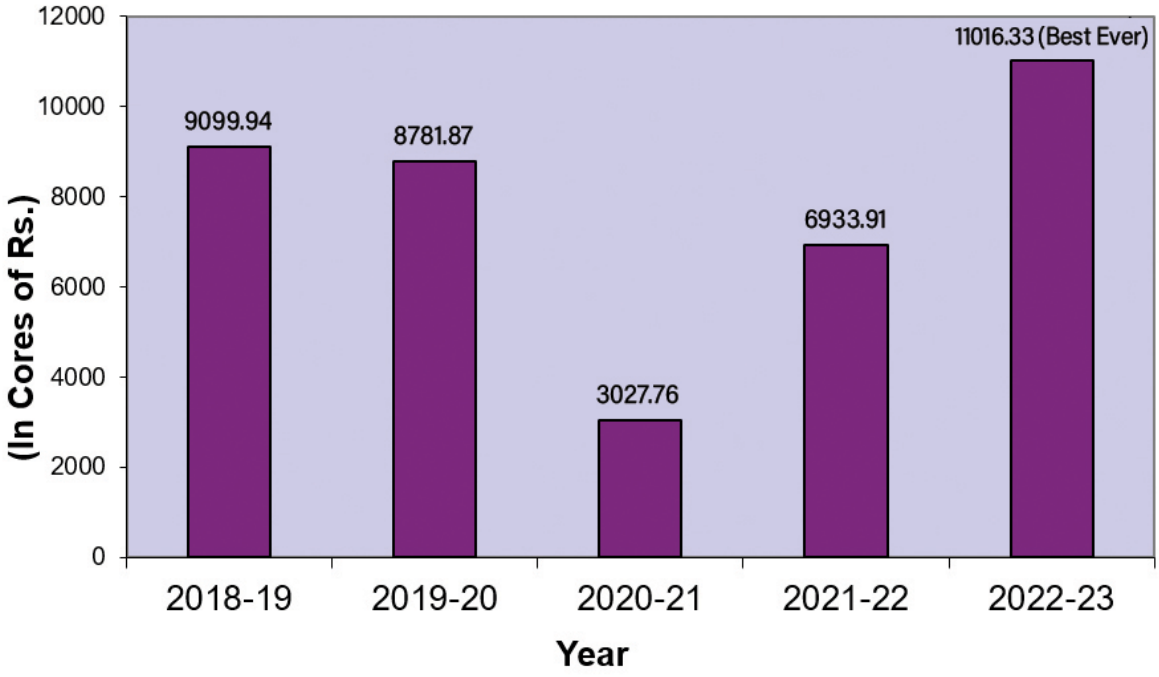
Originating Number of Passengers



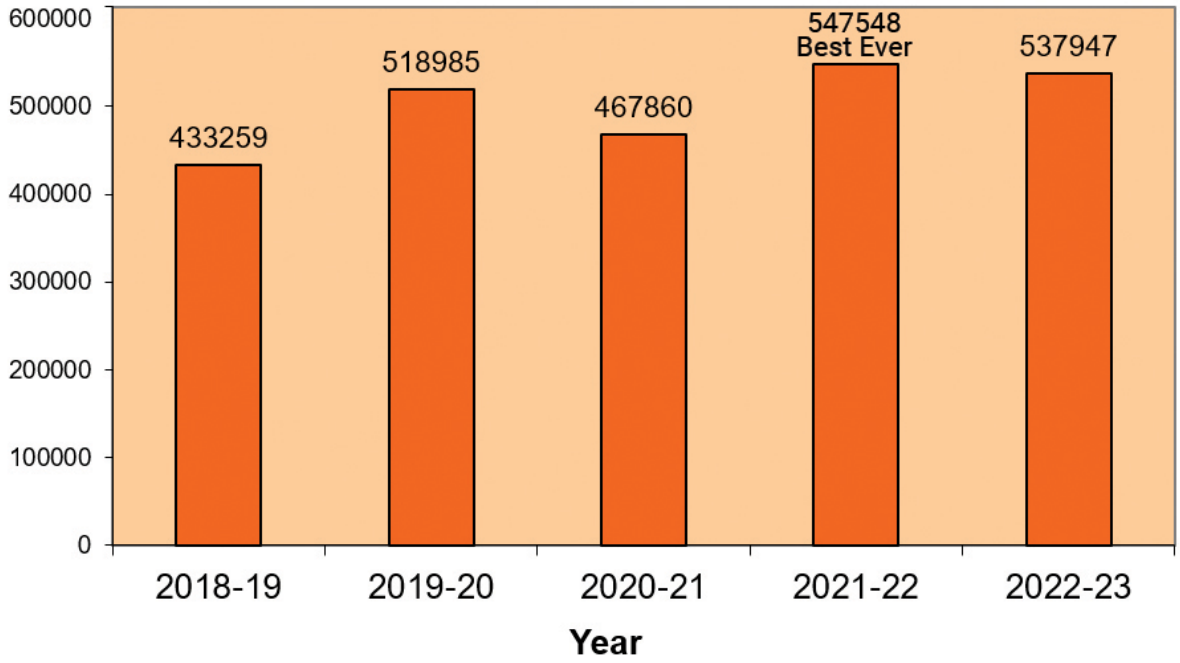
Originating Total Earnings

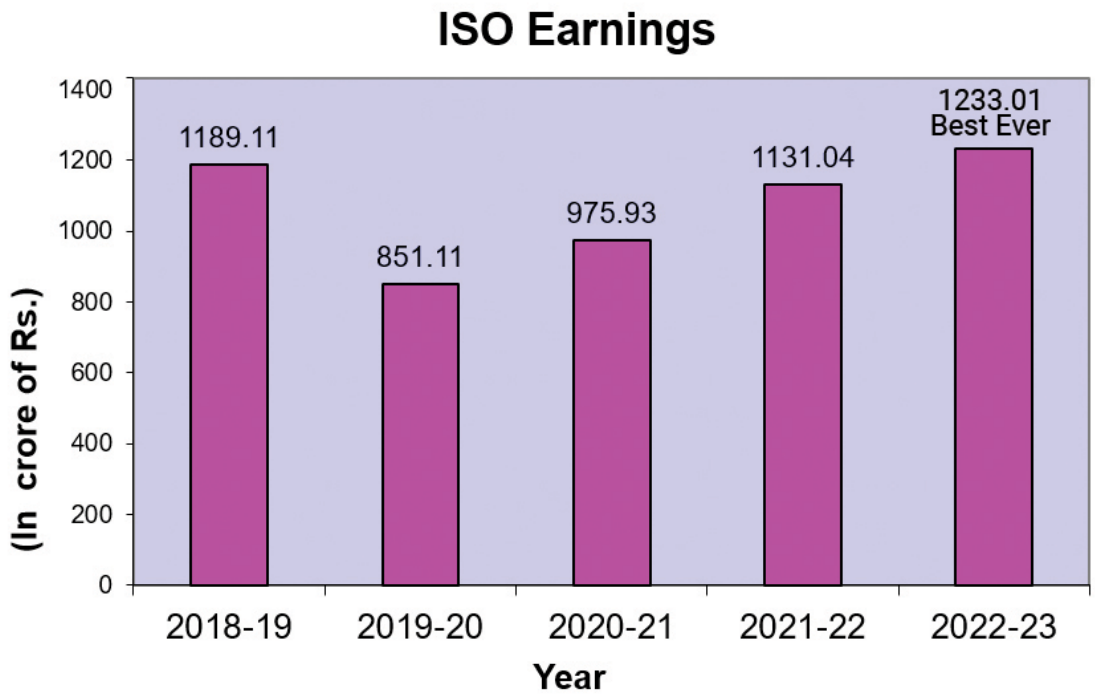


Originatng Passenger Earning



ISO Containers in TEUs





3.1.2.C Passenger Amenities\

Special efforts are being made by Northern Railway to provide the customer's amenities at stations, so that direct benefit is ensured to the passengers and simultaneously help to build up the image of the railway.

Following works have been approved/ sanctioned by Railway Board under Plan Head 53: Passenger Amenities in Pink Book 2023-24 under Umbrella Works.

(Cost in Thousands of Rs.)

Cost of approved & sanctioned work in FY 2023-24 (PH 53)

S.No	PB No.	NAME OF WORK	Sanctioned cost for 2023-24
1	1298	Integration of Metro stations with Railway Stations (Umbrella Work 2023-24)	1000000
2	1299	Major Upgradation of Railway Stations on Indian Railways (Phase-IV)	15000000
3	1300	Ballast fewer Tracks for station Development.	9811765
4	1301	Setting up of quick watering arrangement systems at stations.	132000
5	1302	Upgradation/ Modernization of Infrastructure at good sheds.	11992200

6	1303	Provision Escalators on Railway platforms over Indian Railways with average footfall more than 25000 per day (Phase-II).	3270588
7	1304	Comprehensive sewage treatment plant (Phase-II).	307100
8	1305	Minimum essential amenities -Telecom, Expansion information system to facilitate Divyangjan and other passenger amenity items (Phase -11).	300000
9	1306	Minimum essential amenities & facilities for Divyangjan at stations (other than telecom, lift quick watering system) (Phase-II).	2616471
10	1307	Provision of lifts at stations (Sugamya Bharat Abhiyan) (Phase - II).	981177
11	1308	Soft upgrades/improvements at stations.	10247843
12	1309	Provision of Foot over bridges and/or high-level platforms at stations (Phase - III).	7195294

Following works have been sanctioned by GM/Railway Board under Plan Head 53: Passenger Amenities in 2022-23 under Umbrella Works.

S.No	Name of Umbrella work	Works sanctioned for stations
1	Northern Railway - Provision of foot over bridges and/or high-level platforms at stations (Phase-2) (Umbrella Work 2022-23)	**New FOB:** Ambala city, Khanna, Yamunanagar Jagadhari, Doraha, Adarsh Nagar, Jataula jauri Sampka, Patli, Bijnor, Dhampur, Gajraula, Roorkee **Extension of FOB:** Chawapail, Saharanpur, Delhi Inderpuri, Hazrat Nizamuddin, SIC, JTU & POF, Bhadhoi. **Raising of Platform to High level:** Mustafabad, 29 stations of Delhi Shahadara Saharanpur section, Guldhar, Bijnor, Nagina.
2	Northern Railway - Minimum essential amenities & facilities for Divyangjan at stations (other than telecom, lift, escalators & quick watering system) (Phase-2) (Umbrella Work 2022-23	Various stations between JNC-PWL section, Various stations under ADEN/HNZM, Various stations on DSA-SRE section, DUK section, , stations between DEE-RE section, stations under ADEN-II/ FZR, stations under ADEN-/PLMX, stations under ADEN-/JRC, stations under ADEN-/FZR, stations under ADEN-/PTK, stations under ADEN-/I & II ASR, stations under ADEN-/UHP, stations under ADEN-/JAT, stations under ADEN-/BDGM, Dhampur, stations under Sr.DEN-1/MB.

3	Major upgradation of stations on Indian Railways (Phase-2) (Umbrella Work 2022-23)	**Major upgradation:** Chandigarh, Delhi Cantt, Jammu Tawi, Ludhiana, Jallandhar Cantt, Lucknow (NR)/ Lucknow Jn(NER). **Technical consultancy for Techno Economic feasibility:** Saharanpur, Kashi
4	Sewage treatment plant / effluent treatment plant at Railway stations and water treatment plant to utilize treated affluent for non-potable use at major railway stations (Umbrella Work 2022-23)	UMB, BTI, NLDM, CDG & KLK, 13 stations in Haryana, Jallandhar Cantt, Palampur Himachal, Beas, Budgam, Srinagar, Udhampur, Banihal, Shri Mata Vishno Devi Katra, New washing line/Sadar/ LKO, RBL Depot, SLN Depot, North Coaching Complex, Charbagh/LKO
5	Provision of 250nos lifts at stations under Sugamya Bharat Abhiyan (Phase-2) (Umbrella Work 2022-23)	No works proposed
6	Provision of 100 nos escalators at Railway stations over Indian Railways with average footfall more than 25000 per day (Umbrella Work 2022-23)	No works proposed
7	Northern Railway - Soft Upgrade at stations (like provision of passenger amenities, cover over platform etc) (Umbrella Work 2022- 23)	**OSOP Sale outlets :** UMB divn.- 91 stations, DLI divn.- 132 stations, FZR divn.- 131 stations LKO divn.- 128 stations MB divn.- 81 stations, **Architectural & Technical consultancy for upgradation of 15 stations under Amrit stations:** UMB division, MB division. **Quick watering Arrangements:** Saharanpur, Ambala Cantt, Ludhiana.

		Improvement of PF surface: Bathinda, Kalka., MTC, MDNR, MWC, Delhi Jn., FZR, SNL, DDL (PF No. 2),Dhariwal, Gurdaspur, Pathankot Jn., Amritsar Jn. **Provision of PF shelter:** Saharanpur, HNZM, MUT, Section of ADEN/SMQL, JUC, Prayag Raj Sangam. **Extension & widening of PF:** SASN (Mohali) **Provision of RCC Tank:** NO, RPMN, KEX, KQL, THBN, NNX. **Augmentation of Water supply system with Borewell & Pump House:** BAHL, ANT, PJGM, HME, SXZM, CHH. SWPR, KEH, MPRFSWS, ANT, MFL, JIS,VAI. **Improvement in station building (Waiting hall, Circulating area, Booking office, Retiring Room, dormitory etc:** ANVT, ASR, PTK, Faridkot, Gurdaspur, Muktsar, PHR, DDL, Beas, SWE, MEM, BTJ & KDF, DHAMPUR, Bijnor. **Provision of coach guidance system/ LED Display Board:** CDG, SRE, PTA, Major stations over FZR divn., HRI, SPN, DDN, **Integrated Passenger Information System,** Pratapgarh, Sultanpur, Amethi. **Face to face Enquiry & Fare repeater:** Important stations on LKO division, **Provision of Basic Amenities like toilets, benches, sheds etc for merchants:** DDL, PGW, FZP, KXH, FKA, BWZ, MKS, KKP, FDK, TTO, BAT, Kathua, UHP, Jallandhar city, Kartarpur, MQF, AJL, JGN, MLX. **Development of station as Adarsh station:** Baghpat Road, Khekra. **Passenger Address System/Computer Based Announcement System:** 121 stations over FZR division.

8	Indian Railways share for redevelopment of New Delhi & Chhatrapati Shivaji Maharaj Terminal stations along with utility shifting	New Delhi work sanctioned in WP 2023-24.
9	Major upgradation of stations on Indian Railways (Phase-III) (Umbrella Work 2022-23) (37/Suppl/Dec'2022)	**Appointment of Technical consultancy for Techno Economic feasibility:** For upgradation of 15 stations under Amrit stations of FZR divn: & LKO division

3.1.2.D Ticket Checking Performance

Ticket Checking Performance (In Lakhs)						
S.No	**Particulars**	**Cumulative (upto September-2023)**				
		Board's Prop. Target for the Current month of Year 2022-23	**Same month of Last Year 2022-23**	**Achievement during Current month of Year 2023-24**	**% age Variation over Railway Board's Prop. Target**	**% age Variation over Last Year**
1	No. of Persons detected travelling **Without Tickets**	Targets not fixed by Board	24.02	12.48	Targets not fixed by Board	-48
2	No. of Persons detected travelling **With Improper Tickets**	Targets not fixed by Board	1.94	8.08	Targets not fixed by Board	316
3	Amount realized as fare and Penalty (In Rs.)	Targets not fixed by Board	17031.89	13134.68	Targets not fixed by Board	-23

4	Unbooked Luggage Cases Detected	Targets not fixed by Board	0.07	0.07	Targets not fixed by Board	5
5	Amount Realized from Unbooked Luggage Cases (In Rs.)	Targets not fixed by Board	20.10	19.42	Targets not fixed by Board	-3
6	Ticketless/ Irregular Travel Plus Unbooked Luggage Cases (In Rs.)	17.84	26.03	20.63	15.69	-21
[3] +[5]	Ticketless/ Irregular Travel Plus Unbooked Luggage Earnings (In Rs.)	11622.00	17051.99	13154.10	13.18	-23

3.1.2.E Catering

i.Catering Earning:-

- In financial year 2022-23, Rs. 3304 Lakhs license fee has been received from static units
- In financial year 2022-23 Rs. 158 Lakhs fixed haulage charges has been received for Maharaja Express trains from IRCTC
- In financial year 2022-23 Rs. 3895 Lakhs Railway share of catering units (Mobile TSV) has been received from IRCTC
- In financial year 2022-23 Rs. 383 Lakhs Railway share of Major static units has been received from IRCTC.

ii. Digital Payment facility:-

- Cashless Payment facilities at Catering units Swipe machine (POS), Mobile based payment facility has been made at all Food Plaza, Fast Food Units. Further 100% of other catering units have also been provided with cashless system of payment.

iii. Improvement in catering/vending arrangement:

- The OSOP scheme has been implemented at over 119 stations. The objective of OSOP is to provide enhance livelihood and welfare of local artisan, potter, weaver etc: through a marketing channel by providing earmarked space for stalls at platforms, it would also promote local food items, handicrafts art effects etc.
- Optional food in Pre-Paid trains (Rajdhani, Shatabdi Duranto & Vande Bharat) introduced
- Green initiative has been taken by banning "Use of plastic carry bags at catering units on stations.
- All catering units are having FASSAI certificate.
- 50 stations have been identified, for use of Kulhad, Glasses and plates made by potters.
- As per direction of Railway Board's WVM is now under the management of Railway. This Railway has allotted 118 WVMs out of 366 WVMs. Remaining 248 are under process.

iv. Other initiatives:-

- Total existing 215 Misc. Article units & Book stalls units have been converted into multipurpose stalls (MPS) units over Northern Railway.
- 15 days Safety drive was launched to prevent the cases of fire in trains with respect to catering services (Pantry Cars) in the month of August-2023.
- To ease the mechanism of transferring the bill amount of catering services to IRCTC an online portal has been launched.

3.1.2.F Public Grievances Redressal

In the interest of Railway passengers, an integrated online Complaint Management System named "Rail Madad" is working 24X7. Railway passengers may interact with the Railway Administration for assistance and resolve their complaints by using online and offline channels as convenient.

a) Offline public complaint & suggestion channels:

i. By dialing three digits Helpline number 139. (Including medical and security assistance service)

ii. SMS by writing "MADAD <space> text grievance" to Helpline number 139.

iii. By writing in "Complaint & Suggestion book", available with the station superintendent of the concerned Railway Station and with the concerned 'Train Superintendent".

b) Online public complaint & suggestion channels:

i. Rail Madad portal website: URL https://railmadad.indianrailways.gov.in

ii. By using APP **"Rail Madad"**

iii. Tweet to concerned DRM's, @GMNRly, @RailwaySeva, @RailMinIndia

c) Performance handling for the year 2022-23(1.4.2022-31.3.2023) is as under:

i. Rail Madad Based Public Grievances:

Public Grievances: A total of **2,60,922** public grievances were disposed of out of **2,61,008,** which is **99.97%** (Performance).

Customer feedback: The average rating is satisfactory and a total of **18,517**Excellent and **18,529** satisfactory feedbacks were awarded by the passengers to Northern Railway.

Average disposal time: 78 minutes

Rank of IR:-2nd (Highest positive feedback)

ii. Centralized Public Grievance Redress and Monitoring System (CPGRAMS): A total of **8,318** complaints were disposed out of **8,593** complaints all over Northern Railway. The disposal percentage is **96.80%** (Performance) and the average disposal time is **19** days.

iii. Manual: A total of **170** complaints were disposed of out of **199** complaints, disposal percentage is **85.42% (Performance).**

3.2 About the Department

The Operating department is concerned with the running of both passengers and goods trains and is headed by Principal Chief Operating Manager (PCOM).

The department also arranges multi modal traffic in regular coordination with Container Corporation of India. This includes both traffic for export and traffic for domestic use.

The passenger traffic has seen a constant increase over the years, due to increase in population as well as due to increased requirement to travel due to economic development. The freight traffic has also increased simultaneously. The Operating Department has to examine these increasing requirements and has to organize for satisfying the same. This also involves planning for infrastructural development and as such the Operating department also plays a pivotal role in planning.

3.2.1 Highlights of the year

Punctuality performance of Mail/Exp trains and MR trains for the year 2020-2021, 2021-2022 & 2022-2023 is appended below:

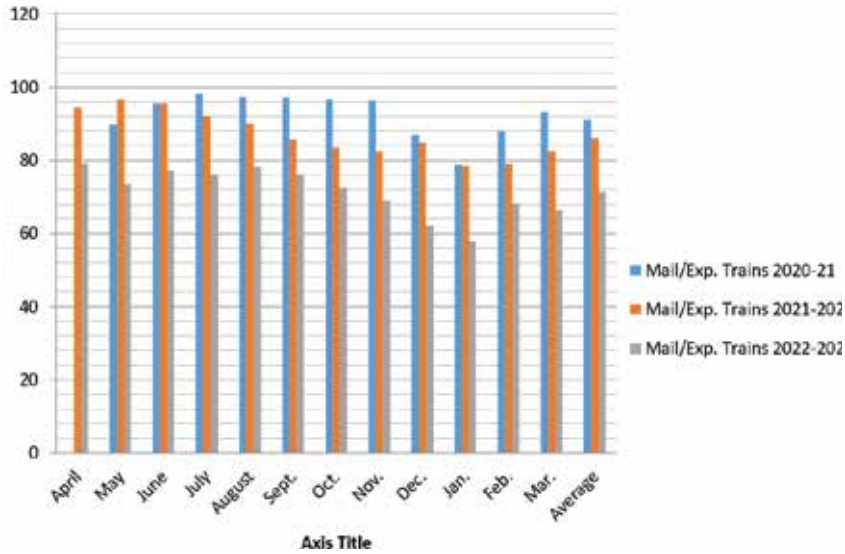
Trains	Target	2020-21	2021-2022	2022-2023
Mail/Exp.	85.00%	Covid Period	86.21	71.40

Month-wise punctuality performance over Northern Railway

Mail/Exp. Trains			
Month	**2020-21**	**2021-2022**	**2022-2023**
April	0	94.52	79.11
May	89.77	96.57	73.56
June	95.73	95.75	77.10
July	98.14	92.12	76.12
August	97.39	90.05	78.16
Sept.	97.10	85.82	76.11
Oct.	96.51	83.44	72.54
Nov.	96.49	82.39	69.02
Dec.	86.89	84.88	62.10
Jan.	78.62	78.56	57.72
Feb.	87.99	78.92	68.19
Mar.	93.29	82.29	66.36
Average	**91.24**	**86.21**	**71.40**

In FY 2020.21 due to covid all M/Exp. were run as M/Exp. Spl.

Punctuality performance over Northern Railway in graph



3.2.2 Narrative Report (01 April 2022 to 31 March 2023)

A. Introduction of Trains

S. No.	Train no	Train Name	From	To	Frequency	W.E.F.
1	14030/14029	Meerut Cantt-SGNR-Delhi Express	Meerut Cantt	Delhi	Daily	16.05.2022
2	04771/04772	BTI-APH Express	BTI	APH	Daily	09.06.2022
3	04044/04043	NZM-ABKP Express	Nizamuddin	Ambikapur	Weekly	19.07.2022
4	05395/05396	PBE-SPN-PBE	PBE	SPN	Daily	02.07.2022
5	05381/05382	PBE-SPN-PBE	SPN	PBE	Daily	02.07.2022
6	20957/20958	Indore- New Delhi SF Express	Indore	New Delhi	Tri-weekly	24.08.2022
7	20657/20658	UBL - NZM - UBL SF EXP	UBL	NZM	Weekly	14.10.2022
8	22447/22448	Vande Bharat Express	New Delhi	Amb Andaura	6 days a week	19.10.2022

B. Extension

S. No.	Train no	Train Name	Extended		W.E.F.
			From	To	
1	19717/19718	Jaipur-DLPC Express upto SBIB (new no 19411/12)	Jaipur	Sabarmati Bg	05.04.2022
2	14021/14022	Delhi Sarai Rohilla - Jaipur (19701/02)	Delhi Sarai Rohilla	Delhi	13.05.2022
3	17323/17324	UBL-BSB-UBL-Weekly Express	Varanasi	Banaras	24.06.2022
4	05169/05170	BUI-BCY MEMU	BCY	PRRB	27.06.2022
5	14220/14219	LKO - BSB (19107/08)	BSB	BSBS	11.07.2022
6	11071/11072	LTT- BSB	BSB	BSBS	10.07.2022
7	12555/12556	GKP - HSR SF EXPRESS	HSR	BTI	14.07.2022
8	14213/14214	Varanasi -Gonda Express	Gonda	Bahraich	21.08.2022
9	22969/22970	Okha-Varanasi Exp.	Varanasi	Banaras	10.09.2022
10	04591/04592	LDH - ASR SPL	Amritsar	Chheharta	20.09.2022
11	14265/14266	BSB - DDN Exp.	Varanasi	Banaras	10.10.2022
12	22407/22408	BSB - ANVT Exp.	Varanasi	Banaras	13.10.2022
13	14854/14853	JU-BSB EXP	Varanasi	Banaras	21.10.2022
14	14864/14863	JU-BSB EXP	Varanasi	Banaras	21.10.2022
15	14866/14865	JU-BSB EXP	Varanasi	Banaras	21.10.2022
16	06951/06952 74907/74906	JAT - UHP PASSENGER	Jammu Tawi	Pathankot	23.10.2022
17	64912/64915	ROK - NDLS PASS.	ROK	Jind	23.10.2022
18	64932/64931	ROK - NDLS PASS.	ROK	Jind	23.10.2022
19	19167/19168	ADI-BSB EXPRESS	Varanasi	Banaras	12.12.2022
20	14712/14711	SGNR-HW Express	Haridwar	RKSH	01.03.2023
21	12538/12537	Banaras-Muzaffarpur Express	Banaras	Prayagraj Rambag	01.03.2023

C. Increase in frequency

S. No.	Train no	Train Name	Frequency increase		W.E.F.
			From	To	
1	14021/14022	Delhi - Sikar Sainik Express	Tri-weekly	Daily	13.05.2022
2	14113/14114	SFG-DDN Express	Tri-weekly	5 days a week	07.06.2022
3	14119/14120	DDN-KGM Express	Tri-weekly	5 days a week	08.06.2022
4	15279/15280	SHC-ANVT Express	Weekly	Bi-weekly	07.07.2022
5	15211/15212	DBG-ASR Jannaayak Express	Tri-weekly	Daily	03.03.2023
6	22435/22436	BSB - NDLS - BSB Vande Bharat Express	05 days a week	06 days a week	20.03.2023

D. Experimental stoppage

S. No.	Train no	Train Name	Stoppage	Divn.	W.E.F.
1	12237/12238	BSB-JAT Exp.	Lambhua	LKO	06.01.2022
2	20401/20402	BSB-LKO Exp.	Lambhua	LKO	06.01.2022
3	04381/04382 54373/54374	PYGS-AYC Pass.	Dayalpur Halt	LKO	08.01.2022
4	04501/04502 64511/64512	SRE - UHL MEMU	Mustafabad	UMB	21.01.2022
5	04571/04572 54631/54632	BNW-DUI Pass.	Jamalpur Shaikhan	UMB	05.03.2022
6	04575/04576 54635/54636	HSR-LDH Pass.	Jamalpur Shaikhan	UMB	05.03.2022
7	12422/12421	ASR-NED Exp.	Narwana	DLI	23.05.2022
8	14711/14712	HW-SGNR Exp.	Bhuchchu	UMB	24.05.2022
9	14736	UMB-SGNR Express	Bhuchchu	UMB	24.05.2022
10	20401/20402	BSB - LKO Exp.	Sri Krishna Nagar	LKO	13.06.2022
11	12425/12426	NDLS-JAT Exp.	Kathua	FZR	01.07.2022
12	04501/04502	SRE-UHL Exp.	Rai Mehatpur	UMB	25.06.2022
13	06997/06998	UMB-DLPC Exp.	Churaru Takrala	UMB	25.06.2022

14	20401/20402	BSB-LKO Exp.	Musafirkhana	LKO	08.07.2022
15	14612/14611	SVDK Ghazipur City exp.	Nihalgarh	LKO	15.07.2022
16	12411/12412	CDG-ASR Express	New Morinda	UMB	12.07.2022
17	14631/14632	DDN - ASR Express	New Morinda	UMB	12.07.2022
18	12566/12565	DBG - NDLS Exp.	Unnao	LKO	05.08.2022
19	20409/20410	DLI – BTI – DLI Exp.	Narwana Jn.	DLI	19.09.2022

E. Permanent Augmentation

In the year 2022-23, 24 pair of NR trains have been permanently augmented by 50 coaches having 40 rakes. Detailed list attached as Annexure “A”.

F. Augmentation to Clear Extra Rush

During the Pooja/Chhath/Winter/Holi/Mela Rush 2022-23 load of 107 pair of NR Special trains by 323 coaches having 129 rakes, generating 27190 coach trips. Detailed list attached as Annexure “B”.

G. Conversion of Rakes

During 2022-23, ICF (IRS) rakes of 3 pair of NR trains having 6 rakes have been converted into LHB and ICF (IRS) rakes of 4 pair of NR trains having 3 rakes have been converted into ICF (CBC). Detailed list attached as Annexure “C”.

H. Conversion Into MEMU Rakes

During 2022-23, ICF (IRS) rakes of 10 service (5 pair) of NR passenger trains having 4 rakes have been converted into MEMU rakes. Detailed list attached as Annexure “D”.

I. Merger of Rakes

NIL.

J. Standardization of Rakes

In the year 2022-23, 7 pair of NR rain have been standardized having 8 rakes and 4 links. Detailed list attached as Annexure “E”.

K. Induction of AC-3 Tier Economy Coach (LWACCNE)

To facilitate passengers, NR has attached 12 AC-3 Tier Economy Coaches in 5 pair of NR trains having 8 rakes during the year 2022-23. Detailed list attached as Annexure “F”.

L. Induction of LSLRD vice LWLRRM

In order to save fuel, NR has replaced 20 LWLRRM coaches with 20 LSLRD coaches in 11 pair of NR trains during the year 2022-23. Detailed list attached as Annexure “G”.

DETAILED SUMMARY (CAB SECTION) (01-04-2022 to 31-03-2023)					
S. No.	**Description**	**No. of trains augmented**	**No. of Rakes augmented**	**No. of coaches attached**	**Total Trips**
A	Permanent Augmentation (April'22 to 31st March'23)	24	40	50	4648
	TOTAL	**24**	**40**	**50**	**4648**
B	Temporary Augmentation (April'22 to 31st March'23)	107	129	323	27190
	TOTAL	**107**	**129**	**323**	**27190**

CONVERSION OF ICF(IRS/CBC) RAKES INTO LHB			
S. No.	**Description**	**Total No. of Trains (which are Running with ICF(IRS/ CBC) stock)**	**No. of LHB Rakes inducted**
C	Conversion of ICF(IRS/CBC) Rakes into LHB (April,2022 to 31st March,2023)	3	6
	TOTAL	**3**	**6**

CONVERSION OF ICF(IRS) RAKES INTO CBC				
S. No.	**Description**	**Total No. of Trains (which are Running with ICF(IRS stock)**	**No. of ICB(CBC) Rakes inducted**	
D	Conversion of ICF(CBC/IRS) Rakes into CBC (April,2022 to 31st March,2023)	4	3	14306/05, 14303/04 & 04599/04600 One rake converted (out of 3 ICF/IRS rake) from 30-01-2023
	TOTAL	**4**	**3**	

CONVERSION OF ICF(IRS)/DEMU RAKES INTO MEMU			
S. No.	**Description**	**Total No. of Trains (which are Running with ICF(IRS stock)**	**No. of MEMU**
E	Conversion of ICF(CBC/IRS) Rakes into MEMU (April,2022 to 31st March,2023)	10	4
	TOTAL	**10**	**4**

STANDARDIZATION OF RAKES				
S. No.	**Description**	**No. of Rakes**	**No. of Trains running in links (pairs)**	**No. of Links**
F	Standardization of Rakes (April, 2022 to 31st March,2023)	8	7	4
	TOTAL	**8**	**7**	**4**

INDUCTION OF AC-3TIER ECONOMY COACH (LWACCNE)				
S. No.	**Description**	**No. of Trains**	**No. of Rakes**	**Total No. LWACCNE Coaches inducted**
G	Induction of AC- 3-Tier Economy Coach (LWACCNE) (April,2022 to 31st March,2023)	5	8	12
	TOTAL	**5**	**8**	**12**

INDUCTION OF LSLRD COACHES					
S. No.	**Description**	**No. of Trains**	**No. of Rakes**	**Total No. LSLRD Coaches inducted**	**Remarks**
H	Induction of LSLRD (April,2022 to 31st March,2023)	11	20	20	
	TOTAL	**11**	**20**	**20**	

Annexure - A

NORTHERN RAILWAY TRAINS AUGMENTED ON REGULAR BASIS DURING 2022-23

S. No.	R/S/JS/M/ P/ DMU/ EMU/ MEMU	Rake Type	Train no.	From	To	No. of Trains	Type of coach added	Notified in	W.e.f.	No. of Rakes	Total no. of coaches attached	Total Trips
1	SUF	LHB	12487/88	ANVT	JBN	1	LWACCNE-1	Apr-22	04-04-2022	3	3	724
2	SUF	LHB	12429/30	LKO	NDLS	1	LWACCNE-1	May-22	05-05-2022	2	2	662
3	SUF	LHB	12402/01	DDN	KOTA	1	LWACCN-1	Nov-22	11-11-2022	2	2	282
4	SHT.	LHB	12046/45	CDG	NDLS	1	LWFCZAC-1	Dec-22	23-12-2022	1	1	170
5	JS	LHB	12408/07	ASR	NJP	1	LWS-1	Dec-22	23-12-2022	1	1	30
6	EXP	LHB	14624/23	FZR	CWA	1	LWACCN-2	Dec-22	22-12-2022	3	6	400
7	AC	LHB	22401/02	DEE	UHP	1	LWACCN-1	Dec-22	24-12-2022	1	1	84
8	AC	LHB	22412/11	ANVT	NHLN	1	LWACCN-1	Dec-22	25-12-2022	2	2	56
9	EXP	ICF (CBC)	14224/23	BSB	RGD	1	CWGSCN-2	Dec-22	23-12-2022	2	4	220
10	DRNT	SB	12265/66	DEE	JAT	1	SWGSCN-1	Dec-22	23-12-2022	1	1	86
11	EXP	ICF (CBC)	14235/36	BSB	BE	1	CWGSCN-1	Dec-22	23-12-2022	2	2	110
12	JSH	ICF (IRS)	12054/53	ASR	HW	1	WGSCZJ-1	Dec-22	23-12-2022	1	1	170

13	EXP	ICF (IRS)	14308/07	BE	PYGS	1	WGSCN-1	Dec-22	11-01-2023	3	3	160
14	Pass.	ICF (IRS)	04383/84 (54375/76)	PYGS	JNU	1	WGSCN-1	Dec-22	12-01-2023	0	0	158
15	EXP	ICF (IRS)	14231/32	PYGS	BST	1	WGSCN-1	Dec-22	13-01-2023	0	0	128
16	SUF	LHB	12444/43	ANVT	HLZ	1	LWACCNE-1	Dec-22	03-01-2023	2	2	26
17	EXP	LHB	14010/09	ANVT	BMKI	1	LWACCNE-1	Dec-22	31-12-2022	0	0	52
18	EXP	LHB	14612/11	SVDK	GCT	1	LWACCNE-2	Dec-22	05-01-2023	1	2	52
19	SUF	ICF (CBC)	12237/38	BSB	JAT	1	CWGACCN-1	Dec-22	01-01-2023	3	3	180
20	EXP	ICF (IRS)	14512/11	MTC	PYGS	1	WGACCN-1	Dec-22	21-12-2022	2	2	202
	EXP	ICF (IRS)	14512/11	MTC	PYGS	0	WGSCN-2	Dec-22	21-12-2022	2	4	404
21	EXP	ICF (IRS)	14646/45	JAT	JSM	1	WGACCN-1	Dec-22	02-01-2023	4	4	102
22	EXP	ICF (IRS)	14662/61	JAT	BME	1	WGACCN-1	Dec-22	01-01-2023	0	0	78
23	EXP	ICF (IRS)	14650/49	ASR	JYG	1	WGACCN-1	Dec-22	02-01-2023	4	4	76
24	EXP	ICF (IRS)	14674/73	ASR	JYG	1	WGACCN-1	Dec-22	Notified	0	0	36
						24				**40**	**50**	**4648**

SUMMARY		
S. No.	**Coach Type**	**Total No. of coaches attached**
1	**LWFAC**	**0**
2	**LWFCWAC**	**0**
3	**LWACCW**	**0**
4	**LWACCN**	**11**
5	**LWACCNE**	**9**
6	**LWCBAC**	**0**
7	**LWFCZAC**	**1**
8	**LWSCZAC**	**0**
9	**LWSCN**	**0**
10	**LWSCZ**	**0**
11	**LWS**	**1**
12	**LSLRD**	**0**
13	**LWLRRMD**	**0**
14	**LWLRRM**	**0**
15	**WFAC**	**0**
16	**WACCW**	**0**
17	**WACCN**	**0**
18	**WCBAC**	**0**
19	**WLRRM**	**0**
20	**WFCZAC**	**0**
21	**WSCZAC**	**0**
22	**1CCEHS**	**0**
23	**2CCEHS**	**0**
24	**PCHEHS**	**0**
25	**WACCNH**	**0**
26	**WSCZACH**	**0**
27	**WRRMDAC**	**0**
28	**WGFAC**	**0**
29	**WGFCWAC**	**0**
30	**WGACCW**	**0**
31	**WGCWNAC**	**0**
32	**WGACCN**	**10**
33	**WGSCZAC**	**0**
34	**WGSCN**	**7**

35	**WGSCZ**	**0**
36	**GS**	**0**
37	**GSLR**	**0**
38	**GSLRD**	**0**
39	**GSRD**	**0**
40	**WGCB**	**0**
41	**WGSCZACJ**	**0**
42	**WGSCZJ**	**1**
43	**WGSCZRJ**	**0**
44	**SWGFAC**	**0**
45	**SWGACCW**	**0**
46	**SWGACCN**	**0**
47	**SWGSCN**	**1**
48	**SGS**	**0**
49	**SWGCBN**	**0**
50	**SGLR**	**0**
51	**SGLRD**	**0**
52	**CWGFAC**	**0**
53	**CWGFCWAC**	**0**
54	**CWGACCW**	**0**
55	**CWGCWNAC**	**0**
56	**CWGACCN**	**3**
57	**CWGSCN**	**6**
58	**CGS**	**0**
59	**CWGCB**	**0**
60	**CGSLR**	**0**
61	**CGSLRD**	**0**
62	**MC(EMU)**	**0**
63	**MC(MEMU)**	**0**
64	**MC(DEMU)**	**0**
65	**DPC(DEMU)**	**0**
66	**TC(EMU)**	**0**
67	**TC(MEMU)**	**0**
68	**TC(DEMU)**	**0**
	TOTAL	**50**

Annexure - B

AUGMENTATION OF NR TRAINS FOR CLEARANCE OF EXTRA RUSH DURING 2022-23

S. No.	Occasion	Regular Train No.	Freq.	Augmented by	Running Load	Augmented load	Ex	From	To	Ex.	Freq.	From	To	No. of Rakes	Total No. of coaches attached	Total Trips
1	S	12231/32	Daily	WGFAC-1	22	23	LKO	01-04-2022	31-03-2023	CDG	Daily	02-04-2022	01-04-2023	4	4	730
2	S	14218/17	Daily	WGFAC-1	22	23	CDG	01-04-2022	01-01-2023	PYGS	Daily	02-04-2022	02-01-2023	0	0	488
	W	14218/17	Daily	WGFAC-1	22	23	CDG	01-03-2023	31-03-2023	PYGS	Daily	02-03-2023	01-04-2023	0	0	62
	S	12231/32	Daily	WGSCN-1	23	24	LKO	01-04-2022	25-06-2022	CDG	Daily	02-04-2022	28-06-2022	4	4	172
	S	14217/18	Daily	WGSCN-1	23	24	CDG	01-04-2022	26-06-2022	PYGS	Daily	02-04-2022	27-06-2022	0	0	174
	S	12231/32	Daily	WGSCN-1	23	24	LKO	26-06-2022	30-11-2022	CDG	Daily	29-06-2022	03-12-2022	0	0	316
	W	12231/32	Daily	WGSCN-1	23	24	LKO	02-12-2022	31-03-2023	CDG	Daily	03-12-2022	01-04-2023	0	0	240
	S	14217/18	Daily	WGSCN-1	23	24	CDG	27-06-2022	01-12-2022	PYGS	Daily	28-06-2022	02-12-2022	0	0	314
	W	14217/18	Daily	WGSCN-1	23	24	CDG	01-03-2023	31-03-2023	PYGS	Daily	02-03-2023	01-04-2023	0	0	62
3	S	14512/11	Daily	WGSCN-3	20	23	MTC	01-04-2022	20-06-2022	PYGS	Daily	02-04-2022	21-06-2022	2	6	486
	S	14512/11	Daily	GS-1	23	24	MTC	01-04-2022	20-06-2022	PYGS	Daily	02-04-2022	21-06-2022	2	2	162
	S	14512/11	Daily	WGSCN-3	20	23	MTC	21-06-2022	20-12-2022	PYGS	Daily	22-06-2022	21-12-2022	0	0	1098
	S	14512/11	Daily	GS-1	23	24	MTC	21-06-2022	20-12-2022	PYGS	Daily	22-06-2022	21-12-2022	0	0	366
	D	14512/11	Daily	WGSCN-1	23	24	MTC	15-01-2023	15-01-2023	PYGS	Daily	16-01-2023	16-01-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	04-02-2023	04-02-2023	PYGS	Daily	05-02-2023	05-02-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	05-02-2023	05-02-2023	PYGS	Daily	06-02-2023	06-02-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	11-02-2023	11-02-2023	PYGS	Daily	12-02-2023	12-02-2023	0	0	2
	H	14512/11	Daily	WGSCN-1	23	24	MTC	12-02-2023	12-02-2023	PYGS	Daily	13-02-2023	13-02-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	15-02-2023	15-02-2023	PYGS	Daily	16-02-2023	16-02-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	16-02-2023	16-02-2023	PYGS	Daily	17-02-2023	17-02-2023	0	0	2
	D	14512/11	Daily	WGSCN-1	23	24	MTC	17-02-2023	17-02-2023	PYGS	Daily	18-02-2023	18-02-2023	0	0	2
	H	14512/11	Daily	WGSCN-1	23	24	MTC	18-02-2023	24-02-2023	PYGS	Daily	19-02-2023	25-02-2023	0	0	14
	H	14512/11	Daily	WGSCN-1	23	24	MTC	25-02-2023	03-03-2023	PYGS	Daily	26-02-2023	04-03-2023	0	0	14
	H	14512/11	Daily	WGSCN-1	23	24	MTC	04-03-2023	10-03-2023	PYGS	Daily	05-03-2023	11-03-2023	0	0	14
	H	14512/11	Daily	WGSCN-1	23	24	MTC	11-03-2023	17-03-2023	PYGS	Daily	12-03-2023	18-03-2023	0	0	14
	H	14512/11	Daily	WGSCN-1	23	24	MTC	18-03-2023	24-03-2023	PYGS	Daily	19-03-2023	25-03-2023	0	0	14
4	S	14011/12	Daily	CWGFCWAC-1	16	17	DLI	01-04-2022	10-06-2022	HSX	Daily	02-04-2022	11-06-2022	2	2	142
	S	14011/12	Daily	CWGFCWAC-1	16	17	DLI	11-06-2022	10-09-2022	HSX	Daily	12-06-2022	11-09-2022	0	0	184
	S	14011/12	Daily	CWGFCWAC-1	16	17	DLI	11-09-2022	10-12-2022	HSX	Daily	12-09-2022	11-12-2022	0	0	182
	R	14011/12	Daily	CWGFCWAC-1	16	17	DLI	11-12-2022	31-03-2023	HSX	Daily	12-12-2022	01-04-2023	0	0	222

	S	14011/12	Daily	CWGSCN-1	17	18	DLI	10-04-2022	09-07-2022	HSX	Daily	11-04-2022	10-07-2022	2	2	182
	S	14011/12	Daily	CWGSCN-1	17	18	DLI	10-07-2022	10-11-2022	HSX	Daily	11-07-2022	11-11-2022	0	0	248
	W	14011/12	Daily	CWGSCN-1	17	18	DLI	09-12-2022	09-12-2022	HSX	Daily	10-12-2022	10-12-2022	0	0	2
5	S	14021/22	2,4,6	WGSCN-1	17	18	DEE	09-04-2022	09-04-2022	JP	3,5,7	10-04-2022	10-04-2022	1	1	2
	S	14021/22	2,4,6	WGSCN-1	17	18	DEE	23-04-2022	23-04-2022	JP	3,5,7	24-04-2022	24-04-2022	0	0	2
	S	14021/22	2,4,6	WGSCN-1	17	18	DEE	30-04-2022	30-04-2022	JP	3,5,7	01-05-2022	01-05-2022	0	0	2
	S	14021/22	2,4,6	WGSCN-1	17	18	DEE	07-05-2022	07-05-2022	JP	3,5,7	08-05-2022	08-05-2022	0	0	2
6	S	14035/36	1,3,5	WGSCN-1	20	21	DEE	13-04-2022	13-04-2022	PTK	2,4,6	14-04-2022	14-04-2022	1	1	2
	S	14035/36	1,3,5	WGACCW-1	21	22	DEE	13-04-2022	13-04-2022	PTK	2,4,6	14-04-2022	14-04-2022	1	1	2
	S	14035/36	1,3,5	WGSCN-1	20	21	DEE	10-08-2022	12-08-2022	PTK	2,4,6	11-08-2022	13-08-2022	0	0	4
	S	14035/36	1,3,5	WGSCN-1	20	21	DEE	30-09-2022	09-11-2022	PTK	2,4,6	01-10-2022	10-11-2022	0	0	36
	D	14035/36	1,3,5	WGSCN-1	20	21	DEE	10-02-2023	10-02-2023	PTK	2,4,6	11-02-2023	11-02-2023	0	0	2
	D	14035/36	1,3,5	WGSCN-1	20	21	DEE	17-03-2023	17-03-2023	PTK	2,4,6	18-03-2023	18-03-2023	0	0	2
7	S	12237/38	Daily	CWGSCN-1	22	23	BSB	01-04-2022	25-06-2022	JAT	Daily	02-04-2022	26-06-2022	3	3	172
	S	12237/38	Daily	CWGSCN-1	22	23	BSB	26-06-2022	31-12-2022	JAT	Daily	27-06-2022	01-01-2023	0	0	378
	W	12237/38	Daily	CWGSCN-1	22	23	BSB	01-01-2023	31-01-2023	JAT	Daily	02-01-2023	01-02-2023	0	0	62
	W	12237/38	Daily	CWGSCN-1	22	23	BSB	01-02-2023	31-03-2023	JAT	Daily	02-02-2023	01-04-2023	0	0	118
	S	12237/38	Daily	CWGACCN-1	23	24	BSB	01-04-2022	25-06-2022	JAT	Daily	02-04-2022	26-06-2022	3	3	172
	S	12237/38	Daily	CWGACCN-1	23	24	BSB	26-06-2022	31-12-2022	JAT	Daily	27-06-2022	01-01-2023	0	0	378
8	S	14624/23	Daily	WGSCN-3	18	21	FZR	01-04-2022	25-06-2022	CWA	Daily	02-04-2022	26-06-2022	3	9	516
	S	14624/23	Daily	WGSCN-3	18	21	FZR	26-06-2022	10-11-2022	CWA	Daily	27-06-2022	11-11-2022	0	0	828
	P	14624/23	Daily	WGSCN-1	21	22	FZR	22-10-2022	23-10-2022	CWA	Daily	23-10-2022	24-10-2022	2	2	4
	H	14624/23	Daily	LWACCN-1	20	21	FZR	01-03-2023	12-03-2023	CWA	Daily	02-03-2023	13-03-2023	3	3	24
9	S	14646/45	1,2,4,6	WGSCN-1	22	23	JAT	02-04-2022	25-06-2022	JSM	3,4,6,1	04-04-2022	27-06-2022	4	4	98
	S	14646/45	1,2,4,6	WGSCN-1	22	23	JAT	27-06-2022	24-09-2022	JSM	3,4,6,1	29-06-2022	26-09-2022	0	0	104
	S	14646/45	1,2,4,6	WGSCN-1	22	23	JAT	26-09-2022	10-11-2022	JSM	3,4,6,1	28-09-2022	12-11-2022	0	0	54
	W	14646/45	1,2,4,6	WGSCN-1	22	23	JAT	12-11-2022	29-11-2022	JSM	3,4,6,1	14-11-2022	01-12-2022	0	0	22
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	09-04-2022	14-04-2022	JSM	3,4,6,1	11-04-2022	16-04-2022	4	4	8
	W	14646/45	1,2,4,6	WGACCN-1	22	23	JAT	01-12-2022	31-12-2022	JSM	3,4,6,1	03-12-2022	02-01-2023	4	4	36
10	S	14662/61	3,5,7	WGSCN-1	22	23	JAT	01-04-2022	26-06-2022	BME	5,7,2	03-04-2022	28-06-2022	0	0	76
	S	14662/61	3,5,7	WGSCN-1	22	23	JAT	29-06-2022	25-09-2022	BME	5,7,2	01-07-2022	27-09-2022	0	0	78
	S	14662/61	3,5,7	WGSCN-1	22	23	JAT	28-09-2022	11-11-2022	BME	5,7,2	30-09-2022	13-11-2022	0	0	40
	W	14662/61	3,5,7	WGSCN-1	22	23	JAT	13-11-2022	30-11-2022	BME	1,3,6	16-11-2022	03-12-2022	0	0	16
	W	14662/61	3,5,7	WGACCN-1	22	23	JAT	02-12-2022	30-12-2022	BME	1,3,6	05-12-2022	02-01-2023	0	0	26
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	16-04-2022	16-04-2022	JSM	3,4,6,1	18-04-2022	18-04-2022	0	0	2
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	17-04-2022	17-04-2022	BME	5,7,2	19-04-2022	19-04-2022	0	0	2

	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	23-04-2022	23-04-2022	JSM	3,4,6,1	25-04-2022	25-04-2022	0	0	2
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	24-04-2022	24-04-2022	BME	5,7,2	26-04-2022	26-04-2022	0	0	2
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	29-04-2022	29-04-2022	BME	5,7,2	01-05-2022	01-05-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	30-04-2022	30-04-2022	JSM	3,4,6,1	02-05-2022	02-05-2022	0	0	2
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	01-05-2022	01-05-2022	BME	5,7,2	03-05-2022	03-05-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	07-05-2022	09-05-2022	JSM	3,4,6,1	09-05-2022	11-05-2022	0	0	4
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	08-05-2022	08-05-2022	BME	5,7,2	10-05-2022	10-05-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	14-05-2022	16-05-2022	JSM	3,4,6,1	16-05-2022	18-05-2022	0	0	4
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	15-05-2022	15-05-2022	BME	5,7,2	17-05-2022	17-05-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	21-05-2022	26-05-2022	JSM	3,4,6,1	23-05-2022	28-05-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	22-05-2022	25-05-2022	BME	5,7,2	24-05-2022	27-05-2022	0	0	4
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	28-05-2022	31-05-2022	JSM	3,4,6,1	30-05-2022	02-06-2022	0	0	6
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	29-05-2022	29-05-2022	BME	5,7,2	31-05-2022	31-05-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	02-06-2022	02-06-2022	JSM	3,4,6,1	04-06-2022	04-06-2022	0	0	2
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	01-06-2022	03-06-2022	BME	5,7,2	03-06-2022	05-06-2022	0	0	4
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	04-06-2022	09-06-2022	JSM	3,4,6,1	06-06-2022	11-06-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	05-06-2022	10-06-2022	BME	5,7,2	07-06-2022	12-06-2022	0	0	6
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	11-06-2022	16-06-2022	JSM	3,4,6,1	13-06-2022	18-06-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	12-06-2022	15-06-2022	BME	5,7,2	14-06-2022	17-06-2022	0	0	4
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	18-06-2022	23-06-2022	JSM	3,4,6,1	20-06-2022	25-06-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	19-06-2022	24-06-2022	BME	5,7,2	21-06-2022	26-06-2022	0	0	6
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	25-06-2022	30-06-2022	JSM	3,4,6,1	27-06-2022	02-07-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	26-06-2022	29-06-2022	BME	5,7,2	28-06-2022	01-07-2022	0	0	4
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	02-07-2022	07-07-2022	JSM	3,4,6,1	04-07-2022	09-07-2022	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	06-07-2022	08-07-2022	BME	5,7,2	08-07-2022	10-07-2022	0	0	4
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	09-07-2022	11-07-2022	JSM	3,4,6,1	11-07-2022	13-07-2022	0	0	4
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	10-07-2022	10-07-2022	BME	5,7,2	12-07-2022	12-07-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	16-07-2022	15-08-2022	JSM	3,4,6,1	18-07-2022	17-08-2022	0	0	36
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	16-08-2022	16-08-2022	JSM	3,4,6,1	18-08-2022	18-08-2022	0	0	2
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	18-08-2022	15-09-2022	JSM	3,4,6,1	20-08-2022	17-09-2022	0	0	34
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	17-09-2022	22-09-2022	JSM	3,4,6,1	19-09-2022	24-09-2022	0	0	8
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	26-09-2022	15-10-2022	JSM	3,4,6,1	28-09-2022	17-10-2022	0	0	24
	S	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	17-10-2022	10-11-2022	JSM	3,4,6,1	19-10-2022	12-11-2022	0	0	30
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	12-11-2022	17-11-2022	JSM	3,4,6,1	14-11-2022	19-11-2022	0	0	8
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	10-12-2022	10-12-2022	JSM	3,4,6,1	12-12-2022	12-12-2022	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	15-12-2022	15-12-2022	JSM	3,4,6,1	17-12-2022	17-12-2022	0	0	2

	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	22-12-2022	22-12-2022	JSM	3,4,6,1	24-12-2022	24-12-2022	0	0	2
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	26-12-2022	29-12-2022	JSM	3,4,6,1	28-12-2022	31-12-2022	0	0	6
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	31-12-2022	31-12-2022	JSM	3,4,6,1	02-01-2023	02-01-2023	0	0	2
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	02-01-2023	05-01-2023	JSM	3,4,6,1	04-01-2023	07-01-2023	0	0	6
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	07-01-2023	07-01-2023	JSM	3,4,6,1	09-01-2023	09-01-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	12-01-2023	12-01-2023	JSM	3,4,6,1	14-01-2023	14-01-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	14-01-2023	14-01-2023	JSM	3,4,6,1	16-01-2023	16-01-2023	0	0	2
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	16-01-2023	17-01-2023	JSM	3,4,6,1	18-01-2023	19-01-2023	0	0	4
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	21-01-2023	21-01-2023	JSM	3,4,6,1	23-01-2023	23-01-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	26-01-2023	26-01-2023	JSM	3,4,6,1	28-01-2023	28-01-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	28-01-2023	28-01-2023	JSM	3,4,6,1	30-01-2023	30-01-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	31-01-2023	31-01-2023	JSM	3,4,6,1	02-02-2023	02-02-2023	0	0	2
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	04-02-2023	04-02-2023	JSM	3,4,6,1	06-02-2023	06-02-2023	0	0	2
	W	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	06-02-2023	09-02-2023	JSM	3,4,6,1	08-02-2023	11-02-2023	0	0	4
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	11-02-2023	11-02-2023	JSM	3,4,6,1	13-02-2023	13-02-2023	0	0	2
	H	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	18-02-2023	20-02-2023	JSM	3,4,6,1	20-02-2023	22-02-2023	0	0	4
	D	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	23-02-2023	23-02-2023	JSM	3,4,6,1	25-02-2023	25-02-2023	0	0	2
	H	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	25-02-2023	27-02-2023	JSM	3,4,6,1	27-02-2023	01-03-2023	0	0	4
	H	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	04-03-2023	09-03-2023	JSM	3,4,6,1	06-03-2023	11-03-2023	0	0	4
	H	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	11-03-2023	16-03-2023	JSM	3,4,6,1	13-03-2023	18-03-2023	0	0	8
	H	14646/45	1,2,4,6	WGSCN-1	23	24	JAT	18-03-2023	23-03-2023	JSM	3,4,6,1	20-03-2023	25-03-2023	0	0	8
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	17-07-2022	14-08-2022	BME	5,7,2	19-07-2022	16-08-2022	0	0	26
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	17-08-2022	16-09-2022	BME	5,7,2	19-08-2022	18-09-2022	0	0	28
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	18-09-2022	23-09-2022	BME	5,7,2	20-09-2022	25-09-2022	0	0	6
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	25-09-2022	16-10-2022	BME	5,7,2	27-09-2022	18-10-2022	0	0	20
	S	14662/61	3,5,7	WGSCN-1	23	24	JAT	19-10-2022	11-11-2022	BME	5,7,2	21-10-2022	13-11-2022	0	0	22
	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	13-11-2022	13-11-2022	BME	1.3.6	16-11-2022	16-11-2022	0	0	2
	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	09-12-2022	09-12-2022	BME	1.3.6	12-12-2022	12-12-2022	0	0	2
	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	11-12-2022	11-12-2022	BME	1.3.6	14-12-2022	14-12-2022	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	23-12-2022	23-12-2022	BME	1.3.6	26-12-2022	26-12-2022	0	0	2
	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	25-12-2022	30-12-2022	BME	1.3.6	28-12-2022	02-01-2023	0	0	6
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	06-01-2023	06-01-2023	BME	1.3.6	09-01-2023	09-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	13-01-2023	13-01-2023	BME	1.3.6	16-01-2023	16-01-2023	0	0	2
	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	15-01-2023	15-01-2023	BME	1.3.6	18-01-2023	18-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	18-01-2023	18-01-2023	BME	1.3.6	21-01-2023	21-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	20-01-2023	20-01-2023	BME	1.3.6	23-01-2023	23-01-2023	0	0	2

	W	14662/61	3,5,7	WGSCN-1	23	24	JAT	22-01-2023	22-01-2023	BME	1.3.6	25-01-2023	25-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	25-01-2023	25-01-2023	BME	1.3.6	28-01-2023	28-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	27-01-2023	27-01-2023	BME	1.3.6	30-01-2023	30-01-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	29-01-2023	29-01-2023	BME	1.3.6	01-02-2023	01-02-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	05-02-2023	05-02-2023	BME	1.3.6	08-02-2023	08-02-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	10-02-2023	10-02-2023	BME	1.3.6	13-02-2023	13-02-2023	0	0	2
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	12-02-2023	12-02-2023	BME	1.3.6	15-02-2023	15-02-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	17-02-2023	17-02-2023	BME	1.3.6	20-02-2023	20-02-2023	0	0	2
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	19-02-2023	19-02-2023	BME	1.3.6	22-02-2023	22-02-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	22-02-2023	22-02-2023	BME	1.3.6	25-02-2023	25-02-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	24-02-2023	24-02-2023	BME	1.3.6	27-02-2023	27-02-2023	0	0	2
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	26-02-2023	26-02-2023	BME	1.3.6	01-03-2023	01-03-2023	0	0	2
	D	14662/61	3,5,7	WGSCN-1	23	24	JAT	03-03-2023	03-03-2023	BME	1.3.6	06-03-2023	06-03-2023	0	0	2
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	05-03-2023	10-03-2023	BME	1.3.6	08-03-2023	13-03-2023	0	0	6
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	12-03-2023	17-03-2023	BME	1.3.6	15-03-2023	20-03-2023	0	0	4
	H	14662/61	3,5,7	WGSCN-1	23	24	JAT	19-03-2023	24-03-2023	BME	1.3.6	22-03-2023	27-03-2023	0	0	6
11	S	14650/49	1,3,6	WGSCN-2	22	24	ASR	02-04-2022	25-06-2022	JYG	2,5,7	03-04-2022	28-06-2022	4	8	148
12	S	14674/73	2,4,5,7	WGSCN-2	22	24	ASR	01-04-2022	26-06-2022	JYG	1,3,4,6	04-04-2022	27-06-2022	0	0	200
	S	14650/49	1,3,6	WGSCN-2	22	24	ASR	27-06-2022	24-09-2022	JYG	2,5,7	01-07-2022	27-09-2022	0	0	156
	S	14674/73	2,4,5,7	WGSCN-2	22	24	ASR	28-06-2022	25-09-2022	JYG	1,3,4,6	29-06-2022	26-09-2022	0	0	208
	S	14650/49	1,3,6	WGSCN-2	22	24	ASR	26-09-2022	09-11-2022	JYG	2,5,7	30-09-2022	11-11-2022	0	0	80
	S	14674/73	2,4,5,7	WGSCN-2	22	24	ASR	27-09-2022	10-11-2022	JYG	1,3,4,6	28-09-2022	12-11-2022	0	0	104
	W	14650/49	1,3,6	WGSCN-2	22	24	ASR	12-11-2022	30-11-2022	JYG	2,5,7	13-11-2022	02-12-2022	0	0	36
	W	14674/73	2,4,5,7	WGSCN-2	22	24	ASR	11-11-2022	29-11-2022	JYG	1,3,4,6	14-11-2022	01-12-2022	0	0	44
	W	14650/49	1,3,6	WGSCN-1	22	23	ASR	03-12-2022	31-12-2022	JYG	2,5,7	06-12-2022	03-01-2023	0	0	26
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	10-12-2022	10-12-2022	JYG	2,5,7	13-12-2022	13-12-2022	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	12-12-2022	14-12-2022	JYG	2,5,7	16-12-2022	18-12-2022	0	0	4
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	19-12-2022	21-12-2022	JYG	2,5,7	23-12-2022	25-12-2022	0	0	4
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	24-12-2022	24-12-2022	JYG	2,5,7	27-12-2022	27-12-2022	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	26-12-2022	28-12-2022	JYG	2,5,7	30-12-2022	01-01-2023	0	0	4
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	31-12-2022	31-12-2022	JYG	2,5,7	03-01-2023	03-01-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	02-01-2023	04-01-2023	JYG	2,5,7	06-01-2023	08-01-2023	0	0	4
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	07-01-2023	07-01-2023	JYG	2,5,7	10-01-2023	10-01-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	09-01-2023	11-01-2023	JYG	2,5,7	13-01-2023	15-01-2023	0	0	4
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	14-01-2023	14-01-2023	JYG	2,5,7	17-01-2023	17-01-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	16-01-2023	18-01-2023	JYG	2,5,7	20-01-2023	22-01-2023	0	0	4

	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	21-01-2023	21-01-2023	JYG	2,5,7	24-01-2023	24-01-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	23-01-2023	25-01-2023	JYG	2,5,7	27-01-2023	29-01-2023	0	0	4
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	28-01-2023	28-01-2023	JYG	2,5,7	31-01-2023	31-01-2023	0	0	2
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	30-01-2023	30-01-2023	JYG	2,5,7	03-02-2023	03-02-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	01-02-2023	01-02-2023	JYG	2,5,7	05-02-2023	05-02-2023	0	0	2
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	04-02-2023	04-02-2023	JYG	2,5,7	07-02-2023	07-02-2023	0	0	2
	W	14650/49	1,3,6	WGSCN-1	23	24	ASR	06-02-2023	08-02-2023	JYG	2,5,7	10-02-2023	12-02-2023	0	0	4
	D	14650/49	1,3,6	WGSCN-1	23	24	ASR	11-02-2023	11-02-2023	JYG	2,5,7	14-02-2023	14-02-2023	0	0	2
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	13-02-2023	15-02-2023	JYG	2,5,7	17-02-2023	19-02-2023	0	0	4
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	20-02-2023	22-02-2023	JYG	2,5,7	24-02-2023	26-02-2023	0	0	4
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	25-02-2023	01-03-2023	JYG	2,5,7	28-02-2023	05-03-2023	0	0	6
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	04-03-2023	08-03-2023	JYG	2,5,7	07-03-2023	12-03-2023	0	0	6
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	11-03-2023	15-03-2023	JYG	2,5,7	14-03-2023	19-03-2023	0	0	6
	H	14650/49	1,3,6	WGSCN-1	23	24	ASR	18-03-2023	22-03-2023	JYG	2,5,7	21-03-2023	26-03-2023	0	0	6
	H	14674/73	2,4,5,7	WGSCN-1	23	24	ASR	02-03-2023	03-03-2023	JYG	1,3,4,6	04-03-2023	04-03-2023	0	0	4
	H	14674/73	2,4,5,7	WGSCN-1	23	24	ASR	05-03-2023	10-03-2023	JYG	1,3,4,6	06-03-2023	11-03-2023	0	0	8
	H	14674/73	2,4,5,7	WGSCN-1	23	24	ASR	12-03-2023	17-03-2023	JYG	1,3,4,6	13-03-2023	18-03-2023	0	0	8
	H	14674/73	2,4,5,7	WGSCN-1	23	24	ASR	19-03-2023	24-03-2023	JYG	1,3,4,6	20-03-2023	25-03-2023	0	0	8
13	S	12402/01	Daily	LWACCN-1	15	16	DDN	01-04-2022	30-06-2022	KOTA	Daily	02-04-2022	01-07-2022	2	2	182
	S	12402/01	Daily	LWACCN-1	15	16	DDN	01-07-2022	10-11-2022	KOTA	Daily	02-07-2022	11-11-2022	0	0	266
14	S	12004/03	Daily	LWSCZAC-1	20	21	NDLS	21-08-2022	21-08-2022	LJN	Daily	21-08-2022	21-08-2022	1	1	2
	P	12004/03	Daily	LWSCZAC-1	20	21	NDLS	21-10-2022	22-10-2022	LJN	Daily	21-10-2022	22-10-2022	0	0	4
15	W	12013/14	Daily	LWSCZAC-1	18	19	NDLS	09-12-2022	09-12-2022	ASR	Daily	09-12-2022	09-12-2022	1	1	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	10-12-2022	10-12-2022	ASR	Daily	11-12-2022	11-12-2022	0	0	2
	W	12013/14	Daily	LWSCZAC-1	18	19	NDLS	11-12-2022	11-12-2022	ASR	Daily	12-12-2022	12-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	15-12-2022	16-12-2022	ASR	Daily	16-12-2022	17-12-2022	0	0	4
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	22-12-2022	22-12-2022	ASR	Daily	23-12-2022	23-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	23-12-2022	23-12-2022	ASR	Daily	24-12-2022	24-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	24-12-2022	24-12-2022	ASR	Daily	25-12-2022	25-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	28-12-2022	28-12-2022	ASR	Daily	29-12-2022	29-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	29-12-2022	29-12-2022	ASR	Daily	30-12-2022	30-12-2022	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	31-12-2022	01-01-2023	ASR	Daily	01-01-2023	02-01-2023	0	0	4
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	08-01-2023	08-01-2023	ASR	Daily	09-01-2023	09-01-2023	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	12-01-2023	12-01-2023	ASR	Daily	13-01-2023	13-01-2023	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	15-01-2023	15-01-2023	ASR	Daily	16-01-2023	16-01-2023	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	25-01-2023	25-01-2023	ASR	Daily	26-01-2023	26-01-2023	0	0	2

	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	12-03-2023	12-03-2023	ASR	Daily	13-03-2023	13-03-2023	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	16-03-2023	16-03-2023	ASR	Daily	17-03-2023	17-03-2023	0	0	2
	D	12013/14	Daily	LWSCZAC-1	18	19	NDLS	17-03-2023	17-03-2023	ASR	Daily	18-03-2023	18-03-2023	0	0	2
	H	12013/14	Daily	LWSCZAC-1	18	19	NDLS	18-03-2023	19-03-2023	ASR	Daily	19-03-2023	20-03-2023	0	0	4
16	S	12015/16	Daily	LWSCZAC-1	18	19	NDLS	10-04-2022	09-07-2022	All	Daily	10-04-2022	09-07-2022	1	1	182
	P	12015/16	Daily	LWSCZAC-1	18	19	NDLS	30-10-2022	30-10-2022	All	Daily	30-10-2022	30-10-2022	0	0	2
17	H	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	03-04-2022	03-04-2022	ASR	Except-4	03-04-2022	03-04-2022	1	1	2
	S	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	10-04-2022	09-07-2022	ASR	Except-4	10-04-2022	09-07-2022	0	0	156
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	15-04-2022	15-04-2022	ASR	Except-4	15-04-2022	15-04-2022	1	1	2
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	17-04-2022	17-04-2022	ASR	Except-4	17-04-2022	17-04-2022	0	0	2
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	14-05-2022	15-05-2022	ASR	Except-4	14-05-2022	15-05-2022	0	0	4
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	28-05-2022	29-05-2022	ASR	Except-4	28-05-2022	29-05-2022	0	0	4
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	04-06-2022	04-06-2022	ASR	Except-4	04-06-2022	04-06-2022	0	0	2
	S	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	15-06-2022	09-07-2022	ASR	Except-4	15-06-2022	09-07-2022	0	0	42
	S	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	03-09-2022	03-09-2022	ASR	Except-4	03-09-2022	03-09-2022	0	0	2
	S	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	01-10-2022	02-10-2022	ASR	Except-4	01-10-2022	02-10-2022	0	0	4
	S	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	08-10-2022	09-10-2022	ASR	Except-4	08-10-2022	09-10-2022	0	0	4
	P	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	16-10-2022	16-10-2022	ASR	Except-4	16-10-2022	16-10-2022	0	0	2
	P	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	22-10-2022	28-10-2022	ASR	Except-4	22-10-2022	28-10-2022	0	0	12
	P	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	29-10-2022	30-10-2022	ASR	Except-4	29-10-2022	30-10-2022	0	0	4
	P	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	05-11-2022	06-11-2022	ASR	Except-4	05-11-2022	06-11-2022	0	0	4
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	12-11-2022	12-11-2022	ASR	Except-4	12-11-2022	12-11-2022	0	0	2
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	19-11-2022	20-11-2022	ASR	Except-4	19-11-2022	20-11-2022	0	0	4
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	26-11-2022	27-11-2022	ASR	Except-4	26-11-2022	27-11-2022	0	0	4
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	03-12-2022	04-12-2022	ASR	Except-4	03-12-2022	04-12-2022	0	0	4
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	09-12-2022	09-12-2022	ASR	Except-4	09-12-2022	09-12-2022	0	0	2
	W	12029/30	Except-4	LWSCZAC-1	20	21	NDLS	09-12-2022	09-12-2022	ASR	Except-4	09-12-2022	09-12-2022	0	0	2
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	10-12-2022	10-12-2022	ASR	Except-4	10-12-2022	10-12-2022	0	0	2
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	11-12-2022	12-12-2022	ASR	Except-4	11-12-2022	12-12-2022	0	0	4
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	17-12-2022	17-12-2022	ASR	Except-4	17-12-2022	17-12-2022	0	0	2
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	18-12-2022	20-12-2022	ASR	Except-4	18-12-2022	20-12-2022	0	0	6
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	23-12-2022	23-12-2022	ASR	Except-4	23-12-2022	23-12-2022	0	0	2
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	06-01-2023	06-01-2023	ASR	Except-4	06-01-2023	06-01-2023	0	0	2
	W	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	08-01-2023	08-01-2023	ASR	Except-4	08-01-2023	08-01-2023	0	0	2
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	22-01-2023	22-01-2023	ASR	Except-4	22-01-2023	22-01-2023	0	0	2
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	27-01-2023	28-01-2023	ASR	Except-4	27-01-2023	28-01-2023	0	0	4

	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	29-01-2023	29-01-2023	ASR	Except-4	29-01-2023	29-01-2023	0	0	2
	D	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	10-03-2023	10-03-2023	ASR	Except-4	10-03-2023	10-03-2023	0	0	2
	H	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	11-03-2023	12-03-2023	ASR	Except-4	11-03-2023	12-03-2023	0	0	4
	H	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	17-03-2023	17-03-2023	ASR	Except-4	17-03-2023	17-03-2023	0	0	2
	H	12029/30	Except-4	LWSCZAC-1	19	20	NDLS	18-03-2023	24-03-2023	ASR	Except-4	18-03-2023	24-03-2023	0	0	12
18	S	12031/32	4	LWSCZAC-1	18	19	NDLS	14-04-2022	07-07-2022	ASR	4	14-04-2022	07-07-2022	1	1	26
	D	12031/32	4	LWSCZAC-1	18	19	NDLS	05-01-2023	05-01-2023	ASR	4	05-01-2023	05-01-2023	0	0	2
	D	12031/32	4	LWSCZAC-1	18	19	NDLS	09-03-2023	09-03-2023	ASR	4	09-03-2023	09-03-2023	0	0	2
	D	12031/32	4	LWSCZAC-1	18	19	NDLS	16-03-2023	16-03-2023	ASR	4	16-03-2023	16-03-2023	0	0	2
19	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	14-04-2022	15-04-2022	KGM	Daily	14-04-2022	15-04-2022	1	1	4
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	16-04-2022	16-04-2022	KGM	Daily	16-04-2022	16-04-2022	0	0	2
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	30-04-2022	30-04-2022	KGM	Daily	30-04-2022	30-04-2022	0	0	2
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	07-05-2022	07-05-2022	KGM	Daily	07-05-2022	07-05-2022	0	0	2
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	14-05-2022	15-05-2022	KGM	Daily	14-05-2022	15-05-2022	0	0	4
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	21-05-2022	23-05-2022	KGM	Daily	21-05-2022	23-05-2022	0	0	6
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	28-05-2022	31-05-2022	KGM	Daily	28-05-2022	31-05-2022	0	0	8
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	01-06-2022	03-06-2022	KGM	Daily	01-06-2022	03-06-2022	0	0	6
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	04-06-2022	10-06-2022	KGM	Daily	04-06-2022	10-06-2022	0	0	14
	S	12040/39	Daily	LWSCZAC-1	14	15	NDLS	11-06-2022	09-07-2022	KGM	Daily	11-06-2022	09-07-2022	0	0	58
	W	12040/39	Daily	LWSCZAC-1	14	15	NDLS	26-01-2023	26-01-2023	KGM	Daily	26-01-2023	26-01-2023	0	0	2
20	H	12046/45	Except-3	LWSCZAC-1	12	13	CDG	17-04-2022	17-04-2022	NDLS	Except-3	17-04-2022	17-04-2022	1	1	2
	D	12046/45	Except-3	LWSCZAC-1	13	14	CDG	01-01-2023	01-01-2023	NDLS	Except-3	01-01-2023	01-01-2023	1	1	2
21	H	12054/53	Except-4	WGSCZJ-1	8	9	ASR	01-04-2022	01-04-2022	HW	Except-4	01-04-2022	01-04-2022	0	0	2
	S	12054/53	Except-4	WGSCZACJ-1	8	9	ASR	10-04-2022	09-07-2022	HW	Except-4	10-04-2022	09-07-2022	1	1	156
	S	12054/53	Except-4	WGSCZJ-1	9	10	ASR	10-04-2022	09-07-2022	HW	Except-4	10-04-2022	09-07-2022	1	1	156
	S	12054/53	Except-4	WGSCZJ-1	10	11	ASR	16-04-2022	17-04-2022	HW	Except-4	16-04-2022	17-04-2022	0	0	4
	S	12054/53	Except-4	WGSCZJ-1	10	11	ASR	24-04-2022	24-04-2022	HW	Except-4	24-04-2022	24-04-2022	0	0	2
	S	12054/53	Except-4	WGSCZJ-1	10	11	ASR	22-05-2022	22-05-2022	HW	Except-4	22-05-2022	22-05-2022	0	0	2
	S	12054/53	Except-4	WGSCZJ-1	10	11	ASR	29-05-2022	31-05-2022	HW	Except-4	29-05-2022	31-05-2022	0	0	6
	S	12054/53	Except-4	WGSCZJ-2	10	12	ASR	11-06-2022	09-07-2022	HW	Except-4	11-06-2022	09-07-2022	1	2	100
	S	12054/53	Except-4	WGSCZJ-3	8	11	ASR	10-07-2022	09-08-2022	HW	Except-4	10-07-2022	09-08-2022	0	0	162
	S	12054/53	Except-4	WGSCZJ-3	8	11	ASR	10-08-2022	09-09-2022	HW	Except-4	10-08-2022	09-09-2022	0	0	156
	S	12054/53	Except-4	WGSCZJ-3	8	11	ASR	10-09-2022	09-10-2022	HW	Except-4	10-09-2022	09-10-2022	0	0	156
	P	12054/53	Except-4	WGSCZJ-3	8	11	ASR	10-10-2022	09-11-2022	HW	Except-4	10-10-2022	09-11-2022	0	0	162
	S	12054/53	Except-4	WGSCZJ-1	11	12	ASR	25-09-2022	25-09-2022	HW	Except-4	25-09-2022	25-09-2022	1	1	2
	P	12054/53	Except-4	WGSCZJ-1	11	12	ASR	06-11-2022	08-11-2022	HW	Except-4	06-11-2022	08-11-2022	0	0	6

	W	12054/53	Except-4	WGSCZJ-1	11	12	ASR	13-11-2022	13-11-2022	HW	Except-4	13-11-2022	13-11-2022	0	0	2
	H	12054/53	Except-4	WGSCZJ-2	9	11	ASR	20-02-2023	20-02-2023	HW	Except-4	20-02-2023	20-02-2023	0	0	4
	H	12054/53	Except-4	WGSCZJ-1	9	10	ASR	26-02-2023	11-03-2023	HW	Except-4	26-02-2023	11-03-2023	0	0	24
	D	12054/53	Except-4	WGSCZJ-1	9	10	ASR	08-03-2023	08-03-2023	HW	Except-4	08-03-2023	08-03-2023	0	0	2
22	S	14310/09	2,3	LWSCN-1	15	16	DDN	12-04-2022	06-07-2022	UJN	3,4	13-04-2022	07-07-2022	2	2	52
	S	14310/09	2,3	LWSCN-1	15	16	DDN	12-07-2022	10-08-2022	UJN	3,4	13-07-2022	11-08-2022	0	0	20
	S	14310/09	2,3	LWSCN-1	15	16	DDN	16-08-2022	14-09-2022	UJN	3,4	17-08-2022	15-09-2022	0	0	20
	S	14310/09	2,3	LWSCN-1	15	16	DDN	20-09-2022	19-10-2022	UJN	3,4	21-09-2022	20-10-2022	0	0	20
	P	14310/09	2,3	LWSCN-1	15	16	DDN	25-10-2022	09-11-2022	UJN	3,4	26-10-2022	10-11-2022	0	0	12
	W	14310/09	2,3	LWSCN-1	15	16	DDN	15-11-2022	30-11-2022	UJN	3,4	16-11-2012	01-12-2022	0	0	12
	W	14310/09	2,3	LWACCNE-1	15	16	DDN	06-12-2022	28-12-2022	UJN	3,4	07-12-2022	29-12-2022	2	2	16
	D	14310/09	2,3	LWSCN-1	15	16	DDN	15-02-2023	15-02-2023	UJN	3,4	16-02-2023	16-02-2023	0	0	2
	H	14310/09	2,3	LWSCN-1	15	16	DDN	21-02-2023	21-02-2023	UJN	3,4	22-02-2023	22-02-2023	0	0	2
	H	14310/09	2,3	LWSCN-1	15	16	DDN	28-02-2023	28-02-2023	UJN	3,4	01-03-2023	01-03-2023	0	0	2
	H	14310/09	2,3	LWSCN-1	15	16	DDN	07-03-2023	08-03-2023	UJN	3,4	08-03-2023	09-03-2023	0	0	4
	H	14310/09	2,3	LWSCN-1	15	16	DDN	14-03-2023	15-03-2023	UJN	3,4	15-03-2023	16-03-2023	0	0	4
	H	14310/09	2,3	LWSCN-1	15	16	DDN	21-03-2023	21-03-2023	UJN	3,4	22-03-2023	22-03-2023	0	0	2
23	S	14318/17	5,6	LWSCN-1	15	16	DDN	15-04-2022	08-07-2022	INDB	6,7	16-04-2022	09-07-2022	0	0	50
	S	14318/17	5,6	LWSCN-1	15	16	DDN	09-07-2022	13-08-2022	INDB	6,7	10-07-2022	14-08-2022	0	0	22
	S	14318/17	5,6	LWSCN-1	15	16	DDN	19-08-2022	17-09-2022	INDB	6,7	20-08-2022	18-09-2022	0	0	20
	S	14318/17	5,6	LWSCN-1	15	16	DDN	23-09-2022	22-10-2022	INDB	6,7	24-09-2022	23-10-2022	0	0	20
	P	14318/17	5,6	LWSCN-1	15	16	DDN	28-10-2022	11-11-2022	INDB	6,7	29-10-2022	12-11-2022	0	0	10
	W	14318/17	5,6	LWSCN-1	15	16	DDN	12-11-2022	26-11-2022	INDB	6,7	13-11-2022	27-11-2022	0	0	10
	W	14318/17	5,6	LWACCNE-1	15	16	DDN	02-12-2022	31-12-2022	INDB	6,7	03-12-2022	01-01-2023	0	0	20
	D	14318/17	5,6	LWSCN-1	15	16	DDN	03-02-2023	03-02-2023	INDB	6,7	04-02-2023	04-02-2023	0	0	2
	D	14318/17	5,6	LWSCN-1	15	16	DDN	17-02-2023	17-02-2023	INDB	6,7	18-02-2023	18-02-2023	0	0	2
	H	14318/17	5,6	LWSCN-1	15	16	DDN	18-02-2023	24-02-2023	INDB	6,7	19-02-2023	25-02-2023	0	0	4
	H	14318/17	5,6	LWSCN-1	15	16	DDN	25-02-2023	25-02-2023	INDB	6,7	26-02-2023	26-02-2023	0	0	2
	D	14318/17	5,6	LWSCN-1	15	16	DDN	03-03-2023	03-03-2023	INDB	6,7	04-03-2023	04-03-2023	0	0	2
	H	14318/17	5,6	LWSCN-1	15	16	DDN	04-03-2023	10-03-2023	INDB	6,7	05-03-2023	11-03-2023	0	0	4
	H	14318/17	5,6	LWSCN-1	15	16	DDN	11-03-2023	17-03-2023	INDB	6,7	12-03-2023	18-03-2023	0	0	4
	H	14318/17	5,6	LWSCN-1	15	16	DDN	18-03-2023	24-03-2023	INDB	6,7	19-03-2023	25-03-2023	0	0	4
24	H	12265/66	2,5,7	SWGSCN-1	21	22	DEE	01-04-2022	01-04-2022	JAT	3,6,1	02-04-2022	02-04-2022	1	1	2
	S	12265/66	2,5,7	SWGACCN-1	21	22	DEE	10-04-2022	08-07-2022	JAT	3,6,1	11-04-2022	09-07-2022	1	1	78
	S	12265/66	2,5,7	SWGACCN-1	21	22	DEE	10-07-2022	09-08-2022	JAT	3,6,1	11-07-2022	10-08-2022	0	0	28
	S	12265/66	2,5,7	SWGACCN-1	21	22	DEE	12-08-2022	11-09-2022	JAT	3,6,1	13-08-2022	12-09-2022	0	0	28

	S	12265/66	2,5,7	SWGACCN-1	21	22	DEE	13-09-2022	11-10-2022	JAT	3,6,1	14-09-2022	12-10-2022	0	0	26
	S	12265/66	2,5,7	SWGSCN-1	21	22	DEE	14-10-2022	11-11-2022	JAT	3,6,1	15-10-2022	12-11-2022	1	1	26
	S	12265/66	2,5,7	SWGSCN-1	21	22	DEE	13-11-2022	29-11-2022	JAT	3,6,1	14-11-2022	30-11-2022	0	0	16
25	S	22401/02	1,3,6	LWACCN-1	19	20	DEE	11-04-2022	09-07-2022	UHP	2,4,7	12-04-2022	10-07-2022	1	1	78
	S	22401/02	1,3,6	LWACCN-1	19	20	DEE	11-07-2022	10-08-2022	UHP	2,4,7	12-07-2022	11-08-2022	0	0	28
	S	22401/02	1,3,6	LWACCN-1	19	20	DEE	13-08-2022	12-09-2022	UHP	2,4,7	14-08-2022	13-09-2022	0	0	28
	S	22401/02	1,3,6	LWACCN-1	19	20	DEE	14-09-2022	12-10-2022	UHP	2,4,7	15-09-2022	13-10-2022	0	0	26
	S	22401/02	1,3,6	LWACCN-1	19	20	DEE	15-10-2022	09-11-2022	UHP	2,4,7	16-10-2022	10-11-2022	0	0	24
	S	22401/02	1,3,6	LWACCN-1	20	21	DEE	13-04-2022	13-04-2022	UHP	2,4,7	14-04-2022	14-04-2022	1	1	2
	W	22401/02	1,3,6	LWACCN-1	20	21	DEE	25-01-2023	25-01-2023	UHP	2,4,7	26-01-2023	26-01-2023	0	0	2
	H	22401/02	1,3,6	LWACCN-1	20	21	DEE	25-02-2023	11-03-2023	UHP	2,4,7	26-02-2023	12-03-2023	0	0	14
26	S	14210/09	Daily	GS-1	13	14	LKO	10-04-2022	10-11-2022	PYGS	Daily	11-04-2022	11-11-2022	2	2	430
27	S	14233/34	Daily	GS-1	13	14	PYGS	10-04-2022	10-11-2022	MUR	Daily	11-04-2022	11-11-2022	0	0	430
	S	14210/09	Daily	WGSCZ-1	14	15	LKO	11-06-2022	10-11-2022	PYGS	Daily	12-06-2022	11-11-2022	2	2	306
	S	14233/34	Daily	WGSCZ-1	14	15	PYGS	11-06-2022	10-11-2022	MUR	Daily	12-06-2022	11-11-2022	0	0	306
28	S	14308/07	Daily	WGSCN-1	12	13	BE	10-04-2022	09-07-2022	PYGS	Daily	13-04-2022	12-07-2022	3	3	88
29	S	04383/84	Daily	WGSCN-1	12	13	PYGS	11-04-2022	10-07-2022	JNU	Daily	11-04-2022	10-07-2022	0	0	182
30	S	14231/32	1,2,3,5,6	WGSCN-1	12	13	PYGS	12-04-2022	11-07-2022	BST	1,2,3,5,6	12-04-2022	11-07-2022	0	0	130
	P	14308/07	Daily	WGSCN-1	12	13	BE	30-09-2022	10-11-2022	PYGS	Daily	03-10-2022	13-11-2022	0	0	84
	P	04383/84	Daily	WGSCN-1	12	13	PYGS	01-10-2022	11-11-2022	JNU	Daily	01-10-2022	11-11-2022	0	0	84
	P	14231/32	1,2,3,5,6	WGSCN-1	12	13	PYGS	02-10-2022	12-11-2022	BST	1,2,3,5,6	02-10-2022	12-11-2022	0	0	60
	S	14308/07	Daily	WGSCN-1	13	14	BE	11-06-2022	09-07-2022	PYGS	Daily	14-06-2022	12-07-2022	3	3	20
	S	04383/84	Daily	WGSCN-1	13	14	PYGS	12-06-2022	10-07-2022	JNU	Daily	12-06-2022	10-07-2022	0	0	58
	S	14231/32	1,2,3,5,6	WGSCN-1	13	14	PYGS	13-06-2022	11-07-2022	BST	1,2,3,5,6	13-06-2022	11-07-2022	0	0	40
	S	14308/07	Daily	WGSCN-2	12	14	BE	10-07-2022	08-08-2022	PYGS	Daily	13-07-2022	11-08-2022	0	0	120
	S	04383/84	Daily	WGSCN-2	12	14	PYGS	11-07-2022	09-08-2022	JNU	Daily	11-07-2022	09-08-2022	0	0	120
	S	14231/32	1,2,3,5,6	WGSCN-2	12	14	PYGS	12-07-2022	10-08-2022	BST	1,2,3,5,6	12-07-2022	10-08-2022	0	0	88
	S	14308/07	Daily	WGACCN-1	14	15	BE	11-06-2022	09-07-2022	PYGS	Daily	14-06-2022	12-07-2022	3	3	20
	S	04383/84	Daily	WGACCN-1	14	15	PYGS	12-06-2022	10-07-2022	JNU	Daily	12-06-2022	10-07-2022	0	0	58
	S	14231/32	1,2,3,5,6	WGACCN-1	14	15	PYGS	13-06-2022	11-07-2022	BST	1,2,3,5,6	13-06-2022	11-07-2022	0	0	40
	S	14308/07	Daily	WGACCN-1	14	15	BE	10-07-2022	08-08-2022	PYGS	Daily	13-07-2022	11-08-2022	0	0	60
	S	04383/84	Daily	WGACCN-1	14	15	PYGS	11-07-2022	09-08-2022	JNU	Daily	11-07-2022	09-08-2022	0	0	60
	S	14231/32	1,2,3,5,6	WGACCN-1	14	15	PYGS	12-07-2022	10-08-2022	BST	1,2,3,5,6	12-07-2022	10-08-2022	0	0	44
	D	14308/07	Daily	WGSCN-1	13	14	BE	11-02-2023	11-02-2023	PYGS	Daily	14-02-2023	14-02-2023	0	0	2
	D	04383/84	Daily	WGSCN-1	13	14	PYGS	12-02-2023	12-02-2023	JNU	Daily	12-02-2023	12-02-2023	0	0	2
	D	14231/32	1,2,3,5,6	WGSCN-1	13	14	PYGS	13-02-2023	13-02-2023	BST	1,2,3,5,6	13-02-2023	13-02-2023	0	0	2

	H	14308/07	Daily	WGSCN-1	13	14	BE	26-02-2023	11-03-2023	PYGS	Daily	01-03-2023	14-03-2023	0	0	28
	H	04383/84	Daily	WGSCN-1	13	14	PYGS	27-02-2023	12-03-2023	JNU	Daily	27-02-2023	12-03-2023	0	0	28
	H	14231/32	1,2,3,5,6	WGSCN-1	13	14	PYGS	28-02-2023	13-03-2023	BST	1,2,3,5,6	28-02-2023	13-03-2023	0	0	20
31	P	14235/36	Daily	CWGSCN-1	15	16	BSB	10-04-2022	10-11-2022	BE	Daily	11-04-2022	11-11-2022	2	2	430
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	16-04-2022	16-04-2022	BE	Daily	17-04-2022	17-04-2022	1	1	2
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	07-05-2022	07-05-2022	BE	Daily	08-05-2022	08-05-2022	0	0	2
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	11-06-2022	12-06-2022	BE	Daily	12-06-2022	13-06-2022	0	0	4
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	21-08-2022	21-08-2022	BE	Daily	22-08-2022	22-08-2022	0	0	2
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	27-08-2022	28-08-2022	BE	Daily	28-08-2022	29-08-2022	0	0	4
	S	14235/36	Daily	CWGSCN-1	16	17	BSB	03-09-2022	03-09-2022	BE	Daily	04-09-2022	04-09-2022	0	0	2
	P	14235/36	Daily	CWGSCN-1	16	17	BSB	05-11-2022	08-11-2022	BE	Daily	06-11-2022	09-11-2022	1	1	8
32	S	22412/11	7,4	LWACCN-1	20	21	ANVT	10-04-2022	07-07-2022	NHLN	2,6	12-04-2022	09-07-2022	2	2	52
	S	22412/11	7,4	LWACCN-1	21	22	ANVT	10-04-2022	14-04-2022	NHLN	2,6	12-04-2022	16-04-2022	2	2	4
	S	22412/11	7,4	LWACCN-1	21	22	ANVT	12-06-2022	07-07-2022	NHLN	2,6	14-06-2022	09-07-2022	0	0	16
	S	22412/11	7,4	LWACCN-2	20	22	ANVT	10-07-2022	07-08-2022	NHLN	2,6	12-07-2022	09-08-2022	0	0	36
	S	22412/11	7,4	LWACCN-2	20	22	ANVT	11-08-2022	08-09-2022	NHLN	2,6	13-08-2022	10-09-2022	0	0	36
	S	22412/11	7,4	LWACCN-2	20	22	ANVT	11-09-2022	09-10-2022	NHLN	2,6	13-09-2022	11-10-2022	0	0	36
33	P	01671/72	1,4	LWACCN-2	20	22	ANVT	03-10-2022	06-10-2022	UHP	2,5	04-10-2022	07-10-2022	0	0	8
	P	01671/72	1,4	LWACCN-2	20	22	ANVT	10-10-2022	10-11-2022	UHP	2,5	11-10-2022	11-11-2022	0	0	40
	P	22412/11	7,4	LWACCN-2	20	22	ANVT	13-10-2022	10-11-2022	NHLN	2,6	15-10-2022	12-11-2022	0	0	36
	W	22412/11	7,4	LWACCN-1	20	21	ANVT	13-11-2022	27-11-2022	NHLN	2,6	15-11-2022	29-11-2022	0	0	10
	W	22412/11	7,4	LWACCN-1	21	22	ANVT	20-11-2022	20-11-2022	NHLN	2,6	22-11-2022	22-11-2022	1	1	2
	W	22412/11	7,4	LWACCN-1	20	21	ANVT	11-12-2022	11-12-2022	NHLN	2,6	13-12-2022	13-12-2022	0	0	2
	D	22412/11	7,4	LWACCN-1	20	21	ANVT	15-12-2022	15-12-2022	NHLN	2,6	17-12-2022	17-12-2022	0	0	2
	W	22412/11	7,4	LWACCN-1	20	21	ANVT	18-12-2022	22-12-2022	NHLN	2,6	20-12-2022	24-12-2022	0	0	4
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	22-12-2022	22-12-2022	NHLN	2,6	24-12-2022	24-12-2022	0	0	2
	W	22412/11	7,4	LWACCN-1	21	22	ANVT	25-12-2022	29-12-2022	NHLN	2,6	27-12-2022	31-12-2022	0	0	4
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	05-01-2023	05-01-2023	NHLN	2,6	07-01-2023	07-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	08-01-2023	08-01-2023	NHLN	2,6	10-01-2023	10-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	12-01-2023	12-01-2023	NHLN	2,6	14-01-2023	14-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	15-01-2023	15-01-2023	NHLN	2,6	17-01-2023	17-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	19-01-2023	19-01-2023	NHLN	2,6	21-01-2023	21-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	22-01-2023	22-01-2023	NHLN	2,6	24-01-2023	24-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	26-01-2023	26-01-2023	NHLN	2,6	28-01-2023	28-01-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	29-01-2023	29-01-2023	NHLN	2,6	31-01-2023	31-01-2023	0	0	2
	W	22412/11	7,4	LWACCN-1	21	22	ANVT	02-02-2023	02-02-2023	NHLN	2,6	04-02-2023	04-02-2023	0	0	2

	W	22412/11	7,4	LWACCN-1	21	22	ANVT	05-02-2023	09-02-2023	NHLN	2,6	07-02-2023	11-02-2023	0	0	4
	H	22412/11	7,4	LWACCN-1	21	22	ANVT	12-02-2023	12-02-2023	NHLN	2,6	14-02-2023	14-02-2023	0	0	2
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	16-02-2023	16-02-2023	NHLN	2,6	18-02-2023	18-02-2023	0	0	2
	H	22412/11	7,4	LWACCN-1	21	22	ANVT	19-02-2023	23-02-2023	NHLN	2,6	21-02-2023	25-02-2023	0	0	4
	H	22412/11	7,4	LWACCN-1	21	22	ANVT	26-02-2023	12-03-2023	NHLN	2,6	28-02-2023	14-03-2023	0	0	10
	D	22412/11	7,4	LWACCN-1	21	22	ANVT	16-03-2023	16-03-2023	NHLN	2,6	18-03-2023	18-03-2023	0	0	2
34	S	14612/11	4	LWSCN-1	18	19	SVDK	07-04-2022	07-04-2022	GCT	5	08-04-2022	08-04-2022	1	1	2
	S	14612/11	4	LWSCN-1	18	19	SVDK	14-04-2022	14-04-2022	GCT	5	15-04-2022	15-04-2022	0	0	2
	S	14612/11	4	LWSCN-1	18	19	SVDK	05-05-2022	05-05-2022	GCT	5	06-05-2022	06-05-2022	0	0	2
	S	14612/11	4	LWSCN-1	18	19	SVDK	12-05-2022	12-05-2022	GCT	5	13-05-2022	13-05-2022	0	0	2
	S	14612/11	4	LWACCNE-2	18	20	SVDK	19-05-2022	16-06-2022	GCT	5	20-05-2022	17-06-2022	1	2	20
	S	14612/11	4	LWSCN-1	20	21	SVDK	19-05-2022	19-05-2022	GCT	5	20-05-2022	20-05-2022	0	0	2
	S	14612/11	4	LWACCNE-2	18	20	SVDK	23-06-2022	14-07-2022	GCT	5	24-06-2022	15-07-2022	0	0	16
	S	14612/11	4	LWACCNE-2	18	20	SVDK	21-07-2022	18-08-2022	GCT	5	22-07-2022	19-08-2022	0	0	20
	S	14612/11	4	LWACCNE-2	18	20	SVDK	25-08-2022	22-09-2022	GCT	5	26-08-2022	23-09-2022	0	0	20
	S	14612/11	4	LWACCNE-2	18	20	SVDK	29-09-2022	27-10-2022	GCT	5	30-09-2022	28-10-2022	0	0	20
35	P	01654/53	7	LWACCNE-2	18	20	SVDK	02-10-2022	23-10-2022	BSB	2	04-10-2022	25-10-2022	0	0	16
	W	14612/11	4	LWACCNE-1	18	19	SVDK	01-12-2022	29-12-2022	GCT	5	02-12-2022	30-12-2022	0	0	10
	S	14612/11	4	LWSCN-1	20	21	SVDK	22-09-2022	22-09-2022	GCT	5	23-09-2022	23-09-2022	1	1	2
	P	14612/11	4	LWSCN-2	18	20	SVDK	03-11-2022	10-11-2022	GCT	5	04-11-2022	11-11-2022	1	2	8
	P	14612/11	4	LWSCN-2	18	20	SVDK	17-11-2022	24-11-2022	GCT	5	18-11-2022	25-11-2022	0	0	8
	P	01654/53	7	LWSCN-2	18	20	SVDK	30-10-2022	13-11-2022	GCT	2	01-11-2022	15-11-2022	0	0	12
	P	01654/53	7	LWSCN-1	20	21	SVDK	09-10-2022	09-10-2022	GCT	2	11-10-2022	11-10-2022	1	1	2
	P	01654/53	7	LWSCN-1	20	21	SVDK	06-11-2022	06-11-2022	GCT	2	08-11-2022	08-11-2022	0	0	2
	P	14612/11	4	LWSCN-1	20	21	SVDK	13-10-2022	13-10-2022	GCT	5	14-10-2022	14-10-2022	0	0	2
	P	14612/11	4	LWSCN-1	20	21	SVDK	20-10-2022	20-10-2022	GCT	5	21-10-2022	21-10-2022	0	0	2
	P	14612/11	4	LWSCN-1	20	21	SVDK	27-10-2022	27-10-2022	GCT	5	28-10-2022	28-10-2022	0	0	2
	P	14612/11	4	LWSCN-1	20	21	SVDK	10-11-2022	10-11-2022	GCT	5	11-11-2022	11-11-2022	0	0	2
36	S	14224/23	Daily	WGSCN-5	9	14	BSB	06-05-2022	30-06-2022	RGD	Daily	07-05-2022	01-07-2022	2	10	510
	S	14224/23	Daily	CWGSCN-5	9	14	BSB	01-07-2022	05-08-2022	RGD	Daily	02-07-2022	06-08-2022	2	10	360
	S	14224/23	Daily	CWGSCN-5	9	14	BSB	06-08-2022	10-11-2022	RGD	Daily	07-08-2022	11-11-2022	0	0	970
	S	14224/23	Daily	CWGSCN-1	14	15	BSB	04-09-2022	04-09-2022	RGD	Daily	05-09-2022	05-09-2022	1	1	2
	S	14224/23	Daily	CWGSCN-1	14	15	BSB	11-09-2022	15-09-2022	RGD	Daily	12-09-2022	16-09-2022	0	0	10
	S	14224/23	Daily	CWGSCN-1	14	15	BSB	17-09-2022	22-09-2022	RGD	Daily	18-09-2022	23-09-2022	0	0	12
	S	14224/23	Daily	CWGSCN-1	14	15	BSB	24-09-2022	30-09-2022	RGD	Daily	25-09-2022	01-10-2022	0	0	14
	S	14224/23	Daily	CWGSCN-1	14	15	BSB	01-10-2022	01-10-2022	RGD	Daily	02-10-2022	02-10-2022	0	0	2

	S	14224/23	Daily	CWGSCN-1	14	15	BSB	21-10-2022	21-10-2022	RGD	Daily	22-10-2022	22-10-2022	0	0	2
	R	14224/23	Daily	CWGSCN-1	11	12	BSB	08-01-2023	31-01-2023	RGD	Daily	09-01-2023	01-02-2023	0	0	48
	R	14224/23	Daily	CWGSCN-1	11	12	BSB	01-02-2023	31-03-2023	RGD	Daily	02-02-2023	01-04-2023	0	0	30
	R	14224/23	Daily	CWGACCN-1	12	13	BSB	08-01-2023	31-01-2023	RGD	Daily	09-01-2023	01-02-2023	2	2	48
	R	14224/23	Daily	CWGACCN-1	12	13	BSB	01-02-2023	31-03-2023	RGD	Daily	02-02-2023	01-04-2023	0	0	30
	H	14224/23	Daily	CWGSCN-2	13	15	BSB	26-02-2023	11-03-2023	RGD	Daily	27-02-2023	12-03-2023	0	0	0
	D	14224/23	Daily	CWGSCN-1	13	14	BSB	11-02-2023	11-02-2023	RGD	Daily	12-02-2023	12-02-2023	0	0	2
37	S	14265/66	Daily	CWGSCN-2	18	20	BSB	01-05-2022	31-05-2022	HW	Daily	02-05-2022	01-06-2022	3	6	124
38	S	22420/19	2,4,6,7	LWACCNE-1	21	22	ANVT	21-05-2022	19-06-2022	GCT	3,5,7,1	22-05-2022	20-06-2022	2	2	36
39	S	22434/33	1,5	LWACCNE-1	21	22	ANVT	20-05-2022	17-06-2022	GCT	2,6	21-05-2022	18-06-2022	0	0	18
	S	22420/19	2,4,6,7	LWACCNE-1	21	22	ANVT	21-06-2022	19-07-2022	GCT	3,5,7,1	22-06-2022	20-07-2022	0	0	34
	S	22434/33	1,5	LWACCNE-1	21	22	ANVT	20-06-2022	18-07-2022	GCT	2,6	21-06-2022	19-07-2022	0	0	18
	S	22420/19	2,4,6,7	LWACCNE-1	21	22	ANVT	21-07-2022	20-08-2022	GCT	3,5,7,1	22-07-2022	21-08-2022	0	0	36
	S	22434/33	1,5	LWACCNE-1	21	22	ANVT	22-07-2022	19-08-2022	GCT	2,6	23-07-2022	20-08-2022	0	0	18
	S	22420/19	2,4,6,7	LWACCNE-1	21	22	ANVT	21-08-2022	20-09-2022	GCT	3,5,7,1	22-08-2022	21-09-2022	0	0	36
	S	22434/33	1,5	LWACCNE-1	21	22	ANVT	22-08-2022	19-09-2022	GCT	2,6	23-08-2022	20-09-2022	0	0	18
	S	22420/19	2,4,6,7	LWACCNE-1	21	22	ANVT	22-09-2022	20-10-2022	GCT	3,5,7,1	23-09-2022	21-10-2022	0	0	34
	S	22434/33	1,5	LWACCNE-1	21	22	ANVT	23-09-2022	21-10-2022	GCT	2,6	24-09-2022	22-10-2022	0	0	16
	P	22420/19	2,4,6,7	LWSCN-1	21	22	ANVT	22-10-2022	10-11-2022	GCT	3,5,7,1	23-10-2022	11-11-2022	2	2	24
	P	22434/33	1,5	LWSCN-1	21	22	ANVT	24-10-2022	11-11-2022	GCT	2,6	25-10-2022	12-11-2022	0	0	10
	P	22420/19	2,4,6,7	LWSCN-1	21	22	ANVT	12-11-2022	29-11-2022	GCT	3,5,7,1	13-11-2022	30-11-2022	0	0	22
	P	22434/33	1,5	LWSCN-1	21	22	ANVT	14-11-2022	28-11-2022	GCT	2,6	15-11-2022	29-11-2022	0	0	10
40	S	14219/20	Except-7	WGSCZ-1	15	16	BSB	11-06-2022	09-07-2022	HW	Except-7	11-06-2022	09-07-2022	1	1	50
41	S	14041/42	Daily	CWGSCN-1	18	19	DLI	18-06-2022	24-06-2022	HW	Daily	19-06-2022	25-06-2022	2	2	14
42	S	12430/29	Daily	LWACCNE-1	21	22	NDLS	10-08-2022	12-08-2022	LKO	Daily	11-08-2022	13-08-2022	2	2	6
	P	12429/30	Daily	LWACCN-1	21	22	LKO	26-10-2022	28-10-2022	NDLS	Daily	27-10-2022	29-10-2022	2	2	6
	H	12429/30	Daily	LWACCN-1	21	22	LKO	10-03-2023	13-03-2023	NDLS	Daily	11-03-2023	14-03-2023	0	0	8
	D	12429/30	Daily	LWACCN-1	21	22	LKO	15-03-2023	24-03-2023	NDLS	Daily	16-03-2023	25-03-2023	0	0	20
43	S	14206/05	Daily	LWS-1	20	21	DLI	10-08-2022	10-08-2022	AYC	Daily	11-08-2022	11-08-2022	2	2	2
44	S	14208//07	Daily	LWS-1	20	21	DLI	10-08-2022	10-08-2022	PBH	Daily	11-08-2022	11-08-2022	0	0	2
	S	14206/05	Daily	LWSCN-1	20	21	DLI	11-08-2022	12-08-2022	AYC	Daily	12-08-2022	13-08-2022	4	4	4
	S	14208//07	Daily	LWSCN-1	20	21	DLI	11-08-2022	12-08-2022	PBH	Daily	12-08-2022	13-08-2022	0	0	4
	S	14205/06	Daily	LWSCN-1	20	21	AYC	01-10-2022	10-11-2022	DLI	Daily	04-10-2022	13-11-2022	0	0	82
	S	14208/07	Daily	LWSCN-1	20	21	DLI	02-10-2022	11-11-2022	PBH	Daily	03-10-2022	12-11-2022	0	0	82
	P	14205	Daily	LWSCN-1	21	22	AYC	28-10-2022	28-10-2022	DLI	Daily	28-10-2022	28-10-2022	0.5	0.5	1
	P	14208	Daily	LWSCN-1	21	22	DLI	29-10-2022	29-10-2022	PBH	Daily	29-10-2022	29-10-2022	0.5	0.5	1

	W	14205	Daily	LWSCN-1	21	22	AYC	11-11-2022	11-11-2022	DLI	Daily	11-11-2022	11-11-2022	0	0	1
	W	14208	Daily	LWSCN-1	21	22	DLI	12-11-2022	12-11-2022	PBH	Daily	12-11-2022	12-11-2022	0	0	1
	D	14205	Daily	LWSCN-1	20	21	AYC	15-02-2023	15-02-2023	DLI	Daily	15-02-2023	15-02-2023	0	0	1
	D	14208	Daily	LWSCN-1	20	21	DLI	16-02-2023	16-02-2023	PBH	Daily	16-02-2023	16-02-2023	0	0	1
	D	14207	Daily	LWSCN-1	20	21	PBH	17-02-2023	17-02-2023	DLI	Daily	17-02-2023	17-02-2023	0	0	1
	D	14206	Daily	LWSCN-1	20	21	DLI	18-02-2023	18-02-2023	AYC	Daily	18-02-2023	18-02-2023	0	0	1
	D	14205/06	Daily	LWSCN-1	20	21	AYC	16-02-2023	16-02-2023	DLI	Daily	19-02-2023	19-02-2023	0	0	2
	D	14208/07	Daily	LWSCN-1	20	21	DLI	17-02-2023	17-02-2023	PBH	Daily	18-02-2023	18-02-2023	0	0	2
	D	14205/06	Daily	LWSCN-1	20	21	AYC	17-02-2023	17-02-2023	DLI	Daily	20-02-2023	20-02-2023	0	0	2
	D	14208/07	Daily	LWSCN-1	20	21	DLI	18-02-2023	18-02-2023	PBH	Daily	19-02-2023	19-02-2023	0	0	2
	H	14205/06	Daily	LWSCN-1	20	21	AYC	18-02-2023	24-02-2023	DLI	Daily	21-02-2023	27-02-2023	0	0	14
	H	14208/07	Daily	LWSCN-1	20	21	DLI	19-02-2023	25-02-2023	PBH	Daily	20-02-2023	26-02-2023	0	0	14
	H	14205/06	Daily	LWSCN-1	20	21	AYC	25-02-2023	03-03-2023	DLI	Daily	28-02-2023	06-03-2023	0	0	14
	H	14208/07	Daily	LWSCN-1	20	21	DLI	26-02-2023	04-03-2023	PBH	Daily	27-02-2023	05-03-2023	0	0	14
	H	14205/06	Daily	LWSCN-1	20	21	AYC	04-03-2023	07-03-2023	DLI	Daily	07-03-2023	10-03-2023	0	0	8
	H	14208/07	Daily	LWSCN-1	20	21	DLI	05-03-2023	08-03-2023	PBH	Daily	06-03-2023	09-03-2023	0	0	8
	H	14205/06	Daily	LWSCN-1	20	21	AYC	11-03-2023	12-03-2023	DLI	Daily	14-03-2023	15-03-2023	0	0	4
	H	14208/07	Daily	LWSCN-1	20	21	DLI	12-03-2023	13-03-2023	PBH	Daily	13-03-2023	14-03-2023	0	0	4
	H	14205/06	Daily	LWSCN-1	20	21	AYC	14-03-2023	17-03-2023	DLI	Daily	17-03-2023	20-03-2023	0	0	8
	H	14208/07	Daily	LWSCN-1	20	21	DLI	15-03-2023	18-03-2023	PBH	Daily	16-03-2023	19-03-2023	0	0	8
	H	14205/06	Daily	LWSCN-1	20	21	AYC	18-03-2023	24-03-2023	DLI	Daily	21-03-2023	27-03-2023	0	0	14
	H	14208/07	Daily	LWSCN-1	20	21	DLI	19-03-2023	25-03-2023	PBH	Daily	20-03-2023	26-03-2023	0	0	14
45	S	12444/43	2	LWACCNE-1	18	19	ANVT	16-08-2022	13-09-2022	HLZ	4	18-08-2022	15-09-2022	2	2	10
46	S	14010/09	1,6	LWACCNE-1	18	19	ANVT	15-08-2022	12-09-2022	BMKI	2,7	16-08-2022	13-09-2022	0	0	18
	S	12444/43	2	LWACCNE-1	18	19	ANVT	20-09-2022	18-10-2022	HLZ	4	22-09-2022	20-10-2022	0	0	10
	P	12444/43	2	LWACCNE-1	18	19	ANVT	25-10-2022	22-11-2022	HLZ	4	27-10-2022	24-11-2022	0	0	10
	W	12444/43	2	LWACCNE-1	18	19	ANVT	29-11-2022	27-12-2022	HLZ	4	01-12-2022	29-12-2022	0	0	10
	S	14010/09	1,6	LWACCNE-1	18	19	ANVT	17-09-2022	17-10-2022	BMKI	2,7	18-09-2022	18-10-2022	0	0	20
	P	14010/09	1,6	LWACCNE-1	18	19	ANVT	22-10-2022	21-11-2022	BMKI	2,7	23-10-2022	22-11-2022	0	0	20
	W	14010/09	1,6	LWACCNE-1	18	19	ANVT	26-11-2022	26-12-2022	BMKI	2,7	27-11-2022	27-12-2022	0	0	20
	S	12444/43	2	LWSCN-1	19	20	ANVT	16-08-2022	13-09-2022	HLZ	4	18-08-2022	15-09-2022	2	2	10
	S	14010/09	1,6	LWSCN-1	19	20	ANVT	15-08-2022	12-09-2022	BMKI	2,7	16-08-2022	13-09-2022	0	0	18
	S	12444/43	2	LWSCN-1	19	20	ANVT	20-09-2022	18-10-2022	HLZ	4	22-09-2022	20-10-2022	0	0	10
	P	12444/43	2	LWSCN-1	19	20	ANVT	25-10-2022	22-11-2022	HLZ	4	27-10-2022	24-11-2022	0	0	10
	W	12444/43	2	LWSCN-1	19	20	ANVT	29-11-2022	29-11-2022	HLZ	4	01-12-2022	01-12-2022	0	0	2
	S	14010/09	1,6	LWSCN-1	19	20	ANVT	17-09-2022	17-10-2022	BMKI	2,7	18-09-2022	18-10-2022	0	0	20

	P	14010/09	1,6	LWSCN-1	19	20	ANVT	22-10-2022	21-11-2022	BMKI	2,7	23-10-2022	22-11-2022	0	0	20
	W	14010/09	1,6	LWSCN-1	19	20	ANVT	26-11-2022	28-11-2022	BMKI	2,7	27-11-2022	29-11-2022	0	0	4
47	P	14522/21	Daily	WGSCZACJ-1	13	14	UMB	19-10-2022	20-10-2022	DLI	Daily	20-10-2022	21-10-2022	2	2	4
48	P	14507/08	Daily	WGSCZACJ-1	13	14	DLI	19-10-2022	20-10-2022	FKA	Daily	20-10-2022	21-10-2022	0	0	4
	P	14522/21	Daily	WGSCZACJ-1	13	14	UMB	21-10-2022	21-10-2022	DLI	Daily	22-10-2022	22-10-2022	0	0	2
	P	14507/08	Daily	WGSCZACJ-1	13	14	DLI	21-10-2022	21-10-2022	FKA	Daily	22-10-2022	22-10-2022	0	0	2
	P	14522/21	Daily	WGSCZACJ-1	13	14	UMB	30-10-2022	30-10-2022	DLI	Daily	31-10-2022	31-10-2022	0	0	2
	P	14507/08	Daily	WGSCZACJ-1	13	14	DLI	30-10-2022	30-10-2022	FKA	Daily	31-10-2022	31-10-2022	0	0	2
	D	14522/21	Daily	WGSCZACJ-1	13	14	UMB	24-12-2022	24-12-2022	DLI	Daily	25-12-2022	25-12-2022	0	0	2
	D	14507/08	Daily	WGSCZACJ-1	13	14	DLI	24-12-2022	24-12-2022	FKA	Daily	25-12-2022	25-12-2022	0	0	2
	W	14522/21	Daily	WGSCZACJ-1	13	14	UMB	08-01-2023	08-01-2023	DLI	Daily	09-01-2023	09-01-2023	0	0	2
	W	14507/08	Daily	WGSCZACJ-1	13	14	DLI	08-01-2023	08-01-2023	FKA	Daily	09-01-2023	09-01-2023	0	0	2
	R	14522/21	Daily	WGACCN-2	13	15	UMB	14-01-2023	31-03-2023	DLI	Daily	15-01-2023	01-04-2023	2	4	308
	R	14507/08	Daily	WGACCN-2	13	15	DLI	14-01-2023	31-03-2023	FKA	Daily	15-01-2023	01-04-2023	0	0	308
	R	14522/21	Daily	GS-1	15	16	UMB	14-01-2023	22-01-2023	DLI	Daily	15-01-2023	23-01-2023	2	2	18
	R	14507/08	Daily	GS-1	15	16	DLI	14-01-2023	22-01-2023	FKA	Daily	15-01-2023	23-01-2023	0	0	18
	R	14522/21	Daily	WGSCN-1	15	16	UMB	23-01-2023	31-03-2023	DLI	Daily	24-01-2023	01-04-2023	2	2	136
	R	14507/08	Daily	WGSCN-1	15	16	DLI	23-01-2023	31-03-2023	FKA	Daily	24-01-2023	01-04-2023	0	0	136
49	M	04360/59	Daily	GS-3	10	13	HW	14-07-2022	26-07-2022	CH	Daily	15-07-2022	27-07-2022	2	6	78
50	M	04361/62	Daily	GS-3	10	13	HW	29-08-2022	17-09-2022	RKSH	Daily	29-08-2022	17-09-2022	0	0	120
51	M	04363/64	Daily	GS-3	10	13	HW	29-08-2022	17-09-2022	RKSH	Daily	30-08-2022	18-09-2022	0	0	120
	M	04360/59	Daily	GS-3	10	13	RKSH	29-08-2022	17-09-2022	CH	Daily	30-08-2022	18-09-2022	0	0	120
52	M	04374/73	Daily	GS-2	13	15	DDN	14-07-2022	26-07-2022	SRE	Daily	14-07-2022	26-07-2022	1	2	52
53	M	04376/75	Daily	GS-2	13	15	BE	14-07-2022	26-07-2022	ALJN	Daily	14-07-2022	26-07-2022	2	4	52
54	M	04378/77	Daily	GS-2	13	15	BE	14-07-2022	26-07-2022	ALJN	Daily	15-07-2022	27-07-2022	0	0	52
	M	04376/75	Daily	GS-2	13	15	BE	29-08-2022	17-09-2022	ALJN	Daily	29-08-2022	17-09-2022	0	0	80
	M	04378/77	Daily	GS-2	13	15	BE	29-08-2022	17-09-2022	ALJN	Daily	29-08-2022	17-09-2022	0	0	80
	M	04376/75	Daily	GS-2	13	15	BE	07-11-2022	09-11-2022	ALJN	Daily	07-11-2022	09-11-2022	0	0	12
	M	04378/77	Daily	GS-2	13	15	BE	07-11-2022	09-11-2022	ALJN	Daily	07-11-2022	09-11-2022	0	0	12
55	M	04334/33	Daily	GS-1	10	11	NBD	14-07-2022	26-07-2022	GJL	Daily	15-07-2022	27-07-2022	2	2	26
56	M	04394/93	Daily	GS-1	10	11	GJL	14-07-2022	26-07-2022	ALJN	Daily	15-07-2022	27-07-2022	0	0	26
	M	04334/33	Daily	GS-1	10	11	NBD	29-08-2022	17-09-2022	GJL	Daily	30-08-2022	18-09-2022	0	0	40
	M	04394/93	Daily	GS-1	10	11	GJL	29-08-2022	17-09-2022	ALJN	Daily	30-08-2022	18-09-2022	0	0	40
	M	04334/33	Daily	GS-1	10	11	NBD	07-11-2022	09-11-2022	GJL	Daily	08-11-2022	10-11-2022	0	0	6
	M	04394/93	Daily	GS-1	10	11	GJL	07-11-2022	09-11-2022	ALJN	Daily	08-11-2022	10-11-2022	0	0	6
57	M	04358/57	Daily	GS-1	10	11	NBD	29-08-2022	17-09-2022	MB	Daily	29-08-2022	17-09-2022	1	1	40

	M	04358/57	Daily	GS-1	10	11	NBD	07-11-2022	09-11-2022	MB	Daily	07-11-2022	09-11-2022	0	0	6
58	S	04652/51	3,5,7	LWSCN-1	17	18	ASR	20-07-2022	17-08-2022	JYG	2,5,7	22-07-2022	19-08-2022	2	2	26
	S	04652/51	3,5,7	LWSCN-1	17	18	ASR	19-08-2022	18-09-2022	JYG	2,5,7	21-08-2022	20-09-2022	0	0	28
	S	04652/51	3,5,7	LWACCNE-1	18	19	ASR	20-07-2022	17-08-2022	JYG	2,5,7	22-07-2022	19-08-2022	2	2	26
	S	04652/51	3,5,7	LWACCNE-1	18	19	ASR	19-08-2022	18-09-2022	JYG	2,5,7	21-08-2022	20-09-2022	0	0	28
	S	04652/51	3,5,7	LWSCN-1	17	18	ASR	21-09-2022	19-10-2022	JYG	2,5,7	23-09-2022	21-10-2022	0	0	26
	S	04652/51	3,5,7	LWSCN-1	18	19	ASR	21-09-2022	19-10-2022	JYG	2,5,7	23-09-2022	21-10-2022	2	2	26
	P	04652/51	3,5,7	LWSCN-2	17	19	ASR	21-10-2022	11-11-2022	JYG	2,5,7	23-10-2022	13-11-2022	0	0	40
	W	04652/51	3,5,7	LWSCN-2	17	19	ASR	13-11-2022	30-11-2022	JYG	2,5,7	15-11-2022	02-12-2022	0	0	32
	P	04652/51	3,5,7	LWSCN-1	19	20	ASR	19-10-2022	21-10-2022	JYG	2,5,7	21-10-2022	23-10-2022	2	2	4
	P	04652/51	3,5,7	LWSCN-1	19	20	ASR	23-10-2022	28-10-2022	JYG	2,5,7	25-10-2022	30-10-2022	0	0	6
	P	04652/51	3,5,7	LWSCN-1	19	20	ASR	06-11-2022	06-11-2022	JYG	2,5,7	08-11-2022	08-11-2022	0	0	2
	W	04652/51	3,5,7	LWSCN-1	19	20	ASR	20-11-2022	23-11-2022	JYG	2,5,7	22-11-2022	25-11-2022	0	0	4
	P	04652/51	3,5,7	LWACCN-1	20	21	ASR	19-10-2022	21-10-2022	JYG	2,5,7	21-10-2022	23-10-2022	2	2	4
	P	04652/51	3,5,7	LWACCN-1	20	21	ASR	23-10-2022	28-10-2022	JYG	2,5,7	25-10-2022	30-10-2022	0	0	6
59	S	04654/53	3	LWSCN-1	17	18	ASR	20-07-2022	17-08-2022	NJP	5	22-07-2022	19-08-2022	1	1	10
	S	04654/53	3	LWSCN-1	17	18	ASR	24-08-2022	21-09-2022	NJP	5	26-08-2022	23-09-2022	0	0	10
	S	04654/53	3	LWACCNE-1	18	19	ASR	20-07-2022	17-08-2022	NJP	5	22-07-2022	19-08-2022	1	1	10
	S	04654/53	3	LWACCNE-1	18	19	ASR	24-08-2022	21-09-2022	NJP	5	26-08-2022	23-09-2022	0	0	10
	S	04654/53	3	LWSCN-1	17	18	ASR	28-09-2022	26-10-2022	NJP	5	30-09-2022	28-10-2022	0	0	10
	S	04654/53	3	LWSCN-1	18	19	ASR	28-09-2022	26-10-2022	NJP	5	30-09-2022	28-10-2022	1	1	10
	P	04654/53	3	LWSCN-2	17	19	ASR	02-11-2022	09-11-2022	NJP	5	04-11-2022	11-11-2022	0	0	8
	W	04654/53	3	LWSCN-2	17	19	ASR	16-11-2022	30-11-2022	NJP	5	18-11-2022	02-12-2022	0	0	12
	P	04654/53	3	LWSCN-1	19	20	ASR	12-10-2022	12-10-2022	NJP	5	14-10-2022	14-10-2022	1	1	2
	P	04654/53	3	LWSCN-1	19	20	ASR	19-10-2022	19-10-2022	NJP	5	21-10-2022	21-10-2022	0	0	2
	P	04654/53	3	LWSCN-1	19	20	ASR	26-10-2022	26-10-2022	NJP	5	28-10-2022	28-10-2022	0	0	2
60	S	04056/55	3	LWSCN-1	19	20	ANVT	20-07-2022	17-08-2022	BUI	4	22-07-2022	18-08-2022	1	1	10
	S	04056/55	3	LWSCN-1	19	20	ANVT	24-08-2022	21-09-2022	BUI	4	25-08-2022	22-09-2022	0	0	10
	S	04056/55	3	LWACCNE-1	20	21	ANVT	20-07-2022	17-08-2022	BUI	4	22-07-2022	18-08-2022	1	1	10
	S	04056/55	3	LWACCNE-1	20	21	ANVT	24-08-2022	21-09-2022	BUI	4	25-08-2022	22-09-2022	0	0	10
	S	04056/55	3	LWSCN-1	19	20	ANVT	28-09-2022	26-10-2022	BUI	4	29-09-2022	27-10-2022	0	0	10
	S	04056/55	3	LWSCN-1	20	21	ANVT	28-09-2022	26-10-2022	BUI	4	29-09-2022	27-10-2022	1	1	10
	P	04056/55	3	LWSCN-2	19	21	ANVT	02-11-2022	09-11-2022	BUI	4	03-11-2022	10-11-2022	0	0	8
	W	04056/55	3	LWSCN-2	19	21	ANVT	16-11-2022	30-11-2022	BUI	4	17-11-2022	01-12-2022	0	0	12
	W	04056/55	3	LWSCN-1	21	22	ANVT	30-11-2022	30-11-2022	BUI	4	01-12-2022	01-12-2022	1	1	2
61	P	04488/87	6	LWSCN-2	19	21	ANVT	22-10-2022	12-11-2022	GKP	7	23-10-2022	13-11-2022	0	0	16

62	M	04303	Daily	GS-1	19	20	BE	23-09-2022	23-09-2022	DLI	Daily	23-09-2022	23-09-2022	1	1	1
63	M	14308	Daily	GS-1	13	14	BE	23-09-2022	23-09-2022	PYGS	Daily	23-09-2022	23-09-2022	1	1	1
64	P	22460/59	1	LWSCN-1	20	21	ANVT	26-09-2022	26-09-2022	MDP	2	27-09-2022	27-09-2022	1	1	2
	P	22460/59	1	LWSCN-1	20	21	ANVT	03-10-2022	03-10-2022	MDP	2	04-10-2022	04-10-2022	0	0	2
	P	22460/59	1	LWSCN-1	20	21	ANVT	17-10-2022	17-10-2022	MDP	2	18-10-2022	18-10-2022	0	0	2
	P	22460/59	1	LWSCN-1	20	21	ANVT	24-10-2022	24-10-2022	MDP	2	25-10-2022	25-10-2022	0	0	2
	P	22460/59	1	LWSCN-1	20	21	ANVT	31-10-2022	31-10-2022	MDP	2	01-11-2022	01-11-2022	0	0	2
	P	22460/59	1	LWSCN-1	20	21	ANVT	07-11-2022	07-11-2022	MDP	2	08-11-2022	08-11-2022	0	0	2
	W	22460/59	1	LWSCN-1	20	21	ANVT	21-11-2022	21-11-2022	MDP	2	22-11-2022	22-11-2022	0	0	2
	W	22460/59	1	LWSCN-1	20	21	ANVT	28-11-2022	28-11-2022	MDP	2	29-11-2022	29-11-2022	0	0	2
65	P	12236/35	4	LWSCN-1	20	21	ANVT	29-09-2022	29-09-2022	MDP	5	30-09-2022	30-09-2022	0	0	2
	P	12236/35	4	LWSCN-1	20	21	ANVT	20-10-2022	20-10-2022	MDP	5	21-10-2022	21-10-2022	0	0	2
	P	12236/35	4	LWSCN-1	20	21	ANVT	27-10-2022	27-10-2022	MDP	5	28-10-2022	28-10-2022	0	0	2
	P	12236/35	4	LWSCN-1	20	21	ANVT	03-11-2022	03-11-2022	MDP	5	04-11-2022	04-11-2022	0	0	2
	P	12236/35	4	LWSCN-1	20	21	ANVT	10-11-2022	10-11-2022	MDP	5	11-11-2022	11-11-2022	0	0	2
	W	12236/35	4	LWSCN-1	20	21	ANVT	24-11-2022	24-11-2022	MDP	5	25-11-2022	25-11-2022	0	0	2
	W	12236/35	4	LWSCN-1	20	21	ANVT	01-12-2022	01-12-2022	MDP	5	02-12-2022	02-12-2022	0	0	2
66	P	20408/07	3	LWACCN-1	20	21	NDLS	26-10-2022	26-10-2022	RNC	4	27-10-2022	27-10-2022	2	2	2
67	P	12454/53	6	LWACCN-1	20	21	NDLS	29-10-2022	29-10-2022	RNC	7	30-10-2022	30-10-2022	0	0	2
68	P	22824/23	3	LWACCW-1	17	18	NDLS	26-10-2022	26-10-2022	BBS	5	28-10-2022	28-10-2022	1	1	2
69	P	22824/20817	4	LWACCW-1	17	18	NDLS	27-10-2022	27-10-2022	BBS	6	29-10-2022	29-10-2022	1	1	2
70	P	12424/23	Daily	LWACCW-1	21	22	NDLS	22-10-2022	27-10-2022	DBRG	Daily	24-10-2022	29-10-2022	4	4	12
	P	12424/23	Daily	LWACCN-1	21	22	NDLS	28-10-2022	31-10-2022	DBRG	Daily	30-10-2022	02-11-2022	4	4	8
	D	12424/23	Daily	LWACCN-1	21	22	NDLS	11-12-2022	13-12-2022	DBRG	Daily	13-12-2022	15-12-2022	0	0	6
	D	12424/23	Daily	LWACCN-1	21	22	NDLS	14-12-2022	14-12-2022	DBRG	Daily	16-12-2022	16-12-2022	0	0	2
	D	12424/23	Daily	LWACCN-1	21	22	NDLS	15-12-2022	16-12-2022	DBRG	Daily	17-12-2022	18-12-2022	0	0	4
	D	12424/23	Daily	LWACCN-1	21	22	NDLS	17-12-2022	17-12-2022	DBRG	Daily	19-12-2022	19-12-2022	0	0	2
	W	12424/23	Daily	LWACCN-1	21	22	NDLS	07-01-2023	08-01-2023	DBRG	Daily	09-01-2023	10-01-2023	0	0	4
	H	12424/23	Daily	LWACCN-1	21	22	NDLS	25-02-2023	03-03-2023	DBRG	Daily	27-02-2023	05-03-2023	0	0	14
	D	12424/23	Daily	LWACCN-1	21	22	NDLS	09-03-2023	09-03-2023	DBRG	Daily	11-03-2023	11-03-2023	0	0	2
71	D	12425/26	Daily	LWACCN-1	21	22	NDLS	16-12-2022	16-12-2022	JAT	Daily	17-12-2022	17-12-2022	0	0	2
	D	12425/26	Daily	LWACCN-1	21	22	NDLS	22-12-2022	22-12-2022	JAT	Daily	23-12-2022	23-12-2022	0	0	2
	D	12426	Daily	LWACCN-1	21	22	JAT	07-01-2023	07-01-2023	NDLS	Daily	07-01-2023	07-01-2023	0	0	1
	D	12425/26	Daily	LWACCN-1	21	22	NDLS	26-01-2023	26-01-2023	JAT	Daily	27-01-2023	27-01-2023	0	0	2
	D	12425/26	Daily	LWACCN-1	21	22	NDLS	27-01-2023	27-01-2023	JAT	Daily	28-01-2023	28-01-2023	0	0	2
	H	12426	Daily	LWACCN-1	21	22	JAT	24-02-2023	24-02-2023	NDLS	Daily	24-02-2023	24-02-2023	0	0	1

	H	12425/26	Daily	LWACCN-1	21	22	NDLS	24-02-2023	01-03-2023	JAT	Daily	25-02-2023	02-03-2023	2	2	12
	D	12425/26	Daily	LWACCN-1	21	22	NDLS	09-03-2023	09-03-2023	JAT	Daily	10-03-2023	10-03-2023	0	0	2
72	P	12002/01	Daily	LWSCZAC-1	18	19	NDLS	22-10-2022	22-10-2022	RKMP	Daily	22-10-2022	22-10-2022	1	1	2
73	P	12876/75	5	LWACCN-1	20	21	ANVT	28-10-2022	28-10-2022	PURI	7	30-10-2022	30-10-2022	2	2	2
74	P	12816/15	6	LWACCN-1	20	21	ANVT	29-10-2022	29-10-2022	PURI	1	31-10-2022	31-10-2022	0	0	2
75	P	12820/19	5	LWACCN-1	20	21	ANVT	28-10-2022	28-10-2022	BBS	7	30-10-2022	30-10-2022	1	1	2
76	P	12826/25	6	LWACCN-1	16	17	ANVT	29-10-2022	29-10-2022	RNC	1	31-10-2022	31-10-2022	1	1	2
77	P	15708/07	Daily	LWSCN-1	20	21	ASR	28-10-2022	28-10-2022	KIR	Daily	30-10-2022	30-10-2022	1	1	2
78	P	18104/03	5	LWSCN-1	21	22	ASR	28-10-2022	28-10-2022	TATA	1	31-10-2022	31-10-2022	1	1	2
79	W	12204/03	3,6,8	WACCNH-1	18	19	ASR	13-11-2022	16-11-2022	SHC	4,7,1	14-11-2022	17-11-2022	2	2	4
80	P	01678/77	1,5	GS-4	20	24	NDLS	17-10-2022	11-11-2022	GAYA	2,6	18-10-2022	12-11-2022	1	4	64
81	P	04038/37	3	GS-4	20	24	ANVT	19-10-2022	09-11-2022	CPR	4	20-10-2022	10-11-2022	1	4	32
82	P	01676/75	1,4	WGSCN-4	20	24	ANVT	17-10-2022	10-11-2022	MFP	2,5	18-10-2022	11-11-2022	1	4	64
83	P	04040/39	2,5	GS-4	20	24	NDLS	18-10-2022	11-11-2022	BJU	3,6	19-10-2022	12-11-2022	1	4	64
84	P	04012/11	1,4	CGS-4	20	24	NDLS	17-10-2022	10-11-2022	DBG	2.5	18-10-2022	11-11-2022	1	4	64
85	P	01668/67	2,5	CGS-4	20	24	ANVT	18-10-2022	11-11-2022	JYG	3,6	19-10-2022	12-11-2022	1	4	64
86	P	04076/75	2,6,3	WGACCN-1	20	21	ASR	18-10-2022	26-10-2022	PNBE	3,7,4	19-10-2022	27-10-2022	1	1	6
	P	04076/75	2,6,3	WGACCW-1	21	22	ASR	18-10-2022	26-10-2022	PNBE	3,7,4	19-10-2022	27-10-2022	1	1	6
87	P	04010/09	2	GS-3	20	23	ANVT	18-10-2022	08-11-2022	JBN	4	20-10-2022	10-11-2022	1	3	24
	P	04010/09	2	WGACCN-1	23	24	ANVT	18-10-2022	08-11-2022	JBN	4	20-10-2022	10-11-2022	1	1	8
88	P	01674/73	2,5,7	GS-4	20	24	DLI	18-10-2022	11-11-2022	BSB	3,6,1	19-10-2022	12-11-2022	1	4	88
89	P	04606/05	5,7	LWACCN-5	17	22	DLI	30-09-2022	02-10-2022	SVDK	6,1	01-10-2022	03-10-2022	1	5	20
90	R	04351/52	Daily	GS-9	9	18	DLI	12-12-2022	15-12-2022	HSR	Daily	13-12-2022	16-12-2022	2	18	72
91	R	04368/67	Daily	GS-9	9	18	HSR	12-12-2022	15-12-2022	RE	Daily	12-12-2022	15-12-2022	0	0	72
92	R	04603/04	Daily	GS-3	7	10	BTI	14-01-2023	31-03-2023	FZR	Daily	16-01-2023	02-04-2023	3	9	462
93	R	04464/63	Daily	GS-3	7	10	FZR	14-01-2023	31-03-2023	LDH	Daily	15-01-2023	01-04-2023	0	0	462
94	R	04555/56	Daily	GS-3	7	10	LDH	14-01-2023	31-03-2023	LNK	Daily	15-01-2023	01-04-2023	0	0	462
95	R	04658/57	Daily	GS-3	7	10	FZR	16-01-2023	31-03-2023	BTI	Daily	16-01-2023	31-03-2023	0	0	450
96	R	04570/69	Daily	GS-1	9	10	FZR	14-01-2023	31-03-2023	BTI	Daily	14-01-2023	31-03-2023	1	1	154
97	R	12241/42	Daily	LWACCN-2	11	13	CDG	01-03-2023	31-03-2023	ASR	Daily	02-03-2023	01-04-2023	1	2	124
	R	12241/42	Daily	LWACCW-1	13	14	CDG	01-03-2023	31-03-2023	ASR	Daily	02-03-2023	01-04-2023	1	1	62
98	R	14505/06	Daily	WGACCN-2	10	12	NDLM	01-03-2023	31-03-2023	ASR	Daily	01-03-2023	31-03-2023	1	2	124
	R	14505/06	Daily	WGSCN-3	12	15	NDLM	01-03-2023	31-03-2023	ASR	Daily	01-03-2023	31-03-2023	1	3	186
	W	20401/02	Daily	WGSCZAC-1	18	19	BSB	01-12-2022	31-12-2022	LKO	Daily	01-12-2022	31-12-2022	1	1	62
	W	20401/02	Daily	WGSCZAC-1	18	19	BSB	01-01-2023	31-01-2023	LKO	Daily	01-01-2023	31-01-2023	0	0	62
	W	20401/02	Daily	WGSCZAC-1	18	19	BSB	01-02-2023	31-03-2023	LKO	Daily	01-02-2023	31-03-2023	0	0	118

	W	20401/02	Daily	GS-2	19	21	BSB	01-12-2022	31-12-2022	LKO	Daily	01-12-2022	31-12-2022	1	2	124
	W	20401/02	Daily	GS-2	19	21	BSB	01-01-2023	31-01-2023	LKO	Daily	01-01-2023	31-01-2023	0	0	124
99	W	20401/02	Daily	GS-2	19	21	BSB	01-02-2023	31-03-2023	LKO	Daily	01-02-2023	31-03-2023	0	0	236
100	H	04530/29	7,3	GS-1	23	24	BTI	05-03-2023	12-03-2023	BSB	1,4	06-03-2023	13-03-2023	1	1	6
101	H	04048/47	1,3	GS-1	23	24	ANVT	06-03-2023	08-03-2023	MFP	2,4	07-03-2023	09-03-2023	1	1	4
102	H	04412/11	1,4	GS-1	23	24	ANVT	02-03-2023	09-03-2023	SHC	2,5	03-03-2023	10-03-2023	1	1	6
103	H	04060/59	2,5	GS-1	23	24	ANVT	03-03-2023	10-03-2023	JYG	3,6	04-03-2023	11-03-2023	1	1	6
104	H	04064/63	6	GS-1	23	24	ANVT	04-03-2023	11-03-2023	JBN	1	06-03-2023	13-03-2023	1	1	4
105	H	04070/69	2,6	GS-1	23	24	ANVT	04-03-2023	11-03-2023	SMI	3,7	05-03-2023	12-03-2023	1	1	6
106	H	04068/67	1,4	GS-1	23	24	NDLS	02-03-2023	09-03-2023	DBG	2,5	03-03-2023	10-03-2023	1	1	6
107	H	04066/65	6,1	GS-1	23	24	DLI	04-03-2023	06-03-2023	PNBE	7,2	05-03-2023	07-03-2023	1	1	4
107													**Total**	**129**	**323**	**27190**

Annexure - C

LIST OF NR TRAINS CONVERTED INTO LHB DURING 2022-23

S. No.	Year	Rly.	Divn.	Train No.	From	To	Category	PM At	Old Type of Rake	Rakes Converted into	Rakes Converted into LHB W.e.f.	No. of Rakes
1	2022-23	NR	FZR	14624/23	FZR	CWA	EXP	DLI	ICF (IRS)	LHB	22-12-2022	3
2	2022-23	NR	DLI	14311/12	BE	BHUJ	EXP	BE	ICF (IRS)	LHB	29-12-2022	3
3	2022-23	NR	DLI	14321/22	BE	BHUJ	EXP	BE	ICF (IRS)	LHB	28-12-2022	0
3												**6**

S. No.	Year	Rly.	Divn.	Train No.	From	To	Category	PM At	Old Type of Rake	Rakes Converted into	Rakes Converted into CBC W.e.f.	No. of Rakes
1	2022-23	NR	LKO	14223/24	BSB	RGD	EXP	LKO	ICF(IRS)	ICF(CBC)	29-06-2022	2
2	2022-23	NR	MB	14306/05	HW	DLI	EXP	HW	ICF(IRS)	ICF(CBC)	30-01-2023	1
3	2022-23	NR	MB	14303/04	HW	DLI	EXP	HW	ICF(IRS)	ICF(CBC)	30-01-2023	0

4	2022-23	NR	MB	04599/4600 (54473/74)	DLI	SRE	Pas. Express	HW	ICF(IRS)	ICF(CBC)	31-03-2023	0
3												**6**

Annexure - D

LIST OF NR TRAINS CONVERTED INTO MEMU RAKE DURING 2022-23

S. No.	Year	Divn.	Train No.	From	To	Category	PM At	Old Type of Rake	Rakes Converted into	Rakes Converted into MEMU W.e.f.	No. of Rakes
1	2022-23	DLI	01623 (51905)	DLI-	SMQL	Pass	DLI/ CYZ	ICF(IRS)	MEMU	07-12-2022	4
2	2022-23	DLI	01620 (51906)	SMQL	DLI	Pass	DLI/ CYZ	ICF(IRS)	MEMU	08-12-2022	0
3	2022-23	DLI	01619 (51909)	DLI	SRE	Pass	DLI/ CYZ	ICF(IRS)	MEMU	08-12-2022	0
4	2022-23	DLI	01622 (51914)	SRE	DLI	Pass	DLI/ CYZ	ICF(IRS)	MEMU	09-12-2022	0
5	2022-23	DLI	01617 (51917)	DLI	SMQL	Pass	DLI/ CYZ	ICF(IRS)	MEMU	09-12-2022	0
6	2022-23	DLI	01618 (51918)	SMQL	DLI	Pass	DLI/ CYZ	ICF(IRS)	MEMU	09-12-2022	0
7	2022-23	DLI	04429 (51913)	DLI	SRE	Pass	DLI/ CYZ	ICF(IRS)	MEMU	09-12-2022	0
8	2022-23	DLI	04430 (51910)	SRE	DLI	Pass	DLI/ CYZ	ICF(IRS)	MEMU	10-12-2022	0
9	2022-23	DLI	04521 (51911)	DLI	SRE	Pass	DLI/ CYZ	ICF(IRS)	MEMU	10-12-2022	0
10	2022-23	DLI	04522 (51912)	SRE.	DLI	Pass	DLI/ CYZ	ICF(IRS)	MEMU	10-12-2022	0
10											**4**

MERGER OF RAKES DURING - 2022-23

S. No.	Merger of Rakes	No. of Rakes Merged	Implemented w.e.f.	Remarks	RLRA No.
DURING - 2022-2023					
NIL					

Annexure - E

LIST OF NORTHERN RAILWAY TRAINS STANDARDISED DURING 2022-23

S. No.	Year	No. of Rakes	No. of Trains running in links (pairs)	No. of Links	Train- Number which is run by these rakes	Notified During	W.e.f.	
1	2022-23	4	4	1	12471/72 SVDK-BDTS Swaraj Superfast Express	**Mar-22**	06-07-2022	RLRA-148
2	2022-23	0	0	0	12473/74 SVDK-GIMB Sarvodya Superfast Express		07-07-2022	
3	2022-23	0	0	0	12475/76 SVDK-HAPA Superfast Express		11-07-2022	
4	2022-23	0	0	0	12477/78 SVDK-JAM Superfast Express		10-07-2022	
5	2022-23	2	1	1	12415/16 NDLS-INDB Intercity Superfast Express	**Mar-22**	15-07-2022	RLRA-173
6	2022-23	1	1	1	12484/83 ASR-KCVL Superfast Express (Weekly)	**Mar-23**	12-03-2023	RLRA-43/23
7	2022-23	1	1	1	14620/19 FZR-AGTL Tripura Sundari Express (Weekly)	**Mar-23**	13-03-2023	RLRA-43/23
	TOTAL	**8**	**7**	**4**				

Annexure - F

LIST OF NORTHERN RAILWAY TRAINS RUNNING WITH LAACCNE COACH DURING 2022-23

S. No.	Train No.	From	To	No. of Trains	No. of Rakes	No. Of LWACNE Attached	Total No. LWACCNE Attached	Attached from	Remarks	RLRA No.
1	12429/30 (Presently running as 02429/30 Special)	LKO	NDLS	1	2	1	2	05-05-2022	Augmentation	R-14-22
2	12488/87 ANVT-JBN Seemanchal Superfast Express	ANVT	JBN	1	3	1	3	04-04-2022	Augmentation	168-21
3	12488/87 ANVT-JBN Seemanchal Superfast Express	ANVT	JBN	0	3	1	3	26-07-2022	Replacement	181-21
4	12444/43 ANVT-HLZ Superfast Express	ANVT	HLZ	1	2	1	2	03-01-2023	Augmentation	178-22
5	14010/14009 ANVT-BMKI Champaran Satyagrah Express	ANVT	BMKI	1	0	1	0	31-12-2022	Augmentation	178-22
6	14612/14611 SVDK-GCT Express	SVDK	GCT	1	1	2	2	05-01-2023	Augmentation	178-22
	Total			**5**	**8**		**12**			

Annexure - G

LIST OF NR TRAINS RUNNING WITH ONE LSLRD COACH IN EACH RAKE during 2022-23

S. No.	Divn.	PM Depot	Train No.	From	To	No. of Trains	No. of Rakes	LSLRD inductedby replacing LWLRRM	LSLRD used	LSLRD Attached from	RLRA No.
1	FZR	ASR	14603/14604 ASR-SHC Jansadharan Express	ASR	SHC	1	1	1	1	03-08-2022	98/21
2	FZR	ASR	22423/22424 ASR–GKP Superfast Express	ASR	GKP	1	0	1	0	07-08-2022	98/21
3	FZR	ASR	14617/14618 ASR-BNKI Jansewa Express	ASR	BNKI	1	4	1	4	01-08-2022	129/91
4	DLI	ANVT	12487/12488 ANVT-JBN Seemanchal Superfast Express	ANVT	JBN	1	1	1	1	04-04-2022	168/21
5	FZR	JAT	12414/13 JAT-AII Superfast Express	JAT	AII	1	2	1	2	19-05-2022	23/22
6	LKO	SLN	14205/14206 AYC-DLI Express	AYC	DLI	1	4	1	4	28-11-2022	RLRA-150/22
7	LKO	SLN	14208/07 DLI-PBH Padmavat Express	DLI	PBH	1	0	1	0	29-11-2022	RLRA-150/22
8	DLI	DLI	12226/25 DLI-AMH Kafiyat Express	DLI	AMH	1	2	1	2	28-11-2022	RLRA-150/22

9	FZR	ASR	14624/23 FZR-CWA Patalkot Express	FZR	CWA	1	3	1	3	22-12-2022	RLRA-149/22
10	MB	BE	14311/12 BE-BHUJ Ala-Hazart Express	BE	BHUJ	1	3	1	3	29-12-2022	RLRA-149/22
11	MB	BE	14321/22 BE-BHUJ Ala-Hazart Express	BE	BHUJ	1	0	1	0	28-11-2022	RLRA-149/22
						11	20		20		

3.2.3 Performance of Operating Department During the year

3.2.3(i) OPERATIONS (FREIGHT)

Some of the Highlights during the year 2022-23 and 2021-22 are given below:-

- **Revenue Loading**

Northern Railway has during the year 2022-23 achieved an Originating Revenue Loading was 65.03 Million Tonnes as against 67.88 Million Tonnes during the year 2021-22 registering an decrease of -4.20%.

- **Through put**

During the year 2022-23 through put was 21164 wagons per day as against 18425 wagon par day during the year 2021-22 registering an improvement of 14.86%

- **Diesel loco utilization:**

During the year 2022-23 Diesel loco utilization was 292.05 kms. as compared to 379.36 kms. during the year 2021-22 registering decrease of -23.01%

- **Electric loco utilization:**

During the year 2022-23 Electric loco utilization was 378.22 kms. as compared to 441.34 kms. during the year 2021-22 registering decrease of -14.30 %.

- **NTKM per wagon day:**

During the year 2022-23 NTKM per wagon day was 9544.25 wagons per day as compared to 8398.83 wagons per day during the year 2021-22 registering an improvement of 13.64%

- **Wagon Kms. Per wagon day:**

During the year 2022-23 wagon kms. Per wagon day was 254.37 wagon per day as compared to 232.67 wagons per day during the year 2021-22, registering an improvement of 9.33%.

- **Piecemeal Loading:**

During the year 2022-23, 8897 wagons piecemeal loading was done as against 7295 loading during the year 2021-22 registering an improvement of 21.96%.

Yearly Performance of Operating Department (Freight)

S.no	Items		Target 2022-23	Years					Best Ever	
				2018-19	2019-20	2020-21	2021-22	2022-23	Figure	Year
1	Total Loading (Wagon/day)	BG		3104	3115	3261	3812	3647	3812	2021-22
2	Originating Loading (Wagon/ day)	BG		3104	3115	3261	3812	3647	3812	2021-22
3	Revenue Loading (Wagon/day) As per ST-7A	BG	3869	3244	3253	3531	4054	3905	4054	2021-22
4	Revenue Loading (m.t.)	BG	64.77	52.37	50.14	59.08	67.88	65.03	67.88	2021-22
5	Total Receipts (Wagon/day)			7885	7516	7560	9214	10587	10587	2022-23
6	Total Made over (Wagon/day)	BG		7896	7518	7555	9216	10577	10577	2022-23
7	SFG Loading (Wagon/day)	BG		952	806	1275	1412	1310	1412	2021-22
8	PFG Loading (Wagon/day)	BG		44	21	27	134	37	134	2021-22
9	Fertilizer Loading (Wagon/day)	BG		344	343	329	315	344	344	2022-23
10	Rly. Wagon Holding ((Wagons/ day)	BG		18288	16839	19326	19177	19825	16839	2019-20
11	Wagon Turn Round (in days)	BG	1.90	2.34	2.35	2.79	2.23	2.06	2.06	2021-22
12	BOXN Loading(Rakes/day)	BG		0.57	0.67	0.33	0.36	0.75	0.75	2022-23

12	BOXN Loading(Rakes/day)	BG		0.57	0.67	0.33	0.36	0.75	0.75	2022-23
13	BOXN Holding (Rakes/day)	BG		95.58	75.99	92.24	93.49	111.10	75.99	2019-20
14	BOXN Turn Round (in days)	BG		1.97	1.85	2.99	1.89	1.73	1.73	2022-23
15	Jumbo Loading(Rakes/ day)	BG		35.09	31.40	42.10	47.08	43.53	47.08	2021-22
16	Jumbo Holding (Rakes/day)	BG		147.91	152.18	166.31	169.41	162.40	147.91	2018-19
17	Jumbo Turn Round (in days)	BG		2.43	2.51	2.22	2.06	2.03	2.03	2022-23
18	Engine Utilization DSL.	BG	387	317.32	367.38	364.02	379.36	292.05	384.96	2021-22
	Elec.	BG	387	317.32	367.38	364.02	379.36	292.05	384.96	2021-22
19	NTKM / Wagon day	BG	8455	6947	6788	6434.67	8398.86	9544.25	9544.25	2022-23
20	Wagon Km./ Wagon day	BG	250	207	188	180.52	232.67	254.37	254.37	2022-23

3.2.3(ii) FREIGHT OPERATIONS

- **Movement of important commodities**

The originating loading of important commodities during the year 2022-23 as compared to the previous year is as under: -

S.No.	Commodity	Average number of wagons loaded per day (BG)	
		2021-2022	2022-23
1	Food grains (Sponsored)	1412	1310
2	Food grains (Public)	134	37
3	Sugar & Jagree	45	49
4	Cement	127	127
5	POL	275	223
6	Fertilizer	315	344
7	Container	1282	1251
7	Other Commodities	222	306
8	Total Loading (Originating)	3812	3647

- **Grand Total of wagon balance at 0/- Hrs of Northern Railway**

BG Wagon holding (Rly.+ Pvt.) during the year 2022-23 was 23933 as against 23554 in 2021-22.

- **Interchange of Wagons**

The interchange of trains from the adjoining railways was kept free from any restrictions and the trains were accepted freely. The details of average receipt and dispatches are given below:-

S.No.	Items	Average number of wagons loaded per day (BG)	
		2021-2022	2022-23
1	Total Receipt	9214	10587
	Total Dispatch	9214	10577
2	Receipt from ECR	1530	1939
	Dispatch to ECR	1686	2022
4	Receipt from NER	1892	2134
	Dispatch to NER	1799	1954
5	Receipt from NCR	3738	4129
	Dispatch to NCR	3589	4159
6	Receipt from NWR	2054	2385
	Dispatch to NWR	2140	2442
	Dispatch to Pakistan Rly. (Attari)	0	0

- **Railway wise Interchange Position during 2022-23 as compared to 2021-22 is given below:-**

Interchange Points	No. of wagons per day			
	Received		Dispatches	
	2021-22	2022-23	2021-22	2022-23
Interchange with E.C.Rly.				
Mughalsarai/DeenDayal Upadhyay (DDU)	1530	1939	1686	2022
Total	**1530**	**1939**	**1686**	**2022**
Interchange with N.C.Rly.				
Ghaziabad + Chipayana Buzurg	978	921	1062	1042
Palwal	1450	1606	1470	1702
Kanpur Central	803	861	612	758
Allahabad/Prayagraj (PRYJ)	165	211	40	87
Jeonathpur	119	111	95	99
Khurja	129	305	239	391
Harduaganj	94	114	71	80
Total	**3738**	**4129**	**3589**	**4159**
Interchange with N.E.Rly.				
Shahganj	47	50	38	44
Jaunpur	97	89	115	94
Varanasi	27	12	104	113
Barabanki	681	714	532	488
Ayodhya	133	183	96	139
Rampur	94	86	108	86
Moradabad / kathghar	45	40	58	54
Sitapur	588	689	595	630
Bareilly	56	60	21	35
Ramganga	45	67	37	116
Badshah Nagar	0	0	0	0
Lucknow NE	0	0	0	0
Malhour	47	77	15	28
Manak Nagar	26	33	77	93
Shahjahan pur	6	34	3	34
Total	**1892**	**2134**	**1799**	**1954**
Interchange with N.W.Rly.				

Dobhbahali(DBHL)	0	381	0	373
Rohtak	560	346	598	360
Katar Singh wala	252	366	345	426
Rewari	1022	1027	955	847
Bhatinda	141	125	77	92
Hissar	14	44	74	169
Sat Road	63	94	91	174
Sri Ganga Nagar	2	3	0	1
Total	**2054**	**2385**	**2140**	**2442**
Interchange with Pak Rly				
Atari	0		0	0

- **Wagon Turn Round**

During the year 2022-2023 wagon turn round was 2.06 days as compared to 2.23 days in 2021-22.

The month wise details of wagon turn round for BG system during 2022-2023 as compared to 2021-2022 is given below :-

Wagon Turn Round (in days)

Month	2021-22	2022-23
April	2.41	1.96
May	2.35	1.92
June	2.34	2.00
July	2.51	2.06
Aug.	2.62	2.00
Sept.	2.42	2.08
Oct.	2.16	2.27
Nov.	2.20	2.16
Dec.	2.00	2.07
Jan.	1.90	2.03
Feb.	1.92	2.07
Mar.	1.90	2.06
Avg.	2.23	2.06

3.2.3((iv) FUEL CONSUMPTION

Statement showing SFC Rates, Fuel Consumption, GTKM/EKMs earned service, gauge and traction-wise during the year 2022-23.										
Service		**Specific Fuel Consumption**	**Specific Fuel Consumption**	**Variation 1-2**	**G.T.K.M in million/ EKMs in thousands**		**HSD Oil Consumed in KLs**		**Theoretical Saving / Excess (IN KLs)**	**%age Excess / Saving**
		2022-23	**2021-22**		**2022-23**	**2021-22**	**2022-23**	**2021-22**		
		1	2	3	4	5	6	7	8	9
Liters / 1000 GTKM Pass	**DSL Elect**	3.21	3.22	-0.01	31566.49	32500.22	101196.45	104753.30	-315.66	
Goods	**DSL Elect**	1.81	1.82	-0.01	24678.52	34129.21	44740.45	62023.20	-246.79	
DMU	**PASS**	5.37	5.50	-0.13	2547.20	1270.56	13667.72	6994.31	-331.14	
Rail/Bus	**RAIL/ BUS**									
EKM / SHTG	**DSL Elect**	2.04	2.07	-0.03	4704.50	5085.24	9605.91	10530.70	-141.14	
EKM / SHTG	**DSL/ HYD**	0	0	0	0	0	0	0	0	
SHTG DMU	**DMU**	2.11	2.59	-0.48	744.42	457.74	1573.00	1183.41		
Deptt	**DSL/. ELECT**	8.57	5.10	+3.47	1.00	5.34	7.70	27.25	+3.47	
Deptt	DSL/ HYD									

Deptt	DMU	1.59	1.31	+0.28	88.68	88.02	141.34	115.50	+24.83	
	LOMS							0	0	
	TOTAL						**170932.57**	**185627.67**	**-1363.75**	**-0.80**
NG										
PASS	**PASS**	18.52	17.75	+0.77	83.43	83.23	1545.50	1477.36	+64.24	
MIXED	**MIXED**	26.05	28.16	-2.11	5.30	1.84	138.07	51.93	-11.18	
SHTG.	**SHTG.**	1.14	1.15	-0.01	202.84	222.35	231.67	256.25	-2.03	
DEPTT	**DEPTT**	1.91	2.19	-0.28	18.55	75.09	35.47	164.34	-5.19	
RAIL CAR	**R/CAR**						21.12	19.22		
LOMs	**LOMs**						31.48	27 .40		
TOTAL	**TOTAL**						2003.31	1996.50	+45.84	+2.29
BG+NG	**BG+NG**						172935.88	187624.17	-1317.91	-0.76

3.2.3.1 FUEL ECONOMY

- **Movement of important commodities**

As regards performance of Northern Railway during the year 2022-23, there has been saving by 0.76 % on Diesel traction as compared to the corresponding period of last year.

To achieve further economy in the consumption of HSD oil, the following steps are being taken: -

1. Shutting down of diesel locos where detention is likely to exceed 30 minutes.
2. Intensive checks are conducted against leakage of HSD oil from RCDs.
3. Monitoring of drivers to make use of the dynamic brakes and coasting period.
4. Monitoring of fuel consumption on the basis of fixed trip ratios.
5. Checks on fitment of fuel oil strainers and caps on locomotive tanks to avoid the possibility of pilferage of oil online and dripping out oil by splash.
6. Super checks of outgoing locos at the level of officers and supervisors of the shed for proper maintenance practice.

विद्युत
ELECTRICAL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter-IV

4.1 About the Department

Principal Chief Electrical Engineer heads Electrical Engineering Department of Northern Railway. Activities of Electrical Department of Northern Railway covers - Operation and Maintenance of Electric & Diesel Locos, Overhead Head Electrical Equipment (OHE) - its Maintenance & Operation; Planning; Electrical Freight Stock - Operation & Maintenance, Fuel Management & Disaster Management and Electrical General Power Supply - Air-conditioning, Diesel Generating set Operation & Maintenance and Water supply.

4.1.1 Shed wise Electric Locos holding as on 31.03.2023 is as under:

Shed	Div.	Holding (2021-22)	Holding (2022-23)								%age Variation w.r.t. last year
			P-1	P-4	P-5	P-7	G-7	G-9	G-12B	Total	
ELS/ GZB	DLI	281	-	-	137	165	-	-	-	302	(+) 7.5
DLS/ TKD		115	-	42	-	-	-	69	-	111	(-) 3.5
ELS/ LDH	FZR	223	-	-	-	25	08	230	-	263	(+) 17.9
DLS/ LDH		51	-	-	-	-	73	-	-	73	(+) 43.1
ELS/ KJGY	UMB	75	-	-	-	-	47	83	-	130	(+) 73.3
MELS/ SRE		200	-	-	-	-	-	-	249	249	(+) 24.5
DLS/ AMV	LKO	20	18	-	-	-	16	-	-	34	(+) 70.0
Total		**965**	**18**	**42**	**137**	**180**	**144**	**382**	**249**	**1162**	**(+) 20.4**

4.1.2 Shed wise Diesel loco holding as on 31.03.2023 is under:

Shed/ TYPE	Allotted Holding						
	DLTB	DLSL	DLSA	WLPL	KLKN	PTKN	Total
	TKD	LDH	LKO	ROZA	KLK	PTK	
Holding (2021-22)	181	163	165	250	20	19	798

WDM3A	24	72	14	0	0	0	110
WDM3D	0	0	73	0	0	0	73
WDG3A	10	48	25	0	0	0	83
WDP1	44	0	0	0	0	0	44
WDP3A	20	0	0	0	0	0	20
ALCO	**98**	**120**	**112**	**0**	**0**	**0**	**330**
WDG4	29	0	48	0	0	0	77
WDG4D	25	10	20	0	0	0	55
WDP4	10	0	0	0	0	0	10
WDP4B	20	4	1	0	0	0	25
WDP4D	24	48	28	0	0	0	100
HHP	**108**	**62**	**97**	**0**	**0**	**0**	**267**
WDG4G	0	0	0	225	0	0	225
WDG6G	0	0	0	25	0	0	25
GE loco	0	0	0	250	0	0	250
WDS6	27	8	5	0	0	0	40
ZDM3/3D	0	0	0	0	16	10	26
ZDM4A	0	0	0	0	0	10	10
Total	233	190	214	250	16	20	923
% Variation	**(+)28.72**	**(+) 16.56**	**(+) 29.69**	**0**	**(-) 20**	**(+) 5**	**(+) 15.66**

4.1.3 TRD

Item	**2021-22**	**2022-23**						**% Increase**
		DLI	**UMB**	**FZR**	**LKO**	**MB**	**Total**	
Electrified RKM	6057	1449	924	1029	1460	1408	6270	3.50%
Electrified TKM	12342	3526	1850	1958	2973	2737	13043	5.60%
TSS (Nos.)	62	21	10	12	18	17	78	25.80%
Remote Control Centers (Nos.)	5	1	1	1	1	1	5	0.00%
OHE Depots (Nos.)	64	15	11	13	15	16	70	9.37%

PSI Depots (Nos.)	7	7	-	-	-	-	7	0.00%
8 Wheeler Tower Wagons (Nos.)	50	18	09	07	14	10	58	16.00%
4 Wheeler Tower Wagons (Nos.)	35	12	05	06	08	08	39	11.42%

4.1.4 General Power Supply

S.No	Assets	2021-22	2022-23
1	Electrified stations/halts	960	951
2	Electrified quarters	59844	60411
3	Sub stations	337	337
4	Transformers	612	612
5	Generating sets	417	405
6	Total Capacity of DG Sets (MVA)	70.63	69.64
7	AC Units:		
	Window type	2548	2798
	Split type	2187	2383
	Package & Central type	49	43
8	Pumps	1353	1296
9	Lifts	166	179
10	Escalators	116	124
11	Solar street lights	498	522
12	Solar Panels at LC Gates	972	772
13	Solar Geysers	430	430
14	Capacity of Solar Power Panels/Plants installed(in kWp)	23498	24066

4.1.5 Accident Relief Infrastructure

ARTs/ ARMEs/SPARMVs& BD Cranes					
Div	**Location**	**Class of ART**	**ARME/SPARMV**	**BDCrane**	**HRE**
DLI	DLI	A	SPARMV	140-T	BEMCO
	NDLS	Road Mobile Van	-	-	BEMCO

UMB	UMB	A	ARMV	140-T	BEMCO
	UMB	Road Mobile Van	--	--	LUKAS
	BTI	A	SPARMV	140-T	MFD
	SRE	B	SPARMV	--	BEMCO
	KLK(NG)	B	ARMV	--	MFD
FZR	FZR	B	ARMV	--	MFD
	ASR	B	SPARMV	--	BEMCO
	LDH	A	ARMV	140-T	LUKAS
	PTK	A	ARMV	140-T	BEMCO
	PTK(NG)	B	--	--	--
	JAT	C(Tool Van)	---	--	MFD
	SVDK	--	---	140-T	--
	BJPL(NG)	C	ARMV	--	--
	BDGM	SPART	---	--	LUKAS
MB	MB	A	SPARMV	140-T	MFD
	RAC	B	ARMV	--	MFD
	HW	--	SPARMV	--	--
LKO	LKO	A	SPARMV	140-T	BEMCO
	FD	B	ARMV	--	BEMCO

4.2 Highlights of the Year

4.2.1 Achievements of Electric Loco wing:

Principal Chief Electrical Engineer heads Electrical Engineering Department of Northern

- **Provision of Hotel load converter**

In accordance with Railway Board guidelines, Electric LocoShed, Ghaziabad has fitted Hotel load converter in 29 WAP-5 locos (Compost converter ABB) during this year. The total population of Hotel load converter of Northern Railway is 193 (ELS GZB=173 & ELS/ LDH=20) loco.

- **Commissioning of New locos**

The holding of electric locos in Northern Railway has increased to 1162 locomotives after successfully commission of 161 locomotives (06 WAP-5 & 09 WAP-7 loco at ELS/GZB, 96 WAG-9 loco at ELS/LDH, SRE & DLS/TKD and 50 WAG-12B loco at MEPL company depot at SRE).

➢ Visit of JICA Team at ELS/GZB

A Team of Japanese Delegation visited ELS/GZB on 06.04.2022 to inspect overhead portable trolley which is being used for inspection of overhead equipment on various locations in shed's shop floor area.





• Automatic overhead portable ladder

ELS/GZB has installed an Automatic overhead portable ladder/ inspection trolley for inspection of loco roof/gantry with 500 kg weight holding capacity, 2x1 platform and maximum 20 ft. height. It is beneficial for the staff who have to work on the roof of the locos.





➢ Provision of AC duct modification

Electric LocoShed, Ghaziabad has started the modification by diverting cooled air of Cab AC towards Machine Room to reduce the temperature of Machine Room of locomotive. This modification has been done in 35005 loco. It will help to prevent temperature rise in the machine room and also reduce the failure on account of high temperature in the machine room.




- **Provision of Solar Heat Reflective Coating**

Solar Heat Reflective Coating has been done on roof of loco no. 30278 by Electric LocoShed, Ghaziabad. The benefit of this coating is that it is eco-friendly, has water & dust lockout chemistry and reflects IR and UV up to 90%. It will help to reduce loco temperature.





- **Installation of VVVF load testing machine**

Electric Loco Shed, Ghaziabad has installed and commissioned variable voltage variable frequency load testing machine for accurate monitoring of run test of TM bearing, MSU Bearing, Axle Box Bearing & Motorized bogie.







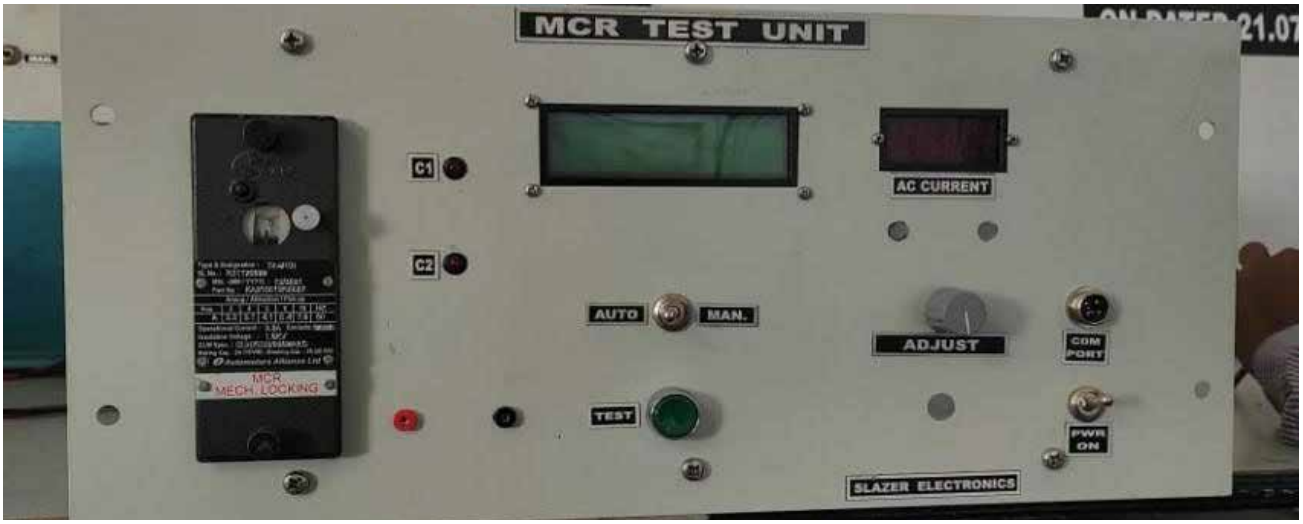
- **First time the Main Transformer waschanged at ELS/SRE**

ELS/SRE achieved a new milestone during this year by changing the Main Transformer of 3-phase loco (32948/WAG-9) for the first time ever in the shed with the assistance of ELS/ GZB Staff.



➢ **Commissioning of OCR test bench for 3 phase locomotives**

ELS/SRE has commissioned OCR test bench during this year which will improve the reliability and safety of locomotive from fire hazards.



➢ **Commissioning of HOG load testing plant**

ELS/GZB has commissioned & installed a new HOG hotel load testing plant during this year. This will be help to ensure proper HOG output voltage level and phase sequence.



➢ **Commissioning of Test Bench for calibration of loco cab meters for 3-phase &conventional locos**

Electric Loco Shed, Saharanpur has commissioned a Test Bench for calibration of loco cab meters. ELS/GZB has alsocommissioned &installed MCR, MVR, cab meter and earth fault relay test bench during this year which will enhance the reliability & safety of locomotives from unusual occurrences.

➢ **MCR test bench.**





➢ **MVR test bench.**





➢ **Cab Meter test bench.**





- **Earth fault relay test bench.**





- **Commissioning of VVVF drive for AC traction motor testing plant at ELS/LDH**

A VVVF Drive for AC traction motor testing plant has been commissioned with which run test of threetraction motors or one complete motorized bogie can be carried out at a time. One complete bogie can be tested in 02 hrs and one complete locomotive in 04 hrs. This will result in manpower saving of 08 hrs per loco and the locomotive will be turned out 08 hrs early. These saved man hours can be used for other loco maintenance activities.



- **Commissioning of 180 V DC, 60 A DC six channel charger cum dis-charger at ELS/LDH**

ELS/LDH has commissioned 180VDC, 60A DC 6 channel charger cum dis-charger for charging multi battery sets. Full charging of loco takes 4-8 hours. Using this multi channel charger, loco will be turned out faster by 08 hours improving its utilization in freight service.



- **Provision of New HOG testing Kit**

A new HOG testing kit has been made in-house by ELS/GZB. This new test kit is capable of checking the status of all the pins of the UIC COUPLER as compared to the old test kit. With this, HOG testing of locos can be done in a better way.



- **Provision of Buffer Changing Equipment**

ELS/GZB has commissioned Buffer changing equipment. With its help, buffer can also be changed in the OHE area. Due to this, loco shunting time and buffer changing time will be saved.





- **Provision of Pneumatic Gauges Test bench**

A New test bench has been made in-house by ELS/GZB for calibrating pneumatic gauges. Five different types of gauges can be tested on it simultaneously. This will not only save time but will also facilitate the staff to calibrate the gauges more efficiently & effectively.





- **Provision of Air Dryer lifting Jack**

Air Dryer lifting Jack has been made in-house by ELS/GZB to lift the air dryer. With its help, the air dryer can be easily attached and removed from the locomotive. With this, the work of overhauling the air dryer can be done in an easier and more secure manner.





- **Provision of New VCB trolleys**

4 nos. new VCB trolleys have been provided in ELS/GZB for easier transportation and better maintenance of VCBs.





- **Provision of TM Rotor stand made In-house**

TM rotor stand has been made by ELS/GZB for better maintenance on which, after placing the rotors, their inspection and maintenance will be easier.





- **Commissioning of new Rain Water Protection (RWP) Plant**

New Rain Water Protection (RWP) plant has been commissioned in ELS/GZB. This new RWP plant is capable of RWP & Filter cleaning on the same pit,which will save loco shunting time and filter cleaning time.





- **Commissioning of Test Bench for testing of 3-Phase Auxiliary Motors**

ELS/LDH has commissioned a new test bench for testing of 3- Phase auxiliary motors. This test bench consists of a variable voltage frequency drive, auxiliary winding auto tuning test and measurement of temperature of drive & non drive end bearings.This testing console is capable to test 1 kW to 35 kW loads.



- **New VCB Test bench**

A new VCB test bench has been commissioned &installed by ELS/GZB for more efficient testing of VCBs.





4.2.2 General power supply

- **Light fittings:**

1473 LED light fittings ranging from 3 watt to 250 watt and 55 nos. new 16/30 mtrs high mast towers have been provided over Northern Railway.

- **Fannage:**

179 Nos. 65 watt ceiling fans in place of old 90/ watt ceiling fans have been provided.

389 Nos. 35 watt ceiling fans in place of old 90/60 watt ceiling fans have been provided.

74 Nos. new air circulating fans have been provided at various railway stations over Northern Railway for better circulation of air.

44 Nos. Exhaust fans have been provided at service buildings over Northern Railway for the benefit of passengers and staff.

- **Commissioning of new solar panels:**

To improve the reliability of power supply, solar panels were commissioned during 2022-23 details of which are as under:

Division/ WS	Location	Capacity of Solar panel	Model
UMB	Chandigarh Railway station	140	Under RESCO
DLI	Ghaziabad Railway station	120	Under RESCO
MB	ZRTI/Chandausi	35.85	Under RESCO
MB	Chandausi Railway station	100	Under RESCO
MB	DRM office, Moradabad	30	Under CAPEX
UMB	Ambala City Railway station	70	Under RESCO
LKO	Ayodhya Railway station	50	Under RESCO

4.2.3 Mobility Wing

- **Availing power through Open Access arrangement**

Northern Railway initiated the procedure for availing power through open access for Non-Traction services.

- **Savings in Electricity Bill**

Approx Rs. 5.29 Crores annual saving achieved at four locations (3 DLI & 1 BSB) of Phase–I of FY2022-23.

a. Northern Railway has successfully executed the First ever power procurement at 11kV level for Non-Traction services for Indian Railways and started drawl of 2.95MW Power from 15 Jan 2020. A saving of Rs. 3.56 Croresapprox. annually has **been achieved in FY2022-23.**

b. BSB/Cantt. with 1 MW capacity started drawing power at 33KV level from 26 Nov 2020. Savingsat this location are nearly Rs. 1.73 Crores annually for FY2022-23.

c. Phase–II (7 locations of DLI div. and 1 location of MB div.) has been operationalizedin Financial Year2023-24 and savings of nearly 7 Crores is expectedin FY 2023-24.

d. 3 more locations over Northern Railway are under process with estimated demand of 3.2MW. Expected additional savings are to the tune of Rs. 3 to 4 Croresannually.

- **Highlights of Electric Training Centre, Ghaziabad**

a. During the year 2022-23, 215 nos. training courses were organized and 7832 nos. running as well as maintenance staff was trained by ETC/GZB against 5618 trainees in the last year (2021-22).

b. Special offline course on training of WAG-12 Loco was started from April, 2022. Total 652 trainees have attended this course during 2022-23. The training is imparted by the instructorsat ETC/GZB and the exam is being conducted by MELPL/SRE.

c. Special crash courses (offline) for three working days for the staff who had attended online courses during Covid period were arranged and a total of 325 trainees attended this course during 2022-23.

d. The topics on safe train operation, safe shunting, SPAD and under frame checking are also covered during the classroom training in loco refresher, promotional, weak loco pilot and loco conversion courses by ETC/GZB. Total 4006 trainees have attended the course during 2022-23.

e. Refresher course for WAG-12 Loco was started from July'2022.Total 121 trainees attended this course during 2022-23.

f. Refresher course for T-18was started from August, 2022. Total 27 trainees attended this course during 2022-23.

g. Special offline course on training of T-18 was started from May'22. Total 821 trainees attended this course during 2022-23. Out of these 821 trainees, 528 other zonal railway staff also attended the course.

h. Keeping in view the increase in trains on electric traction, a special course is being run especially for weaker LPs & newly converted loco pilots from DSL traction to Electric Traction. Total 56 trainees attended this course during 2022-23.

i. The emphasis on practical/simulator training to all crews is being given to improve their skills& knowledge for safe and reliable train operation in all courses as per the modules issued by Railway Board. During 2022-23, total 681 trainees (ALPs) were trained in one day simulator training for operation of RS valve and 196 trainees (LPS/LPP/LPG/LPM) were trained in 3/6 day simulator training.

j. Special Classes for integrated escorting staff of C&W and TL-AC were organized. Total 100 trainees attended the course during 2022-23.

k. ETC/GZB has developed its own website (www.etcgzb.in) during July, 2022.The website is designed in such a way that it will not only provide the complete profile of the institute but also give useful information about the training schedules, new courses, results, sports activities, cultural activities & study material i.e. Monthly Instruction Bulletin, various course books and TSDs.

4.2.4 O&F wing:

a. Two RCDs at AMG (210KL) on 20.09.22 and BSB(1670KL) on 27.08.22 were closed in LKO division.

b. Northern Railway conducted rationalization of crew links. In this exercise, saving of 27 crew sets was achieved during 2022-2023.

c. 95 pairs of trains were switched over from Diesel to Electric traction during 2022-2023 due to electrification.

d. Subsidized Meal Scheme has been implemented in LKO UP Yard Running Room of LKO division & CH Running Room of MB division.

e. Separate rooms for female running staff have been provided in ASR, HW SHG & LKO-Chg. RunningRooms.

f. CCTV in Running Rooms&CrewLobbies:

I. 12 nos. new CCTV cameras have been installed to cover all locations in Running Room& Crew Lobby at DEE of DLI division.

II. CCTV has been installed in Crew Lobbies at Chg Lobby at LKO, UP Yard LKO & AYC, BSB, SLN, PBH and RBL in LKO division.

g. Crew Lobby at Chandausi& NBD in MB division has been taken over from Traffic Department.

h. 160 nos. safety seminars were organized from Apr’2022 to Mar’2023 which was attended by 3359 nos. running staff.

i. 94 interactions sessions with family members of running staff were organized from Apr’2022 to Mar’2023 at crew lobbies of all divisions. During these interaction sessions attended by 569family members, the families were counseled to motivate to keep good environment at their homes and provide proper rest to LP/ALP for safe train operation.

j. 5753 crack trains per month (average) were run during the year in comparison to the 3558 nos. per month during the previous year.

k. Northern Railway inducted 98 ALPs for line duty during 2022-23 and the vacancy position improved from 5.6% to 4.7%. This is the lowest ever over NR. 1520 Running staff got promoted to higher grade including 636 Sr.ALP/LPS to LPG.

4.2.5 Diesel Wing:

➢ Fog Light Modification done by NR Sheds:

In view of difficulties faced by Loco Pilots during foggy weather, NR Sheds have taken initiative & a provision of high intensity fog lights has been made which can be operated from the Cab itself. This would provide aid to LPs during dense fog & improve train operation. At present 19 no. of locos have been provided with this modification.





➢ Portable Jump Starter Trolley

With the increase in number of locomotives in DSL Sheds, it has become tough to shunt locomotives for battery jumper functions. So to avoid shunting battery-rundown locomotives at the battery charging section, NR Sheds have indigenously developed a portable jump starter trolley to facilitate more accessible jump-start functions in battery-rundown locomotives. This trolley will significantly save a lot of time and, as it is made from scrap material available in Diesel Shed,will save expenditure on buying a separate trolley.

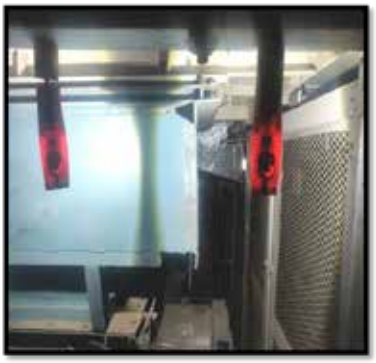
➢ Vertical Induction Heater

In Traction Motor sections of the Diesel Sheds of NR, Vertical Induction heater is commissioned. This equipment is used for heating the armature end shield (both pinion and commutator end) and inner race (both pinion and commutator end) for proper fitment of the bearing. It is also used for heating pinions of all types of Traction Motors.

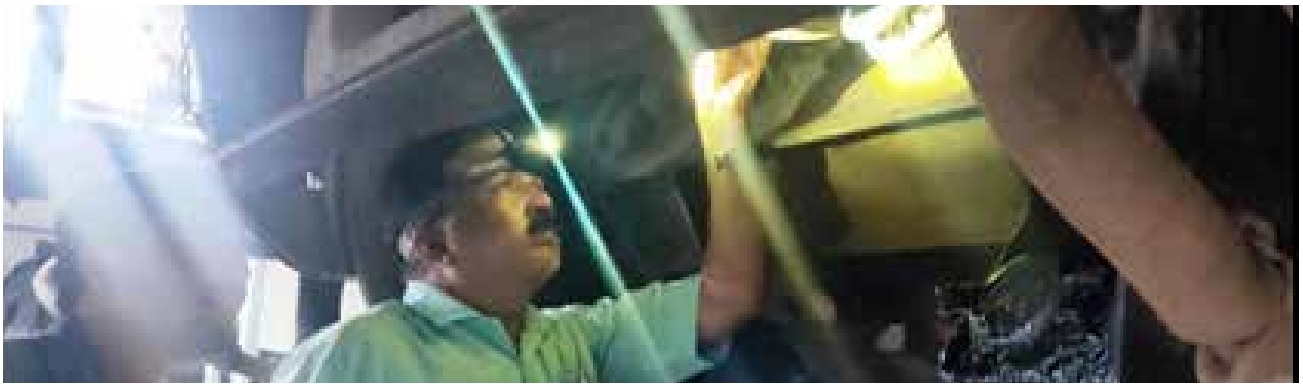


- **Diesel Loco Shed,Alambagh**

In order to improve maintenance of electric locomotives, LED based lighting arrangement with magnetic base has been provided. It will help in quality maintenance due to better visibility inside locomotive corridors and compartments.

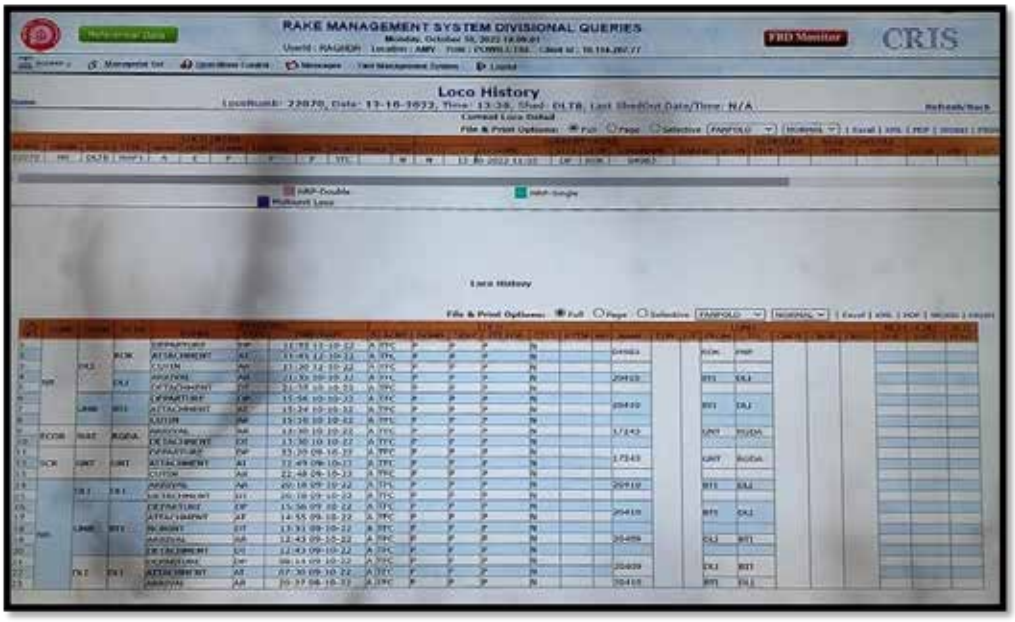


- **Diesel Loco Shed Alambagh** has introduced a high performance LED head lamp with light output of 600 lumens and with a beam distance of more than 100 meters. With the help of this device, it will be easier to inspect restricted locations in locomotives which are not clearly visiblewhile keeping both hands free for holding tools and executing maintenance activities without losing visibility of the component.





➢ **Diesel Shed Alambah,** Lucknow has installed FOIS (Freight Operations Information System) in Control room of AMV shed. It will help in Real time monitoring and accountal of locomotives.



➢ **Transformer Oil Cooling Radiator Leakage test bench:**

Diesel Loco Shed, AMV has developed an in-house test bench for testing of Transformer Oil Cooling Radiator for Electric locomotives. With the help of this test bench, leakages of transformer oil can be prevented by prior testing and identifying vulnerable locations/spots from which oil leakages are occurring/may occur from the radiator core. Hence, reliability of oil cooling radiator will be increased thereby reducing failures related to leakage of transformer oil and increasing oil cooling efficiency.





4.3 Operational Achievements

4.3.1 LocoOperational Achievements

➢ **Traction changing from Diesel to Electric:**

After completion of works of Railway Electrification over certain sections of Northern Railway, a total of 95 pair of coaching trains have been taken over on Electric traction during the year 2022-23. A recurring saving of Rs. 311.22 Cr. (approx) is likely to accrue during this financial year.

➢ **Introduction of new train on electrification:**

During this year, a tri-weekly new train No. 20957/58 (Indore-New Delhi Superfast Exp) was introduced between Indore to New Delhi on 24.08.2022. This train is being hauled by electric locos.

➢ **Improvement in Goods outage of Northern Railway:**

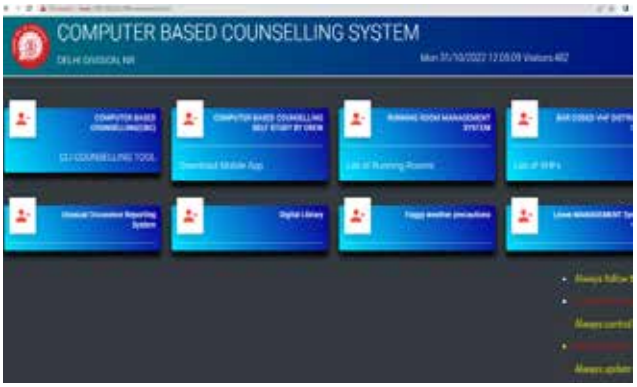
During this year, goods outage of 623.1 was achieved from Electric Loco Sheds which is 6.9% higher than the Railway Board's target of 583.0

➢ **POH schedule of electric locos at CB workshop:**

Electric Loco workshop, Charbagh turned out 31 locos (27 POH & 04 RC) during this year against the target of 25 locos.

➢ **Provision of Computer Based Counseling System:**

Computer based counseling system has been installed at TKD, GZB & PNP lobbies and NDLS ELTS. The LPs & ALPs are being counseled by CLIs through the above system.





4.3.2 General Power Supply

- **Electrification of stations/halts:**

02 Nos. (Nadigam Halt &Ratnipora Halt of Firozpur division) were electrified during 2022-23.

- **Provision of LED basedStation Name Boards and Glow Sign Boards:**

32 Nos. LED type energy efficient station name boards and glow sign boards were provided by divisions at Railway stations for Energy Conservation and for proper guidance to passengers (DLI-10, LKO-06, UMB-11 and MB-05, Total-32).





- **Provision of standard signage's:**

09 Nos. LED type standard signage boards were provided by divisions at Railway stations for Energy Conservation and for proper guidance to passengers (DLI-4 & UMB-05 Stations)

- **Illumination Improvement:**

Illumination level at different areas like platforms, concourse, circulating areas, waiting halls and FOBs at 31 Railway stations over Northern Railway was improved by providing extra fittings and enhancing the illumination by replacing existing fittings (DLI-11,FZR-02,LKO-07,UMB-1& MB-10)

- **Electrification of Newly Constructed Service buildings:**

Following newly constructed service building were electrified over Northern Railway in 2022-23.

S. No.	Division	Name of Service Building.
1	DLI	MTRC room at Gharunda Railway Station and RPF office Tuglakabad.
2	DLI	Diwana Railway station building.
3	DLI	Newly constructed control office at New Delhi.
4	LKO	Health unit at Diesel Shed TS/AMV/LKO.
5	LKO	Battery room at Babatpur Railway station.

6	LKO	Newly constructed station buildings of Mauaimma, Vishwanathganj, Sewaith, Chilbila, Jageshergan j, Darshan Nagar, Bilharghat,Ulnabhari&PiparpurRailwaystations.
7	LKO	Watch tower at the newly developed park area of Varanasi Railway station.
8	LKO	Platform sheds at Bhadiyan station, platform sheds & toilets block at Lambhua station and platform sheds and FOB at Koiripur station.
9	LKO	Lobby & PWI office at Sultanpur Railway station.
10	LKO	Station building of Tanda Railway station.
11	LKO	Legal record room and RPF office at Magistrate court at Charbagh station.
12	LKO	Station building of Kundhaur Railway Station.
13	LKO	New wiring in battery room at Virapatti Railway station.
14	MB	Dhampur Railway station building
15	MB	Newly constructed FOB at Moradabad Railway station
16	FZR	S&T Building of Banga Railway Station

- **Rewiring of service buildings:**

Rewiring of the following service buildings was done over Northern Railway in 2022-23.

S.No.	Division	Name of Service Building.
1	DLI	Mohri Railway station building.
2	DLI	SSE/AC-SP/Baroda House office, Community Hall & Dy.CVO/T room, Rooms no.42/G & 152,42/G & 152 , Commercial branch, CVO/S&T, CVO/T, Out Gate & Main Hall gallery at Baroda house.
3	DLI	Rooms no.317,333,334,525,243, 140/B, 305A, 305B & 305C, 263, 309/B, 309/C,312,312B,312C,522,302,304,306,307, 244,401, 502 , 514 308, 308A, 511A & VIP Gate Entry/Exit at Rail Bhawan& C wing switch rooms at Rail Bhawan.
4	DLI	Ward no.06 and LAB on the 3rd floor of NRCH of Delhi division.
5	DLI	Ladies toilet in the Running room, SSE/SIG office and Foot OverBridge at HNZM Railway station.
6	DLI	S&T office, CNL office, RSO office, DRM office corridor, EDP Centre & room no. 205 at DRM office Delhi.
7	DLI	Platform shelter no. 02 at Sonipat Railway station.
8	DLI	Platform no. 02 at Shakur Basti railway station.
9	DLI	DRM conference room, Pension section, Accounts section,Sr.DPO office, PRO office, RTS building Room no. 202, 209, 210, Dy. Controller chamber, Newly Creche room, URMU office & SC/ST union office at DRM Office, New Delhi.

10	DLI	General Store D section, Kitchen & Canteen counter at Shakurbasti depot, Sub-station no.1 at Sarojini Nagar.
11	DLI	FOB at Pataudi Road Railway station.
12	DLI	Running room and PF no.1 at Panipat Railway station.
13	DLI	SS office, Rest house, Passenger Hall at Karnal Railway station.
14	DLI	Relay hut, PWI store and Microwave building at Kurukshetra Railway station.
15	DLI	UTS booking and CTI office at Delhi Sarai Rohillastation.
16	DLI	CTLC control, operating branch, 03nos. Chamber/Cabin in control office at DRM office, New Delhi and 10 nos. rooms on the first floor in the MSSR building, New Delhi.
17	DLI	Dispensary at the LPNR Railway colony, K.G School at TKD,TRD workshop and IOW store at TKD.
18	DLI	Badminton hall & multi-sports complex at Karnail Singh stadium New Delhi.
19	DLI	Pump house no.4, Pump house no.6, PWI campus at Kurkshetra Railway station and FOB at KurkshetraRailway station.
20	DLI	FOB &Pump house at Bijwasan Railway station.
21	DLI	08nos. room in station building and FOB and Waiting hall at BhodwalMajri Railway Station.
22	DLI	MSSR Running room and AEE/Chg office in Rajdhani Complex at NDLS Railway station.
23	LKO	Union office at Pratapgarh.
24	LKO	Indoor dressing room, Burn ward, Exchange & camera room, New substation and Main store at NRDH Lucknow.
25	LKO	Health unit under Diesel shed TS/AMV/LKO and Battery room at Babatpur of Lucknowdivision.
26	LKO	Store room of Sr.DMMat DRM office,Lucknow.
27	LKO	Up yard panel room, Mechanical vacuum room,PRS campus at Charbagh Railway Station of Lucknow division.
28	LKO	New mechanized laundry in Alambagh.
29	MB	RPF barracks at Moradabad station.
30	MB	Officers Rest House at Najibabad Railway station.
31	MB	Officer Rest House Moradabad.
32	MB	Rewiring work of DEN/BE of Moradabad division.

33	MB	Two second class waiting halls and one Ist class Gents/Ladies waiting hall at Sahajahanpur Railway station.
34	FZR	TTE Running Room at Ludhiana Station station.

4.3.3 TRD

- **Commissioning of Newly Electrified Sections During 2022-23**

Electrification work is going on at a rapid pace in NR under mission 100% electrification. A total of 523.35 RKM and 1178 TKM were electrified during FY 2022-23. With this 93% (6581RKM) route kilometer of Northern Railway has been electrified and Delhi, Lucknow and Moradabad divisions have been completely electrified.

The details of electrified sections during the year 2022-23 are as under:

- **New Electrified Sections:**

S. No.	Date	Section	Divn	RKM	TKM
1.	26.09.2022	Banihal- Budgam	FZR	88.48	125
2.	21.11.2022	Bhatinda- Kotkapura	FZR	41.683	58.138
3.	29.12.2022	Jallandhar-Lohiankhas	FZR	48.76	60.77
4.	06.02.2023	Ludhiana-Jagraon	FZR	37	43.58
5.	27.03.2023	Verka-DeraBabananak	FZR	45.16	50.83
6.	27.03.2023	Cheharta-Atari	FZR	17.67	27.71
7.	28.03.2023	Tarn Taran- Khemkaran	FZR	54	57.44
8.	28.03.2023	Phagwara-Nawanshahr	FZR	35	42.97
9.	29.03.2023	Jagraon-Moga	FZR	32.68	46.04
10	29.03.2023	Moga- Firozpur	FZR	50	57.46
11.	29.03.2023	Bathinda-Abohar	UMB	72.92	91.07
Total				**523.35**	**1178**

- **Electrification of Doubling sections, sidings:**

S. No.	Date	Section	Divn	RKM	TKM
1.	13.04.2022	Stabling line no. 8 & 9 at New Delhi yard	DLI	0	1.5
2.	18.04.2022	Neri-Sitapur Doubling	MB	0	33.16
3.	29.04.2022	Leftover 21 nos. sidings	LKO	0	24.047
4.	13.06.2022	Amethi- Antu Doubling	LKO	0	26.88

5.	15.06.2022	Line no. 1 & 2 of Dhuri yard	UMB	0	2.368
6.	27.06.2022	ALTP and JPL sidings	MB	0	0.526
7.	19.07.2022	Kheta Sarai-Meghawan Doubling	LKO	0	48.91
8.	05.08.2022	Akbarpur- Goshainganj Doubling	LKO	0	27.36
9.	10.08.2022	Rohtak-Dobh Line	DLI	0	5.9
10.	08.08.2022	Bhatinda- BhatindaCantt. Doubling	UMB	0	18.36
11.	02.09.2022	Additional loop line at Manak Nagar	LKO	0	2.24
12.	12.09.2022	Bari Brahman station yard	FZR	0	6
13.	19.10.2022	ACC siding, Gauriganj	LKO	0	6.012
14.	11.11.2022	MTSS siding, katarsinghwala	DLI	0	51.4
15.	23.12.2022	IFFCO siding, Bashratganj	MB	0	11.917
16.	25.01.2023	Nabha-Kaulseri Doubling	UMB	0	38.54
17.	01.02.2023	Jaunpur- Mahgawan Doubling	LKO	0	8.295
18..	01.03.2023	Pratapgarh- Antu Doubling	LKO	0	27.82
19..	17.02.2023	Shahganj- Khetasarai Doubling	LKO	0	11.42
20.	24.03.2023	Lehramohabbat-Bhatinda Doubling	UMB	0	34.37
21.	05.03.2023	RGTP siding, Barwala	UMB	0	18.78
Total				**0**	**516.55**

- **Electrification of non-electrified/ leftover sidings over electrified sections:**

For seamless operation of Electric Traction and for reaping the full benefits of Electrification, 31 Nos. left over sidings and leftover lines in already electrified sections have been electrified during 2022-23.

- **EIG SANCTION ACCORDED:**

83 Nos. EIG sanctions were accorded for energisation of OHE, TSS, SP, SSP, ATs etc over different divisions of Northern Railway during 2022-23.

- **160 KMPH speed raising on New Delhi-Mumbai & Delhi-Howrah Route:**

Work of 2x25KV OHE modification work in connection with 160 KMPH speed raising on New Delhi-Mumbai & Delhi-Howrah Route is going on at a rapid pace. Tenders for OHE & Feeder works on both New Delhi - Mumbai route & New Delhi -Howrah routes have been awarded.

As per Railway Board’s instructions, scheme of 2x25KV system modifications in sub-urban area of Delhi has been revised and 2x25KV systems is now being implemented on the entire route from New Delhi to Palwal and New Delhi to Chipyana. As per the revised scheme, 53% foundation and 43% mast erection, 71% catenary & 45% contact wire replacement have been completed and 57% OHE has been modified & made fit for 160KMPH on Delhi-Mumbai route (NDLS-PWL section) upto Mar’23.

52% foundation, 34% mast erection and 41% catenary replacement has been done and 25% OHE has been modified & made fit for 160KMPH on New Delhi-Howrah route (NDLS-CPYZ, CNB-LKO section) upto Mar'23. These works will be completed as per Rly. Board's target.



4.3.4 Diesel Loco Operation and Fuel

- **Operation of Diesel Locomotives:**

	TKD	LDH	LKO	TOTAL
Mail Link	73	92	14	179
No. of Mail Train	42	40	2	84
No. of Pass. Train	18	67	12	97
Utilization of Mail Link Loco	470	364	285	408
Mail Links kms /day	34285	34742	3984	73011

- **Crew Booking Lobbies Division Wise (Traction O&F):**

Division	Crew Booking Lobbies
DLI – 13	DLI, DEE, SSB, JHI, JHL, MTC, ROK, GZB, ANVT, NZM, TKD, PWL, PNP
UMB – 7	UMB, SRE, BTI, DUI, CDG, KLK, NLDM
MB – 11	MB, BE, RAC, LRJ, HW, DDN, BLM,HPU, CH, NBD, YNRK
LKO – 7	AYC, BSB, RBL, PBH, SLN, LKO/Chg, LKO/Yd.
FZR –9	LDH, ASR, JUC, PTK, BJPL, JAT, FZR, SVDK, BDGM
Total	**47**

- **Running Staff/Supervisor cadre control and Running Rooms under (Traction O&F) Department as on 31.03.2021:**

Division	Running Staff & Supervisor Sanctioned Strength	Running Rooms
DLI	4503	DLI, DEE, SSB, JHL, JHI, MTC, SMQL, ROK, GZB, ANVT, NZM,TKD, PNP, PWL (14)
UMB	1876	SRE, BTI, UMB, SML, DUI, RTP, NLDM, CDG (8)
MB	2563	MB, BE, RAC-TM, RAC-LP, CH, NBD, HW, DDN, BLM, HPU (10)
LKO	2483	LKO-Chg., LKO-Yd, AMG, AYC, BSB, PBH, SLN, JNU, PLP, TD, PYGS, SHG, UCR (13)
FZR	1831	LDH, ASR, JUC, PTK, BJPL, JAT, UHP, SVDK, FZR(9)
Total	**13256**	**54**

- **Railway Consumer Depots:**

Division	Northern Railway Consumer Depots			
	Daily Average Issue in (KL)			Remarks
	RCD	Cap. in (KL)	FY 2022-23	
DLI	NDLS	1010	30	
	TKD	800	27	
	SSB	660	11	
	DLI	440	61	
	NZM	90	11	
	ROK	400	65	
	ANVT	145	15	
	DEE	400	33	
FZR	LDH Shed	730	12	
	LDH Lobby	380	47	
	JUC	210	21	
	ASR	350	13	
	PTK	210	6	
	JAT	490	16	
	BDGM	540	8	
	BJPL	20	1	
	SVDK	140	4	

UMB	BTI	1240	116	
	UMB	520	22	
	KLK	140	4	
	CDG	45	4	
	SRE DN	190	14	
LKO	BSB	-	7	Closed on 27.08.22
	CB / LKO	1905	50	
	AMV	470	6	
	AMG	-	3	Closed on 27.08.22
MB	MB	1446	62	
	RAC	1640	35	
Total		**14611**	**704**	

- **RCDs Switched Over to road / pipe line supplies**

Before 2008-2009	**2**	**KLK & JAT (Road/pipe line)**
2008-2009	5	SRE/UP, SRE/DN, UMB, PTK & BDGM
2009-2010	8	ASR, LDH/Lobby, LDH/Shed, JUC, AMV/LKO, HNZM, SSB & TKD
2010-2011	3	DLI, ROK & BTI
2011-2012	2	ANVT & BJPL
2012-2013	1	AMG/LKO
2013-2014	Nil	
2014-2015	Nil	
2015-2016	1	DEE
2016-2017	1	SVDK
2017-2018	Nil	
2018-2019	Nil	
2019-2020	Nil	
2020-21	1	CDG
2021-22	Nil	
2022-23	Nil	
Total	24	

4.3.5 Diesel

- **Development of Stocks-**

S. No	Parameter	Up to Mar'2023	Up to Mar'2022
1.	Direct PL/100 ML/Month	6.9	9.5
2.	Asset Failures-NR-IR Cases/100LH/ Month	6.6	9.7

- **The targeted passenger and goods outages as for 2022-23 are given below:**

Availability/Outage	Up to Mar'2023	Up to Mar'2022
Target	242.06	251.3
Actual	280.50	287.6

- **Specific Fuel Consumption/1000 GTKM:**

Shed	Cumulative 2021-22		Cumulative 2022-23	
Target	Passenger	Goods	Passenger	Goods
TKD	3.36	1.82	3.36	1.82
LDH	3.11	1.80	3.12	1.81
AMV	3.19	1.81	3.19	1.81
TOTAL (average)	3.23	1.81	3.20	1.81

- **Lube Oil Consumption inLtr. /100 EKM in the FY 2022-23:**

Shed	TKD	LDH	AMV	BG (O/A)	Cumulative (Up to Mar'23)	Cumulative (Up to Mar'22)
LOC	2.27	2.16	2.31	2.23	2.16	2.13

- **Performance of M/s WLPL Company Depot at Roza During 2022-23:**

S. No.	Parameter	Target	Actual
1	Holding	250	250
2	Availability	95%	95.37%
3	Normative distance-KM/Loco in a year	1,50,000 KM	1,05,381.37 KM
4	Reliability-MDBF (Mean distance between failure)	75000 KM/Failure	64226.94 KM/ Failure
5	SFC-GM/BHP-Hrs	172 gm/ BHP.HR	164.94 gm/BHP.HR

4.4 PERFORMANCE:

4.4.1 Loco Performance:

S. No.	Item No	Target 2022-23	Performance					Best Ever	
			2018-19	2019-20	2020-21	2021-22	2022-23	Figure	Year
1.	**Ineffective %age**								
(a)	Electric Loco(Stat)	**9.0**	8.0	7.6	6.1	6.0	6.6	6.0	2021-22
(b)	Electric Loco(Hourly)	15.2	16.2	15.1	10.8	10.8	10.1	10.1	2022-23
2.	**Failure**								
	Electric Loco (NR+FR on NR)	-	701	768	773	1468	1547	701	2018-19
3.	**Engine Kms/failure (in lakhs)**	-	2.31	2.37	9.74	3.56	2.49	9.74	2020-21
4.	**Loss of Punctuality (Inc)**								
	Electric Loco	-	277	238	53	221	425	53	2020-21
5.	**SEC (Goods)**	-	4.77	5.78	7.60	9.36	8.58	4.77	2018-19

4.4.2 OHE Performance:

Punctuality Performance: Regular thrust is being given to maintain OHE reliability through implementation of reliability action plan. TRD failures over NR have slightly increased due to increase in failures in DLI area as TRD assets of DLI area have become over aged (>45years) & weak replacement of which is being done in phased manner.

The punctuality performance comparison of the last five years is as follows.

S. No.	Item	Target for 2022-23	Performance				
			18-19	19-20	20-21	21-22	22-23
1	Internal failures (nos.)	**-**	27	48	9	31	50
2	Overall failures (nos.)	**62**	92	83	16	56	69
3	Internal failure/100TKM	**-**	0.28	0.46	0.08	0.25	0.36

4	Overall failures/100TKM	**0.52**	0.94	0.79	0.14	0.44	0.50
5	Punctuality loss on OHE account (No. of Trains)	**-**	294	455	49	197	309

*2020-21: TRD failures decreased due to reduced nos. of train operation due to Covid-19 Lockdown.

Asset Failures: Regular thrust is being given to maintain OHE reliability through implementation of reliability action plan. TRD asset failures over NR have reduced gradually compared to previous years. The performance of TRD in the last 3 years is as under:

Parameters	**MoU Target 2022-23**	**Tr.D Asset failures**			**% variation (Increase(+) / Reduction(-)**	
		2019-20	2021-22	2022-23	% reduction w.r.t 2019-20	% reduction w.r.t 2021-22
TRD Asset failures (Nos.)	5% Improvement	436	386	276	-36%	-28%
TRD asset failures per 1000TKM		42	32	20	-52%	-37%

*Failure cases were very less in FY 2020-21 due to reduced train operation during Covid-19 pandemic lockdown. Therefore, % variation is compared with performance in FY 2019-20 and FY 2021-22.

4.4.3 General Power Supply

S. No.	**Item No**	**Target 2022-23**	**Performance**					**Best Ever**	
			18-19	**19-20**	**20-21**	**21-22**	**22-23**	**Figure**	**Year**
A	**Energy Conservation**								
1	**Energy consumption (MU)**	302.96	306.17	315.44	279.29	314.54	319.11	279.38	20-21
2	**Unit Generation by Solar panels (MU)**	27.58	10.47	10.75	12.74	17.77	16.95	17.77	21.22

3	**Provision of 5 Star rated equipment by venders at Railway stations (Nos. of stations)**	50	-	-	46	52	34	52	21-22
4	**Automation of pumps with GSM technique**	364	53	117	10	96	239	239	22-23
5	**Electronic energy Meters in Railway installations**	22000	-	-	-	18	200	200	22-23
6	**Use of LED tube lights (lamp) in place of T-8/T-12 FTL & MH Fittings**	**-**	**393463**	**-**	**-**	**-**		**393463**	**18-19 (All replaced)**
7	**Replacement of FTL & T5 lights with LED**								
8	**Automatic switching Power Factor improvement (Nos.)**	**25**	**15**	**15**	**28**	**26**	**30**	**30**	**22-23**
9	**Solar water heater at Running Rooms & hospitals**	**-**	**01**	**01**	**02**	**0**	**0**	**02**	**21-22**
10	**Automatic Switching OFF/ON of Platforms Light for all Stations (70% & 30% Circuit)**	**56**	**-**	**-**	**-**	**05**	**28**	**28**	**22-23**

11	**Segregation of domestic loads.**	**7**	**4**	**8**	**02**	**05**	**03**	**08**	**19-20**
12	**Replacement of 90 watt ceiling fans by 60/35 watt ceiling fans**	**-**	**345**	**1611**	**239**	**389**	**1190**	**1611**	**19-20**
13	**Replacement of Overhead conductors with Underground cables. (No. of locations)**	45	-	-	50	62	31	62	21-22
14	Use of solar street lights for (a) remote place at colonies (b) training institutes (c) Retiring rooms (d) officers rest house	-	19	-	-	-	24	24	22-23
15	Use of 5 star rated pump sets	165	173	131	110	156	196	196	22-23
16	Provision of LED based station name boards (Nos.)	39	-	37	48	63	32	63	21-22
B	**Passenger Amenities**								
1	Improvement in illumination at stations i.e. platforms, FOB, circulating area, waiting halls, booking office / enquiry office, concourse, Retiring Rooms,	26	26	58	14	23	31	58	19-20

2	Provision of standard signages. (No. of stations)	25	67	21	04	03	09	67	18-19
3	Improvement in lighting in circulating area by providing high mast towers	-	05	14	02	16	01	16	21-22
4	Provision of Mobile/Lap top charging point (Nos.)	-	43	32	44	34	14	44	20-21
5	Commissioning of Lifts (Nos.)	12	14	06	08	10	13	14	18-19
6	Commissioning of Escalators (Nos.)	14	18	04	13	07	08	18	18-19
7	Provision of additional water coolers at stations	-	-	-	23	22	5	23	20-21
C	**Staff Amenities**								
1	Rewiring of quarters.	1600	1025	1208	842	859	774	1208	19-20
D	**Traffic Amenities**								
1	Improvement in illumination in washing line, sick line, yard (No of stations)	-	-	12	0	9	03	12	19-20
2	Improvement in goods shed/freight terminals	-	41	48	14	49	41	49	21-22
3	Electrification of stations/ halts	-	-	04	11	03	02	11	20-21
E	**Safety**								
1	Electrification of eligible manned level crossings	-	361	178	20	8	20	361	18-19

F	System Improvement								
1	AMF Panel on DG sets more than 100 kVA.	-	02	01	02	01	04	04	22-23
2	Maintenance free earthling	-	-	-	04	82	8	82	21-22
3	Pre- paid meters within vender's premises	1832	-	08	-	18	200	200	22-23

4.5 SAFETY PERFORMANCE

4.5.1 General Power Supply:

- **Electrification of Manned Level Crossings**

With a view to improve safety of road users, 20 level crossing gates have been electrified by providing solar panels or availing electric connection from State Electricity Boards.

4.5 SAFETY PERFORMANCE

4.6.1 Passenger Amenities

- **Provision of escalators at stations**

Escalators at New Delhi Railway station (01 No.) and H.Nizamuddin Railway station (01 No.) of Delhi division and Varanasi Railway station (02 Nos.) and Ayodhya Railway station (04 Nos.) of Lucknow division (total 08 nos.) have been commissioned for facilitation of passengers as well as for old aged &Divyang (Physically challenged) passengers and for speedy dispersal of commuters during rush at platforms.



(Escalator at Ayodhya Railway station)

- **Provision of Lifts at stations**

Total 07 nos. Lifts were provided at New Delhi Railway station (01 No.), H.Nizamuddin Railway station (01 No.) and Kurukshetra Railway station (02 Nos.) of Delhi division and Ayodhya Railway station (06 Nos.), VaranasiRailway station (02 No.) and Lucknow Railway station (01 No.) of



(Lifts at Ayodhya Railway station)

Lucknow division for benefit of divyang and aged passengers.

- **Improvement of illumination at Freight terminals/Goods sheds:**

To facilitate loading/unloading during night hours, illumination level at 41 freight terminals/ goods sheds (DLI- 6, FZR-22,UMB-2 and MB-11) has been improved.

- **Improvement of illumination at washing line, sick line, yard:**

To facilitate the working of staff during night hours, illumination level at 03 washing lines, sick line and yard (DLI-1and LKO-02) has been improved.

- **Provision of water coolers:**

05 nos. new additional water coolers have been installed at various locations over Northern Railway during the year for the availability of cold water to passengers (DLI-05).

- **Provision of Pit Lights:**

521 nos. Pit light fittings have been installed in 06 washing lines (DLI-04,UMB-01& LKO-01) over Northern Railway to improve the illumination level for efficient working of Train maintenance & operations staff.

- **Augmentation of pumping arrangements:**

22 nos. new submersible pumps have been installed in newly commissioned bores over Northern Railway to augment the water supply at Railway colonies and stations during 2022-23.

- 196 nos. Five Star rated submersible pump sets (DLI-67,FZR-67,LKO-16,MB-20 and UMB-26) have been provided in place of inefficient pumps.

- 26 Joint Water supply reviews have been conducted and signed by Sr.DEE/G and Sr.DEN during 2022-23.

- **Provision of Mobile/Laptop charging point:**

14 nos. Mobile charging points have been provided at various Railway stations for facilitating the passengers.

4.6.2 Staff Amenities

- **Rewiring of staff quarters:**

Rewiring has been done for 774 nos. (DLI-412, FZR-07, LKO-42, MB-77 & UMB-236) staff quarters.

4.6.3 System improvement in TRD during 2022-23:

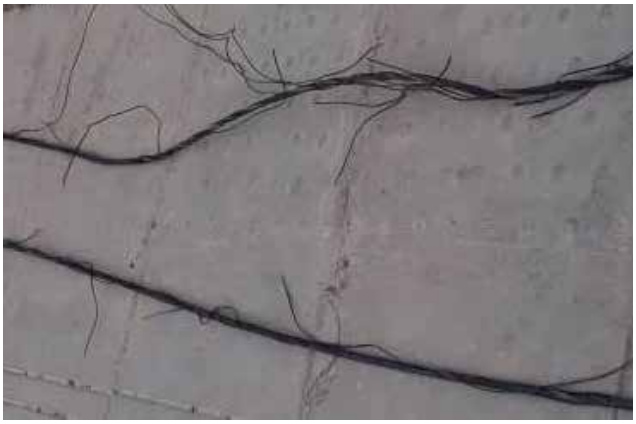
The following measures were taken during 2022-23 for system improvement:

- **Replacement of corroded/weak/damaged catenary wire:** Electrification in Delhi area

was carried out from 1976 onwards. The OHE assets have become old and also cause presence of heavy pollution in DLI area, the condition of TRD assets has deteriorated. Catenary wires have got corroded and weak.Wires have also got damaged due to kite threads and other foreign materials on OHE. Splicing is being done even if a single strand is founded damaged. This was also increased nos. of splices cause weakening of the catenary wire. To overcome this, replacement of catenary wire is being done in phased manner.

During the year 2022-23, 230 Kms of old and weak Catenary wire has been replaced in identified polluted zones and tension lengths having more than 15 splices. It is the highest replacement done so far in a F.Y. Also, at 1825 locations, catenary wires were spliced due to strands found damaged.





➢ **Replacement of brazed jointed Contact wire:** Electrification in Delhi area was carried out from 1976 onwards. Contact wire used since then was manufactured with silver brazed joint at around 100 meters intervals till 1995. Failures of opening of brazed joints started from the year 1989. Hence, a drive was launched to replace all contact wire with silver brazed joints in a phased manner. During the year 2022-23, 71 KMs failure prone brazed jointed Contact wire was replaced by Delhi division.



➢ **Replacement of corroded Cantilever Assemblies:** Severe effect of chemical pollution on TRD assets has been observed in different sections of NR due industrial affluent from factories near the tracks. This has caused corrosion in Cantilever Assemblies around polluted areas especially in Delhi, MB, FZR & UMB divisions. Therefore, these corroded cantilever assemblies are being replaced. During the year 2022-23, 3927 Nos. rusted cantilevers were replaced in polluted areas.





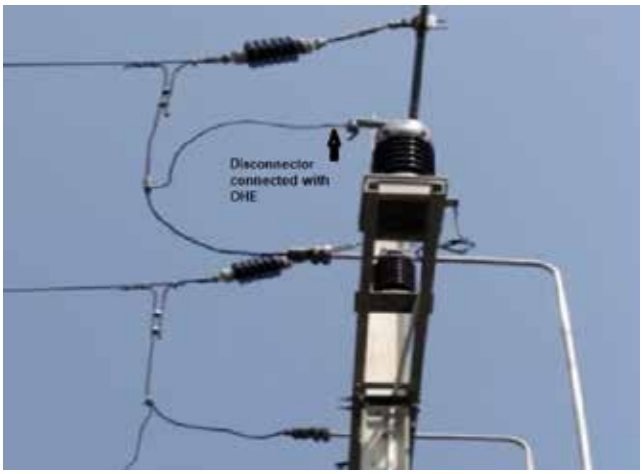
➢ **Removal of corroded steel anti creep wire:** There is a problem of corrosion in steel anti creep wire around polluted areas especially in Delhi, MB, FZR & UMB divisions. Therefore, these anti creep wires are being replaced by copper catenary wire. During the FY 2022-23, 233 nos. Corroded steel anti creep wire were replaced with copper catenary wire.





➢ **Provision of Disconnectors on Lightning Arrestors (LA):** In the event of failure of an LA on line, the line does not hold till the failed LA has been identified and physically isolated. This leads to serious traffic interruptions. Hence Disconnectors are being provided which will disconnect the LA from OHE upon failure thereby ensuring that traffic interruptions does not occur while also permitting much faster restoration. Also, this device will give tell-tale indication for visual identification of failed LA. A drive was launched to ensure provision of Disconnectors on all gantry LAs over Northern Railway and 151 nos. Disconnectors have been provided on gantry LAs during the FY 2022-23.

➢ **Modification in provision of Disconnector assemblies on LA:** Earlier as per RDSO's SMI, Disconnector assemblies were provided at the bottom of the LA. However, due to several failures of disconnector provided at the bottom, RDSO revised the SMI for provision of Disconnector at the top of the LA. Accordingly, the earlier provided LA disconnector assemblies are being shifted to top ofLA. 375 Nos. Disconnector assemblies have been shifted this FY 2022-23. It will help to avoid OHE failures in case of LA failure.



➢ **Installation of a new Capacitor Bank at Shahabad Markanda/TSS:-** To improve the Power Factor for future increase in load due to increase in electric trains over DUK section, a new Capacitor Bank (5500 KVAR) was installed at Shahabad Markanda/TSS in DLI Division.





➢ **Electrification of Diesel Shed at Tughlakabad:-** Electrification of Diesel Loco Shed, Tughlakabad in connection with creation of maintenance & testing facilities for homing of electric Locomotives has been done. Successful loco trial has also been carried out.





➢ **Replacement of overaged PSI equipments:** The following overaged PSI equipments were replaced over DUK section in DLI division-

- **2 nos. 66 KV SF-6 type CBs (CB-285 & CB-286) at Narela/TSS and 1 no. 132 KV SF-6 CB (CB-291) at Diwana/TSS.**
- **6 nos. 25 KVBs (CB- 289 & CB-290 at Narela/TSS and CB- 293, CB-294, CB-295 & CB-296 at Diwana/TSS).**
- **6 nos. 25 KV interrupters (BM-355, BM-356, BM-357, BM-358, BS-26& BC-05) at Diwana/TSS.**
- **2 nos. 66 KV CTs (CT-359 & CT-360) at Narela/TSS.**





➢ **Provision of neutral section on North BG Line between Patel Nagar and Delhi Cantt.:** Galland make short neutral section has been provided on North BG line between Patel Nagar and Delhi Cantt in DLI Division. (The work of provision of this neutral section was left out since its electrification i.e. 2020).





➢ **State Energy Management Centres (SEMC)** has been set up at Delhi (Delhi & Haryana State), Ambala (Punjab state) and Lucknow (UP state). This will facilitate transfer of real time data from Traction Sub Station/Grid Sub Station to SLDC (State Load Dispatch Centre) and will help in forecasting daily schedule for purchase of power.





➢ **Replacement of overaged assets:** To improve the reliability and proper functioning of switching posts, overaged battery sets are being replaced. During the year 2022-23, 54 overaged battery sets at RCC/TSS/ SP/SSP have been replaced.



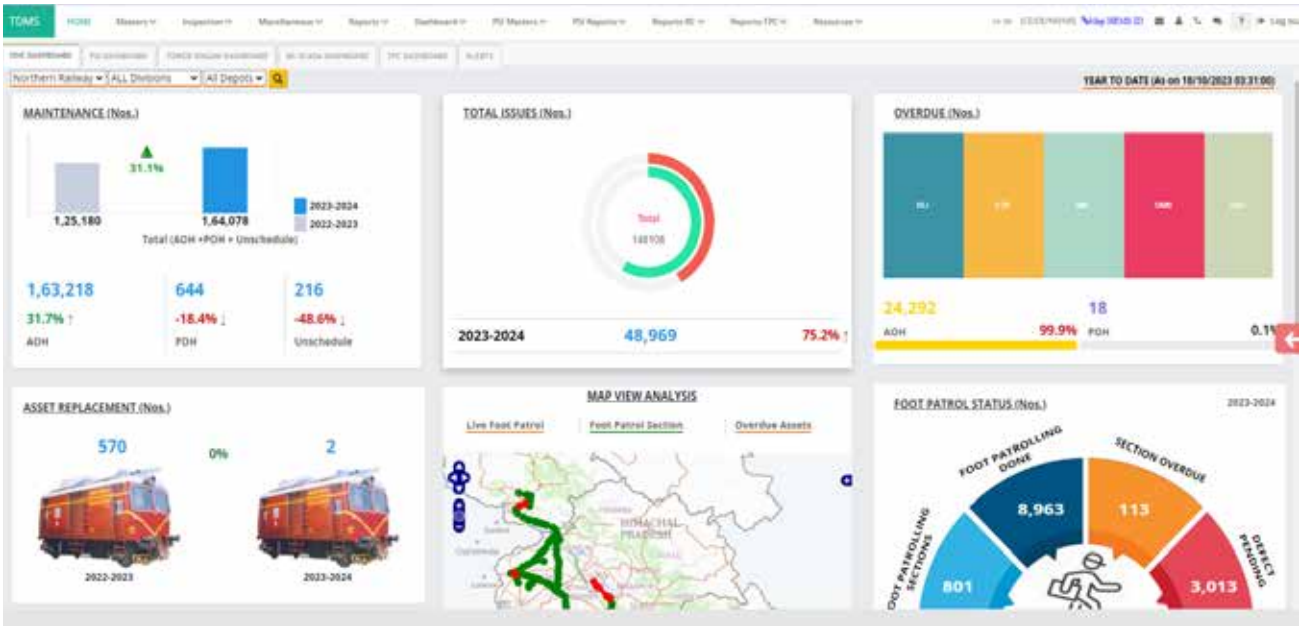
➢ **Improvement of earthing system of switching posts by provision of buried rail:** In order to limit rising rail potential due to its adverseeffect on efficacy of existing protection scheme and safety of Rail vehicles, earthing station should be provided near the switching posts (SP/SSP). For this, an earthing station with buried rail is being provided at switching posts to create a positive, strong and deliberate earth connection to improve system resilience. 32 nos. earthing stations with buried rail have been provided at switching stations during the year 2022-23.

➢ **Provision of 2nd Bay at Rasuiya(RYS)/TSS:** 2nd bay was constructed at RYS/TSS of Moradabad division.



➢ **MOCK DRILL:** Mock Drill at depots over all divisions was arranged for exposure of staff to Breakdown situation. Breakdown management, restoration planning & time taken by staff for each activity were noted and action planed accordingly.

➢ **Traction Distribution Management System (TDMS):** In view of digitalization of assets and maintenance in TRD department, CRIS has developed a software for TRD maintenance called “Traction Distribution Management System (TDMS)” for paper less working. Being Nodal agency for implementation of TDMS project, NR has assisted in developing various modules for OHE & PSI assets details & maintenance work along with several managerial reports. Thesame has now been rolled out by CRIS for Pan India implementation. NR has implemented TDMS in all TRD depots. Assets data entry has been 100% completed. Maintenance data is also being filled up regularly.



➢ **Foot patrolling App:** All the TRD staffs deployed for Foot patrolling are currently using a Mobile App developed by CRIS over Northern Railway. This has led to real time remote monitoring of defects& deficiencies and helped in taking timely corrective action for rectification of defects.

➢ **Traction Energy Management System (TEMS):** Northern Railway is procuring power through open access to save approxRs 300 Crores in its energy bill annually. Open access scheduling & forecasting of power requirement was being done manually based on past trends. Better scheduling & forecasting can help to maximize the profit. Hence, Traction Energy Management System has been commissioned in Delhi, Lucknow&Ambala division for scheduling & forecasting of Traction Power through software. Basic software is under trial for scheduling & forecasting of Power in the states of Delhi, Haryana, UP& Punjab.

4.7 Green Energy Initiatives

a) 545 Kwp Power Plant:

545 KWp Grid connected solar power plants have been installed at 01 location (120 KWp) over Delhi division, 01 location (50 KWp) over Lucknow division, 02 locations (210 KWp) over Ambala division and 03 locations (166 KWp) over Moradabad division to enhance the use of green energy under PPP model. Total 7.96 Lakhs units are expected to be generated from these plants annually which will result in a saving of Rs. 47.74 Lakhs and reduction of 652.47 tonnesof Co2 emission per annum.





b) Solar natural water coolers

02 nos. solar natural water coolers have been installed at Kurukshetra&Panipat Railway stations of Delhi division for availability of cold water facility



c) Remote controlling and monitoring of ACs in the relay rooms.

117 nos. devices for Remote Controlling of ACs have been installed at S&T installations (Relay Rooms) in Moradabad Division for efficient and economic operation of installed ACs.

4.8 Economy Measures

4.8.1 LOCO

- **Energy Regeneration on 3 Phase Electric Locos**

Energy regeneration worth Rs. 137.55 Cr. approx has been achieved during this year by use of regenerative braking in three phase electric locos.

- **Scrap disposal:**

Electric loco sheds disposed off 462.465 MT ferrous scrap, 22.609 MT non ferrous scrap, 212 nos. empty drums, 271 nos. lead acid batteries, 209 nos. bearings, 18.890 MT rubber scrap &17 nos. truck tyre/tubesduring the year.

4.8.2 Electrical General Power

- **Provision of LED tube lights (lamps) in place of high wattage fittings:**

2997 LED fittings in place ofhigh wattage fittings have been provided at various Railway station buildings.

- **Four 11/.750 KV CSS has been successfully operated in Dehradun Depot (02W/L), of Moradabad division& Chandigarh depot (02 W/L) of Ambala division due to which EOG SUPPLY is being givenduring daily repair work in washing line and sick line. With its commencement there will be no air pollution in the daily repair work and there will be an annual saving of about 2 lakh liters of diesel.**

- **Automation of pumps:**

239 pumps (DLI-164, LKO-13, MB-12 and UMB-50) have been automated with GSM technique to improve the reliability of water supply.

4.8.3 OHE

- **Economy in Traction Energy Bills-**

Open Access Status in Northern Railway:

Northern Railway is availing cheaper traction power through Open Access in the states of Haryana, Delhi, UP& Punjab directly from the Generators. With this 96% of the total power requirement of Northern Railway has come under Open Access.

Rs. 204.6 lakh was availed as High Voltage rebate for taking supply at 132/220 KV at TSSs for traction purpose during the year 2022-23.

4.9 Reliability

4.9.1 LOCO

Asset Failures and Asset utilization:

S.No	Items	2021-22	2022-23	% age variation
1.0	**Ineffective %:**			
(a)	Electric Locos(Stat) T-9.0	6.0	6.6	(-) 0.6
(b)	Electric Locos(Hourly)T=15.2	10.8	10.1	(-) 0.7
2.0	**Failure:**			
(a)	Electric loco(NR+FR on NR)	1468	1547	(-) 5.4
3.0	**Engine Kms/failure (in lakhs)**	3.56	2.49	(-) 30.1 (due to Covid)
4.0	**Loss of punctuality (Inc)**			
(a)	Electric Loco	221	425	(-) 92.3 (due to Covid)
5.0	SEC (Goods)	9.36	8.58	(+) 8.3

4.9.2 Power Supply Reliability:

10900 m overhead Aerial Bunched Cables (ACB) has been commissioned in place of over aged overhead line conductor in Sleeper Hut colony, JRRPF, RPSF & LD colony at Alambagh of Lucknow division and in Nabha Railway station of Ambala division to ensure safety, reliability and smooth working of power supply to railway installations and colony.

26,303 m 4 core LT cable has been laid at various locations over Northern Railway for improvement in the reliability of power supply arrangement.

Overhead line conductors at 31 nos. stations over Northern Railway have been replaced with underground cables.

4.9.3 TRD: Measures to Enhance Reliability of OHE During 2022-23:

A number of measures were taken to improve reliability of OHE during 2022-23, which are as under:

- **Checking of PG Clamps & Joints by Thermo vision camera:** To improve the reliability of TRD Assets, as a predictive maintenance, regular thermo-vision checking is being done so that online failure/insipient fault of OHE & PSI equipment can be arrested. During the year 2022-23, 431018 Nos. points on OHE and PSI installations were checked with Thermo-vision camera. During the checking, 48 Nos. hot points were noticed and the same were attended by availing power block.





➢ **Provision of contact wire in place of catenary wire under over line structures (FOB/ ROB):** In order to arrest cases of catenary wire parting due to falling of foreign material from FOB/ROB, RDSO recommended use of contact wire in place of catenary wire under FOB/ ROB. During the year 2022-23, at 182 locations contact wire has been provided in place of catenary wire under FOB/ROBs.



➢ **Provision of Retro- reflective Sigma Boards before signals:** To make the Loco Pilots aware of approaching stop signals, provision of Retro-reflective Sigma boards and sigma strips on two masts in rear of stop signals is being ensured regularly in electrified territories. During the year 2022-23, at 294 Nos. locations Retro-reflective Sigma Boards were provided on two masts prior to stop signals.





➢ **Replacement of Aluminum Cross Feeders:** 12 nos. Cross-feeders have been replaced with 150 sq.mm copper cross-feeders along with its drop jumpers at switching posts during FY 2022-23.





➢ **Replacement of corroded/strand broken tail feeder:** To improve the reliability of system, 109 Nos. corroded/strand broken tail feeders were replaced during the year 2022-23.

➢ **Replacement of old-designed failure prone RRA clamps:** To arrest the cases of contact wire parting due to sharp edges in old designed RRA clamps, a drive was launched to replace these with modified RRA clamps in a phased manner. During the year 2022-23, 1023 nos. sharp edge RRA clamps were replaced with modified RRA clamps. This shall improve the reliability of system.





➢ **Major Schedule of OHE:** 7754 TKM major schedule of OHE i.e. IOH/POH was carried out during the year 2022-23.

➢ **Checking of Turnouts& Crossovers:** 7664 nos. Turn-outs& cross-overs on main line & yards were checked during the year 2022-23 to avoid Panto-entanglement.





➢ **Maintenance of ATD:** AOH/POH schedule of 20435 Nos. ATD were carried out during the year 2022-23.

➢ **Live line checking:** Total 11079 RKM Live line checking of OHE by 8-wheeler Tower Wagons was carried out during the year 2022-23.

➢ **Current Collection Test:** To improve the reliability of OHE, Current collection test with Oliver G in 10282 RKM was carried during year 2022-23.

➢ **Maintenance of gantries:** Annual scheduled maintenance of 391 Nos. gantries of switching stations was carried out covering feeders, PG Clamps and provision of bimetallic strips etc.





➢ **Insulator cleaning in identified polluted zones:** As a measure to improve the reliability of OHE by arresting CB tripping in polluted areas 110716 Nos. insulators were cleaned as a regular exercise during the year 2022-23.

➢ **Porcelain Insulators replacement:** To improve the reliability of OHE system in vandal prone zones, 1440 Nos. porcelain insulators were replaced by composite type insulators during the year 2022-23.





➢ **Provision of missing/damaged traction bonds:** To improve the safety by limiting rise of rail potential, provision of traction bonds is regularly ascertained and their tightness is ensured during foot patrolling. 26384 Nos.missing/damaged traction bonds were replaced/ provided during the year 2022-23.

➢ **Restoration of OHE Height as per original SED:** To improve the reliability of OHE, 16906 TKM height of OHE was adjusted to its original parameters as per SED during the year 2022-23.

➢ **Provision of PVC pipes as anti-bird measures:** There is a problem of Bird nests, formation in fabricated Drop Arms. To arrest the CB tripping and failures due to bird nests, PVC pipes were provided on 255 nos. fabricated drop arms of portals as anti- bird measures during the year 2022-23.





➢ **Cutting of jointly identified Trees:** 9314 Nos. Trees were cut jointly with engineering staff during the year 2022-23 to improve the reliability of OHE.





➢ **Tree Trimming:** To improve the reliability of OHE, 156543 Nos. trees branches close to OHE were trimmed during the year 2022-23 in a special drive.





➢ **Annual Relay testing & calibration of 51 Nos.** TSSs were carried out during the year 2022-23.

➢ **Earth Pit resistance checking:** 6822 Nos. earth pit resistance values were checked to improve the reliability of OHE during the year 2022-23.

➢ **Checking healthiness of LA:** 1684 Nos. LAs were checked for healthiness by Leakage current monitor during year 2022-23.

➢ **1755 Nos.** SS wires were replaced due to their being over aged (more than 09 years) during the year 2022-23.

➢ **Lubrication of 19921 Nos.** SS wire ropes of ATDswas carried out to improve the performance of ATDs during the year 2022-23.

➢ **Provision of sacrificial masts in loading/unloading sidings:** 84 Nos. sacrificial masts were provided in loading/unloading sidings during the year 2022-23.

➢ **10512 Nos.** bird nests were removed during the year to avoid CB tripping due to foreign material on OHE during the year 2022-23.





➢ **Kite & threads removal:** 27668 Nos. Kite & threads were removed during the year 2022-23 to avoid CB tripping.





4.10 MAN POWER PLANNING

4.10.1 General power supply:

Bench Marking	Staff per 1000 units (on Roll)
IR average	**0.13 (2021-22)**
Northern Railway	0.14

4.10.2 TRD

Position of TRD Staff on roll for 2022-23 is as under:

Item	TRD (Staff on roll per TKM)
Staff required as per revised yardstick:	0.22
N. Rly.	0.17

Division wise staff position over NR is as follows:

Items		DLI	UMB	FZR	LKO	MB	Total
Electrified RKM		1449	924	1029	1460	1408	6270
Electrified TKM		3526	1850	1958	2973	2737	13043
Sanctioned Strength of staff		1009	489	619	721	668	3506
Staff on Roll		698	287	299	452	471	2207
Manpower per TKM	Sub urban Yardstick: 0.42/ TKM)	0.42	-	-	-	-	0.42
	Non-Sub-urban (Yardstick:0.22/ TKM)	0.22	0.15	0.15	0.15	0.17	0.17

Bench marking has been revised from 0.45 staff per TKM to 0.22 staff per TKM by Railway Board. Presently ratio of staff per TKM over Northern Railway has come down to 0.17. However, maintenance is being carried out by existing staff without compromising on the quality. Maintenance of PSI assets and manning & housekeeping work of all TSSs and several RD Depots over all divisions has been outsourced.

4.10.3 O&F wing: Shortage of Running staff

There are 622 (4.7%) vacancies in running cadre as on31.03.2023. Selection process for filling up ALP posts through Promotional Quota of 454 posts has been notified (DLI-75 & MB-379) in March 2023. A panel of 106 ALPs recruited under GDCE quota for LKO division is available.

अभि./अभियांत्रिक निर्माण
ENGG./ENGINEERING CONST.







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter-V

5.1 About the Department

The Civil Engineering is responsible for the construction and maintenance of all civil engineering assets, viz all buildings including station buildings, residential quarter, hospital, sheds, workshop structures, goods sheds etc., water supply and sanitary installations, Railway tracks, sidings and all allied structures, Bridges including Road over bridges and Road under bridges.

The maintenance wing (Open Line) of Civil Engineering organization is headed by the Principal Chief Engineer. The Principal Chief Engineer is assisted by Chief Engineers in the Headquarters. The Chief Engineers are assisted by Deputy Chief Engineers, Executive Engineers and Assistant Executive Engineers.

5.2 Highlights of the year

5.2.1 Taking over of State Railway = NIL

5.2.2 Loss to Railway Property

(i) Due to Civil disturbances and violent strikes/bomb blast. = NIL

(ii) Due to damages caused by floods and cyclones

(Repair to slips was done departmentally) = NIL

5.2.3 Progress in Hindi in Engineering Department = 100%

The present progress of Hindi in Engineering Department of Northern Railway is about 90%. All correspondence received in Hindi and replied in Hindi. All boards at stations, waiting halls and on service buildings are written in Hindi/bilingual. Registers in the offices are also maintained in Hindi/bilingual. Efforts are being made to do as much noting in Hindi as possible and it is being progressively increased.

5.2.4 (a) Improvements made in Marshalling Yards and their working =NIL

(b) Works in Progress in Marshalling yards during 2022-23 =NIL

5.2.5 Works completed during 2022-23

Costing Rs.100 lakhs and above:

a) Remodelling & construction of passenger yards. =00

b) Remodelling & construction of Goods Yards =01

c) Line capacity works =01

d) Doubling of lines. =

e) Other works =02

Total expenditure incurred during 2022-23 = Rs. 0.00 Crore

04 no. works costing Rs. 15.42 Cr. was completed out of which expenditure of Rs. 0.00 Cr. was incurred during 2022-23.

5.2.6 Works in progress during 2022-23

Costing Rs.100 lacs and above

a) Remodelling and construction of passenger yards =21

b) Remodelling and construction of goods yards =18

c) Line capacity works =29

d) Doubling of line =40

e) Other Works in progress =17

Total expenditure incurred during 2022-23 > Rs.100 Lakh = ₹ 2004.11 Cr.

Expenditure incurred during 2022-23< Rs. 100 Lakh = ₹ 9.57 Cr.

Total expenditure incurred during 2022-23 = ₹ 2013.68 Cr.

The total cost of these 125 no. of works is about ₹ 47218.20 Crores.

5.2.7 Trough forward in new works costing ₹100 lacs and above under all plan heads during the year 2022-23.

Plan Head (15) Doubling = ₹ 31152.76 Cr.

Plan Head (16) Traffic Facility = ₹ 2247.23 Cr.

5.3 Performance of Engineering Department During the year

5.3.1 Track

NR has total route Kms. as 7362.99 km & running Kms. as 10489.32 Km. Total track Kms. including tracks in yards, sidings etc., stands at 13742.40 Km. About 89.82 % of the route is electrified.

The track net work at the end of 2022-23 in comparison with earlier years (2018-19 onward) is shown below:-

Year	Total route kms.		Running Kms.		Total track kms.	
	Electrified	Total	Electrified	Total	Electrified	Total
2018-19	4166.18	7317.59	6687.52	9871.3	8544.35	13404.92
2019-20	4603.38	7323.29	7271.90	10024.18	9331.08	13557.80
2020-21	5503.84	7323.29	8284.23	10103.68	10891.41	13395.46
2021-22	6125.26	7330.99	9050.43	10256.16	11817.06	13526.37
2022-23	6613.69	7362.99	9740.02	10489.32	12541.45	13742.40

(A) State Wise route km

The following table shows the breakup of route kms States/Union Territories-wise at the end of 2022-23

S. No.	STATE (Union Territory)	ROUTE KILOMETRE 2022-23
1	Uttar Pradesh	3087.55
2	Rajasthan	31.17
3	Himachal Pradesh	312.55
4	Jammu & Kashmir	298.19
5	Punjab	2193.42
6	Haryana	1082.18
7	Delhi	183.23
8	Chandigarh (Union Territory)	15.70
9	Uttarakhand	158.90

(B) Track Renewals

At the end of 2022-23 there was an arrear of 1318 CTR units in track renewal. During 2022-23, N.R. completed 705.12 CTR units of Track renewal against target of 610.00 CTR units.

(C) Track Patrolling

NR undertakes monsoon patrolling and manning of vulnerable spots and bridges to ensure safety of track. In addition wherever any crisis comes patrolling and track protection drills automatically come into force. Gang staff are continuously examined and trained in these exercises. Security Patrolling is also being done in PTK-JAT section and JAT-UHP- SVDK being terrorism prone area.

(D) Welded Rails

On most of the important routes, rails have been welded into continuous lengths from station to station and smaller lengths of 2 to 3 km. as well. On other routes, short welded rails of 39 m lengths and single rails are adopted. As on 31.3.2023, total length of B.G. welded track on NR was 10014 kms. out of which 9204 kms. is with long welded rails and 810 kms. short welded rails.

(E) Track Renewal Carried Out During 2022-23 (Fig. in KMS.)

Target for 2022-23 = 610.00 CTR units

S.No.	Description	Renewal	BG	MG/NG	Total
1	Complete Track Renewal (a) With new material	RR	310.38	0.00	310.38
		SR	310.38	0.00	310.38
	(b) With second hand material	RR	8.16	3.46	11.62
		SR	8.16	3.46	11.62
2	Through Rail Renewal (a) With new material	RR	403.74	0.00	403.74
	(b) With second hand material	RR	28.61	0.00	28.61
3	Through Sleeper Renewal (a) With new material	SR	44.94	0.00	44.94
	(b) With second hand material	SR	0.00	0.00	0.00
4	Other Misc. Works (P)	RR	125.76	0.00	65.30
		SR	51.42	0.00	25.16
	Other Misc. Works (S)	RR	86.53	0.00	63.78
		SR	24.24	0.00	38.04
	Total in Kms		1403.32	6.92	1410.24
	Total in CTR Units				**705.12**

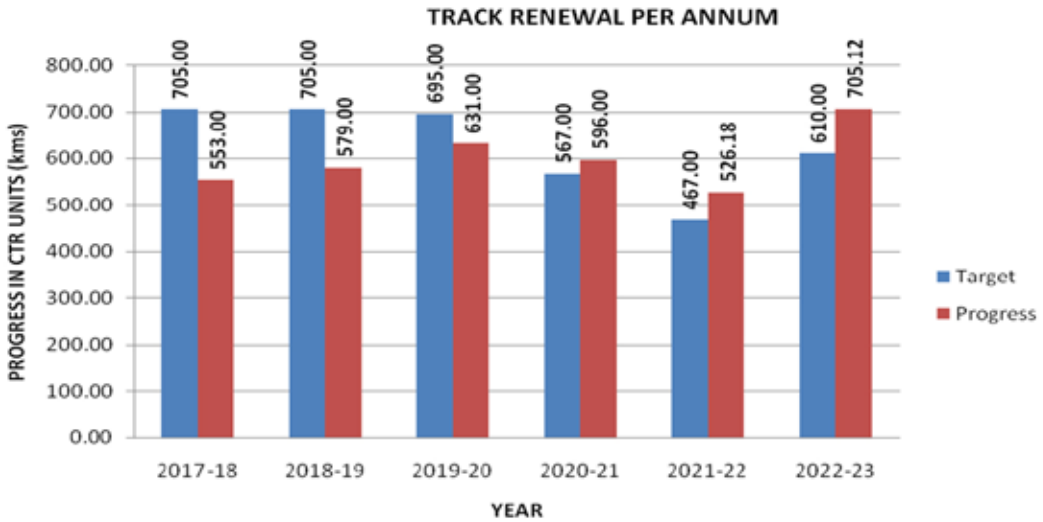


Fig.1

(F) Progress of Track Recording by OMS

MONTH	2018-19	2019-20	2020-21	2021-22	2022-23
TARGET	**67961**	**82080**	**83287**	**86988**	**89942**
APR	5157	7003	16482	8011	8148
MAY	4781	6609	14154	13751	7707
JUN	6148	6807	11887	16133	9484
JUL	5241	7460	14035	11455	9253
AUG	6329	5346	14763	4634	9944
SEP	4713	7008	13220	7246	6244
OCT	5781	6092	10295	8351	3018
NOV	4712	7705	10093	7911	6064
DEC	4984	8447	11796	10086	7431
JAN	5730	6768	9592	6596	8579
FEB	5164	6279	7807	16676	8062
MAR	6683	8302	10766	9315	11023
TOTAL	**65423**	**83826**	**144890**	**120165**	**94957**

(G) Welding of Rail Joints

Length of Track Welded in kms. Up to 31.03.2022	Length of Track Welded during 2022-23 (*)		Total length of Welded Track in kms (1+2+3)**
	By thermit welding	By flash Butt Welding	
1	2	3	4
9756 Kms (DOT Cell)	Track Renewal-705.12 TKM		9756 Kms (DOT Cell)
	47780 (TM Cell)	10308 Joints=66.93 TKM	

(*) For all welded track provided. Thermit Weld and flash butt welds are provided together in all the kilometres welded.

(**) Welded track provided during 2022-23 was by way of Through Rail Replacement (TRR). All the earlier tracks in the locations were already welded track hence no new addition was made.

(H) Production of FWP/MUT

	Stationary Plant	Mobile Plant	Stationary Plant	Mobile Plant	Stationary Plant	Mobile Plant	Stationary Plant	Mobile Plant	Stationary Plant	Mobile Plant
YEAR	2018-19		2019-20		2020-21		2021-22		2022-23	
YEARLY TARGET	55000		33000		24000	6000	24000	6000	0	5500
APR	0	4618	1411	192	295	0	988	1421	0	1843
MAY	494	2966	1502	479	1283	877	176	1619	0	838
JUN	190	4778	1187	1833	2401	956	57	2116	0	733
JUL	0	2037	1138	2208	2491	705	112	1301	0	879
AUG	0	2880	644	2074	2139	2552	0	397	0	1193
SEP	48	3363	1394	2230	1340	2304	0	354	0	572
OCT	0	2453	707	904	2870	1878	0	673	0	608
NOV	0	2246	1203	1848	2155	1501	0	687	0	443
DEC	0	1745	1612	2025	1770	1347	0	553	0	1580
JAN	0	1764	1817	2196	0	1510	0	357	0	933
FEB	5	1378	2306	1586	0	2305	0	1128	0	686
MAR	0	1007	1827	757	0	2661	0	1719	0	0
TOTAL	737	31235	16748	18132	16744	18596	1333	12325	0	10308

5.3.2 Bridges

(A) Bridges Statistics

The total numbers of bridges on Northern Railway are 21153; out of which 67 Nos. are important bridges, each having linear waterway of 300m or more,1490 are Major bridges each having linear waterway of more than 18m or a clear opening more than 12m in a single span and balance 19596 Nos. are minor bridges.

(B) Waterway under bridges

Statement of waterway under various categories as on 31-3-2023 is given below:

S.No	Bridge category	B.G.	M.G.	N.G.	TOTAL
1	Important bridges	32461m	-	1435 m	33896 m
2	Major bridges	64130 m	-	4280 m	68410 m
3	Minor bridges	36466 m	-	2670 m	39136 m
Grand Total		**133057 m**	**-**	**8385 m**	**141442 m**

(C) Bridge works completed during 2022-23

a) Rebuilding /Rehabilitation of Bridges	205 Nos.
b) Removal of Permanent Speed restriction	02 Nos.
c) Removal of temporary Speed restriction	10 Nos.

(D) Progress of bridge works (Cost wise)

Position of Expenditure During 2022-23 Under Plan Head Bridge Works Upto the End of March-2023

Year	Allocation	Final Budget Allotment For 2020-21 (In Cr.)	Expenditure During 2020-21 (In Cr.)	Percentage of Expenditure	Remarks
2022-23	RRSK	88.82	58.35	**72%**	

(E) Performance of bridge Workshop during 2022-23

Fabrication of steel structure = 8595 MT against the target of 6200 MT.

(F) Passenger Amenity works completed during 2022-23

Providing PF shelters on stations.	08 Nos.
Providing Foot over bridges on Stations.	29 Nos. (22 by Divisions and 7 by CAO/C)

5.3.3 Tunnels

Statement of length of tunnels for track as on 31-3-2023 is given below:

Gauge	BG	MG	NG	Total
Length of tunnel as on 31-3-2023	33291.40 M	-	8631.30 m	41922.70 m

a) Performance of Erection works during the year 2022-23 of erection of Steel	=	2096 MT against the target of 6416 MT.
b) Fabrication of steel structure other than girder bridges	=	1528 MT against the target of 600 MT.
c) Productivity achieved:	=	More than 1.0 against the target of 1 MT/man/month.

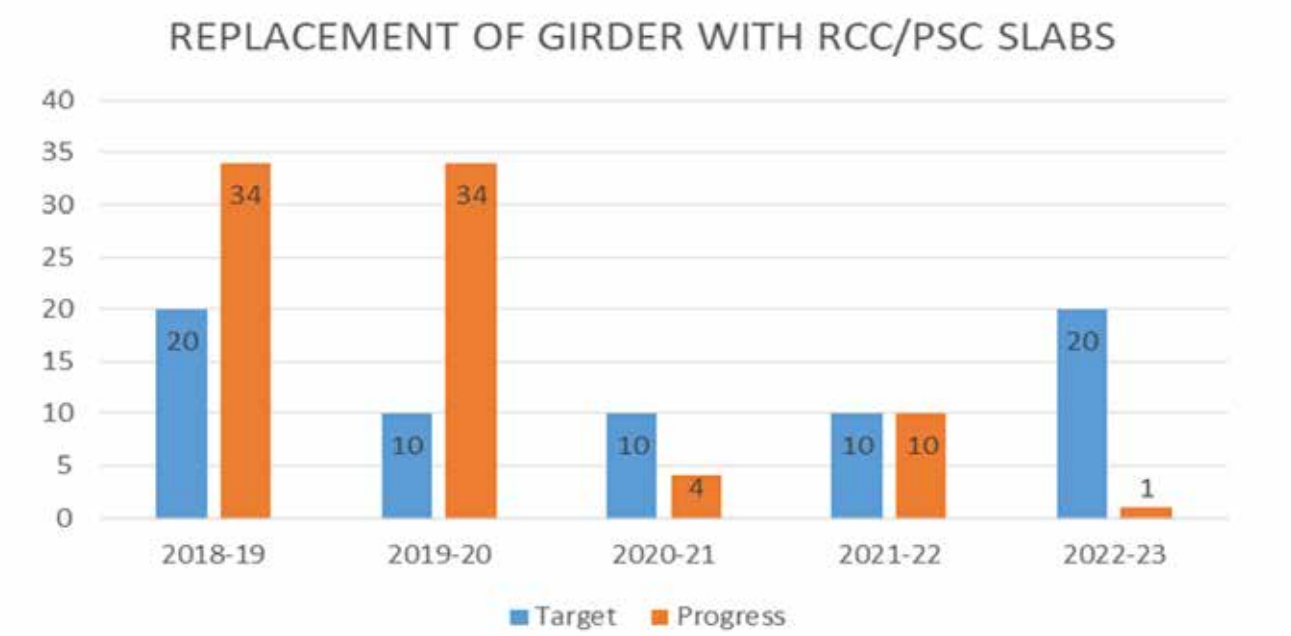

REPLACEMENT OF GIRDER WITH RCC/PSC SLABS
40
35
30
25
20
15
10
5
0
20
34
10
34
10
4
10
10
20
1
2018-19
2019-20
2020-21
2021-22
2022-23
Target
Progress

Fig.7

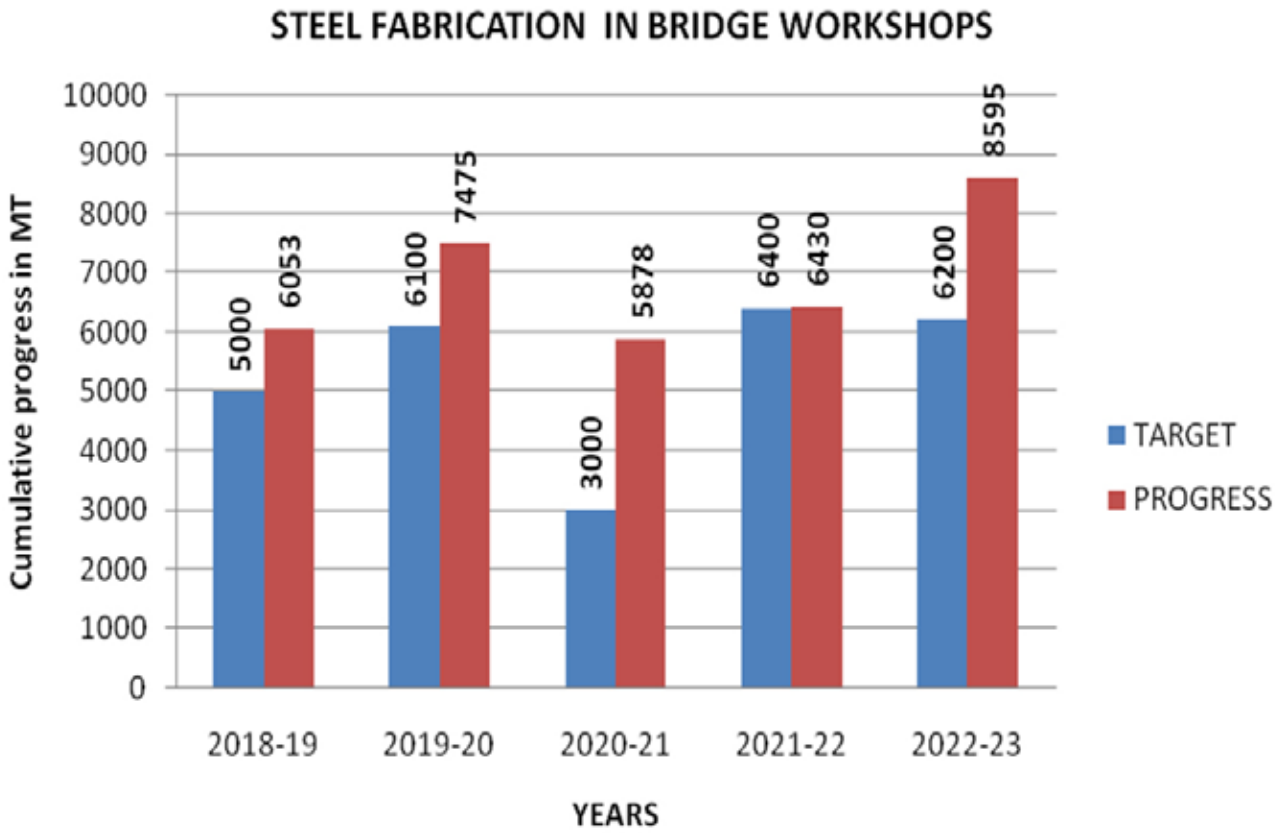

STEEL FABRICATION IN BRIDGE WORKSHOPS
Cumulative progress in MT
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
5000
6053
6100
7475
3000
5878
6400
6430
6200
8595
2018-19
2019-20
2020-21
2021-22
2022-23
YEARS
TARGET
PROGRESS

Fig-8

5.3.4 Quarters

Provision of Quarters

Class of Quarter	No. of Qtrs. as on 31.03.2023
I & II	58049
III	3040
IV	1544
V	607
Total	**63240**

These figures include substandard Quarters also.

(a) No of over and under bridges constructed in replacement of Unmanned level crossings (UMLC's) in 2022-23 = Nil

(b) No. of over and under bridges constructed in replacement of Manned level crossings (MLC's) during 2022-23 = 100 Nos.

5.3.5 Level Crossings

Total no. of level crossings under various classifications over NR as on 31.03.2023

S.No	Classification of Level Crossings	Number of level Crossings 01.04.2023.
1	Special class	425
2	`A' class	274
3	`B' class	284
4	`C' class / Manned	1794
5	`C' class / Unmanned	0
6	`D' class	0
7	Canal/Manned	0
8	Canal/unmanned	0
9	Siding manned	03
10	Siding unmanned	0
	Total	**2780**

S.No	Items	2022-23
1	No. of level crossing manned	4
2	No. of level crossings where additional man provided without upgrading	49
3	No. of level crossings upgraded	12
4	No. of level crossings provided with lifting barriers	13
5	No. of level crossings where traffic census has been taken	847
6	No. of level crossings down graded	0
7	No. of level crossings de-manned	0
8	Assisted and private sidings commissioned	0
9	Railway over and under bridges constructed	136
Total		**1061**

5.3.6 Floods & Breaches

a	Floods and breaches occurred during 2022-23 Monsoon.	**14**
b	Review of works done by special organization set up on this Railway and review of Railway Bridges	**NIL**
c	Review of works made by joint committee of Engineers (Railway and State) in the Railway and other Public affecting works.	**NIL**
d	Progress made in connection with implementation of scheme for enlisting co-operation of villages in communication timely information regarding heavy rains and floods etc.	**District Magistrates of the districts of all Divisions of Northern Railway requested to instruct their staff to have close coordination with Rly. Officials. Their attention in that respect is being drawn every year by divisions.**

5.3.7 Passenger Amenities

(A) Amenities for Passengers

- Total no. of stations including halts opened for passengers during 2022-23 = (Pertain to Commercial).
- Waiting rooms and Waiting halls provided for passenger during 2022-23 = (Pertain to Commercial)

	Gents	Ladies	Combined
For 1st Class Passengers	-	-	-
For 2nd Class Passengers	-	-	-
For 1st & 2nd Class Passengers	-	-	-

(B) Covered and raised platforms 2022-23

S.No.	Division	No. of Stations provided with covered platforms during 2022-23	No. of stations provided with platform above rail level during 2022-23	Construction of additional platforms and sheds at stations during 2022-23 sheltered platforms. (extension of PF)
1	Ambala	0	3	3
2	Delhi	2	6	1
3	Firozpur	0	3	0
4	Lucknow	12	21	4
5	Moradabad	2	1	0
	Total	**21**	**34**	**8**

(C) Water softener and water purification schemes

(i) Automatic Chlorinator: Automatic Chlorinators have been provided at all pumping locations in all divisions of Northern Railway.

(ii) Filtration Plant:- Filtration plants at Oak Groove School/Jharipani have been overhauled by Agency of Division during the years.

(iii) Rain Water Harvesting: - 67 nos. of Rain Water Harvesting were installed during the year for recharging of underground water. Total progress of RWH up to 31.03.2023 over Northern Railway is 385.

(D) Amenities for passengers: Foot Over Bridges

Work completed during 2022-23 = **27 Nos.**

Works in progress during 2022-23 = **26 Nos. (Target)**

(E) Amenities for passengers: Bathing Facilities

Nos. of stations where bathing facilities for passenger travelling in 2nd class exists including halt stations where hand pumps/water tanks have been provided = 1014 Stations.

(F) Passenger amenities works during 2022-23

i. Works completed during 2022-23 costing Rs. 100 Lacs and above = 42 nos.

Total expenditure incurred during 2022-23. = ₹ 1.81 Cr.

ii. Works in progress costing during 2022-23 Rs. 100 Lacs and above = 264 nos.

Total expenditure incurred during 2022-23. = ₹ 390.58 Cr.

(G) Schedule of expenditure of Development funds

(Figure in Crore of Rs.)

S.No	Particular of works	2022-23
1.	Platforms	20.70
2	Water Supply arrangements	7.46
3	Electrical Works	0.31
4	Waiting/retiring room facilities	0.04
5	Transfer Facilities	16.06
6	Sanitation	0.54
7	Station building & circulating Area	247.50
8	Other users amenities	23.47
	Total Exp. incurred in Rly. Board/ GM power	**316.08**
	Exp. incurred in completed works	**1.81**
	Exp. incurred in DRM/LS Power	**72.69**
	Grand Total	**390.58**

(H) Land Management

PROFORMA 'A'
(in Thousands)

A) Tree Plantation
Target for 2022-23 = 10 Lac

Name of State	Total no. of Tree Surviving as on 01.04.2022	Total no. of Trees Planted on Rly. Land 2021-22			Total land handed Over to Forest Deptt. (Hectares)	
		Deptt.	Forest Deptt.	Total	During Year	Total up-to date
Rajasthan	3590	3250	0	3250	0	159.8204
Haryana	428909	165419	5350	170769	0	0
Punjab	350774	274504	31220	305724	0	1144.694
Delhi	0	29550	0	29550	0	0
U. P.	563885	276957	12340	289297	0	0
H. P.	129256	23743	1200	24943	0	0
J&K	40	18348	0	18348	0	50.64
Chandigarh (UT)	35120	17671	0	17671	0	1464.5534
Uttrakhand	492758	141113	50110	191223	0	0
TOTAL	**2004292**	**950555**	**100220**	**1050775**	**0**	**2819.7078**

Progress of tree plantation on Railway land as on 31.3.2023 is 10.50 lacs. The year wise breakup of tree plantation is shown in the graph.

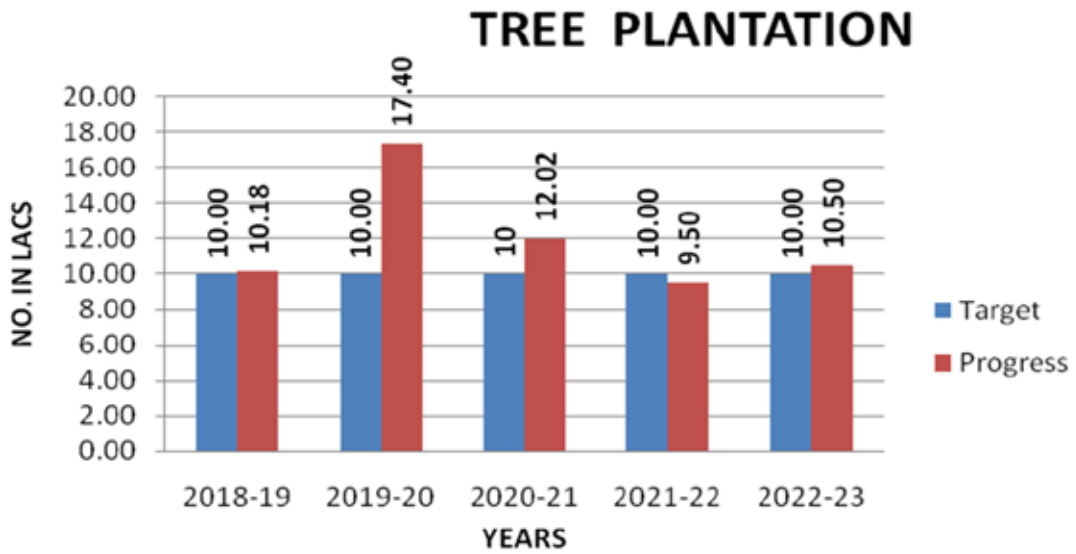


Fig. 9

PROFORMA 'B'

B) Position of Encroachments on Northern Railway for 2022-23

Total no. of Encroachments as on 31.3.2023	Total no. of Encroachments		Total no. of Encroachments as on 31.3.2023	Total no. of cases pending with Estate officers on 31-03-2023	No. of cases filed during the Year	No. of cases decided during the Year	Total no. of cases pending with Estate Officers as on 31.3.2023
	Added	Removed					
42674	0	638	42036	5820	0	3026	2794

*Figure of 710 has been reconciled by the division earlier this figure was 6711 (which was communicated in last year's GMANR)

PROFORMA – 'C'

C) Position of Licensing Agreement 2022-23

	Item	Total no of Cases	Total no of Agreement	Cases Executed
a)	G.M.F	279.00	279.00	279.00
	(i) Railway Employees			
	(ii) Outsiders			
b)	Commercial Plots Including Vending of Commercial Dept.	185	185	125
c)	Engg. Plots			
d)	Shopping Flats (Engg. Deptt)			

PROFORMA 'D'

D) Earnings

(Figures in Crores of Rupees)

S.No.	Description	Target 2022-23	Actual earnings for the last three years		
			2020-21	2021-22	2022-23
1.	Licensing of land to CONCOR	503	361.52	270.17	272.82
2	Licensing of land to oil companies		127.80	1.29	1.34
3	Licensing of land for ordinary commercial plots		1.19	1.21	1.75

4	Licensing of land for Pvt. siding		38.97	35.34	33.72
5	Way leave facilities licensing		44.89	31.84	20.91
6	Lease to Govt. Deptt./ DMRC		213.16	14.57	56.11
7	Govt./ Building licensing/ Defence		1.29	2.49	13.79
8	Other income received		114.00	2.39	99.09
	TOTAL	**503**	**902.82**	**359.30**	**499.53**

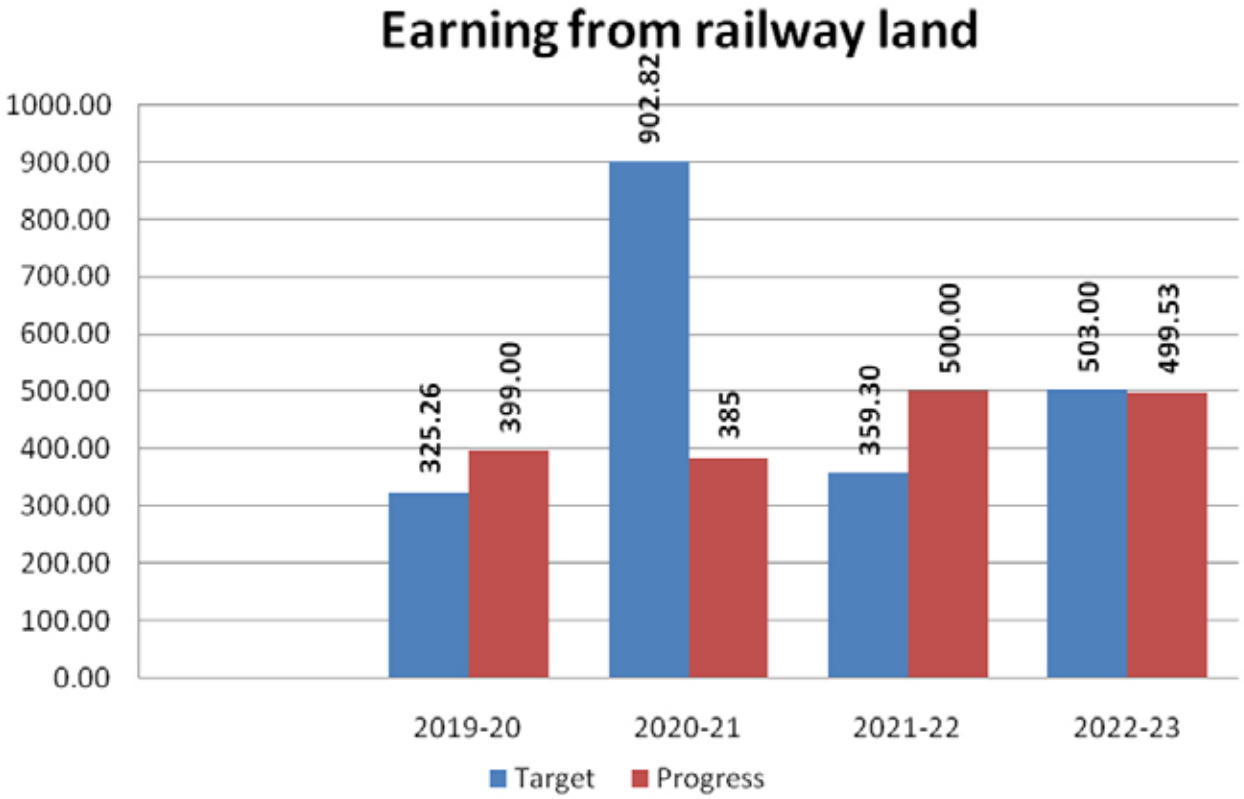


Fig. 10

PROFORMA 'E'

E) Outstanding Dues (Rs. in Crore) 2022-23

S.N.	ITEM	Position as on 31.03.2022	Accretion during the year (+)	Clearance during the Year (+)	Balance Outstanding dues as on 31.3.2023
1.	**GMF:-**				
	a) RAILWAY EMPLOYEES	12.83	9.35	5.79	16.39
	b) OUTSIDERS.				
	c). STATE GOVT.				
2.	TEMPORARY COMML. LICENSING.	726.06	608.38	478.62	855.82
3.	OUTSTANDING DUES OF OIL COMPANIES/ GOVT. DEPTTS.				

PROFORMA 'F'

F) Land Holding 2022-23 (In Hectares)

Total Land Area at the Beginning of the year.	Area of Land acquired during the year.	Area of land relinquished during the year.	Balance area at the end of the year.	Area of Land under Active Use				Area of Land Lying vacant.	Rly. on Use
				Affore-station	Commercial Licensing	G.M.F	Any Other Use.		
44005.52	1512.467	0	45517.99	6261.898	348.53	630.35	1585.071	11364.651	25327.49

PROFORMA –'G'

G) Land Holding under different Heads

S. No.	Item	Area in Hectares. As on 31.03.2023
1.	Track and structure	25327.49
2.	Under Afforestation	6261.897
3.	Commercial Licensing.	345.53
4.	Under pisciculture	40.97
5.	Under Encroachment	154.428
6.	Vacant land.	11364.651

7.	Under long term lease	86.391
8.	Under KVS/Other Schools	14.527
9.	Under religious structure	13.428
10.	Under CONCOR	86.259
11.	Under RLDA	131.197
12	Under DFCCL	1060.87
13	Under GMF Scheme	630.35
	Total	**45517.988**

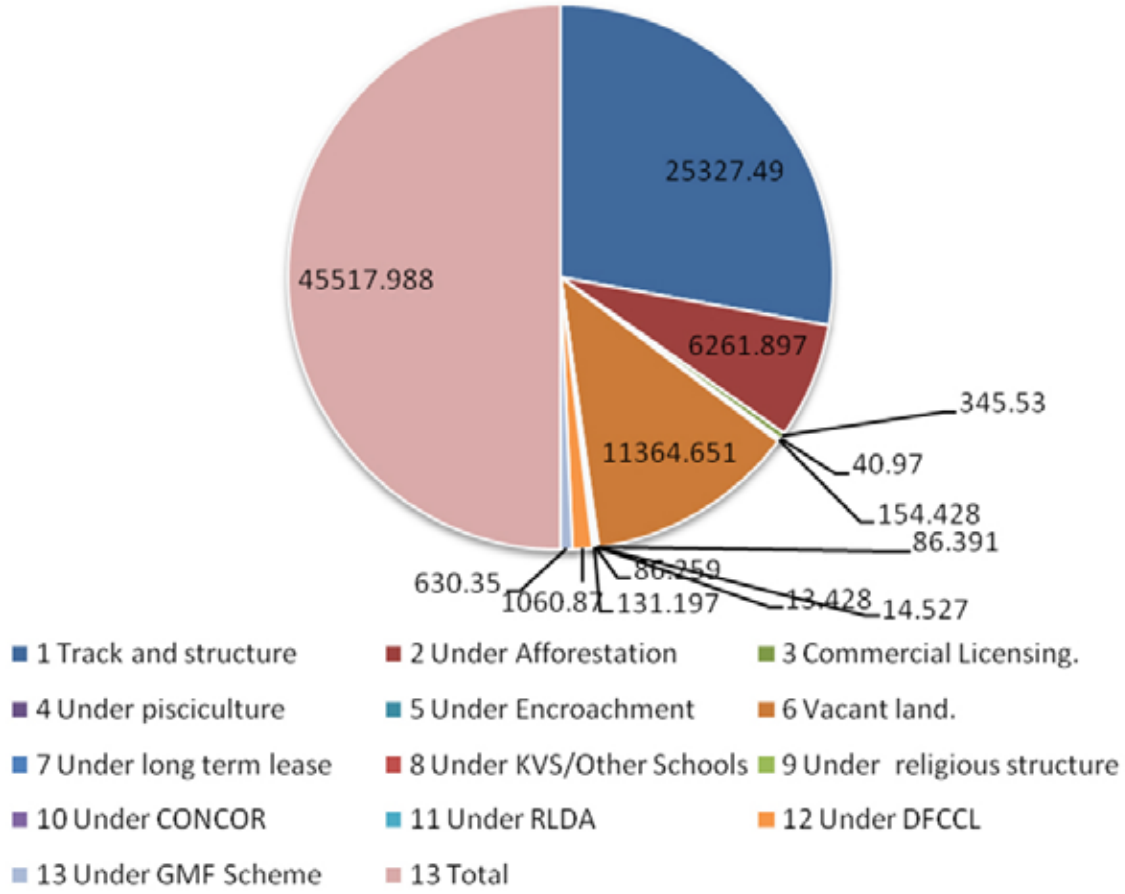


Fig.11

H) Details of Civil Engineering Assets (Other than P.Way) (As on 31.03.2023)

Name of Rly.	Plinth area of service bldgs (Sqm.)	Plinth area of reside-ntial bldgs. (Sqm.)	Linear water way of bridges (Metres)				Length of over/ under bridges (Metres)			
			Important	Major	Major	Total	FOB	FOB	RUB	Total
1	2	3	4	5	6	7	8	9	10	11
N.Rly	3251494	4696198	32461	64130	36466	133057	27443	14074	10468	51985

Tonnes of steel girder bridges (MT)	Tonnes of steel structure other than bridges. (MT)	No. of water pumping points	No. of Sewerage treatment points	No. of ballast Sidings
12	13	14	15	16
7067	1528	620	4	20

5.4 Yearly Performance of Engineering Department

S.N.	Item No.	Target	Performance					Best Ever	
		for 2022-23	2018-19	2019-20	2020-21	2021-22	2022-23	Figure	Year
1	Earnings from Railway Land (Crore of Rs.)	**503**	346.70	325.26	902.82	359.30	499.53	902.82	2020-21
2	Production of MBC Sleepers (Nos.)	**951000**	596796	669644	702556	1332222	8589992	1332222	2021-22
3	Production of T/o Sleepers (Sets)	**775**	946	225	303	210	534	946	2018-19
4	Ballasting (Lac CUM)	**10.30**	10.83	11.92	7.92	8.73	10.09	11.92	2019-20
5	Track Renewal (CTR unit)	**610.00**	579.11	631.05	596.70	526.18	705.12	631.05	2019-20
6	Track recording by OMS-2000 (Kms.)	**89942**	65423	83826	144890	120165	94957	144890	2020-21
7	Tree Plantation (lacs)	**20**	6.32	10.18	17.40	9.5	10.50	17.40	2019-20
8	Replacement of Girder with RCC/ PSC slabs (nos).	**20**	10	34	4	10	01	34	2018-19
9	Steel Fabrication in Bridge Workshops (MT)	**6200**	5732	6053	7475	6430	8595	8595	2022-23
10	Production of FWP(Nos.)	**5500**	31972	34880	35340	13658	10308	35340	2020-21

5.5 NEW CONSTRUCTION & ENGINEERING WORKS

5.5.1 New Lines

(A) New Lines Completed During the Year 2022-23

S. No.	Section	Gauge	Length (Kms)	Month of Commissioning
1.	Rohtak –Meham	BG	32	Dec'22

(B) (i) Sanctioned During The Year 2022-23

S. No.	Section	Gauge	Length	Month of Commissioning
NIL				

(ii) Under Construction During 2022-23

S. No.	Name of Project	Estimated cost (In Cr. of Rs.)		Gauge	Length (Kms)	% age of Physical Progress as on
1	Nangaldam- Talwara (83.74)- New BG Line and taking over siding Mukerian- Talwara (29.16 km)	2018		BG	113	48
2	(A) Rewari- Rohtak (81.26 Km)	1001.71	Rewari-Rohtak- 686 cr	BG	81.26	100
			Elevated BG line- 315.71 cr.	BG	4	90
3	Jind Sonepat	7134		BG	88.9	98
4	Chandigarh- Baddi	1540		BG	28	0
5	Deoband (Muzaffar Nagar)- Roorkee	791		BG	27	25
6	Qadian – Beas	2052		BG	40	0
7	Unchahar- Amethi	1229		BG	66	0
8	Rohtak- Meham- Hansi	680		BG	68.8	84

9	Delhi- Sohna- Nuh- Firozpur- Jhirka- Alwar	1249	BG	104	0
10	Yamuna Nagar- Chandigarh via Sadhaura, Narayangarh	901	BG	91	0
11	Faizabad- Lalganj via Akbarganj, Maharajganj and Raebareli	654	BG	116	0
12	Hissar- Sirsa via Agroha and Fatehabad	400	BG	93	0
13	Firozpur- Patti	300	BG	25	0
14	Meerut - Panipat	2200	BG	104	0
15	Rajpura –Mohali	406	BG	24	0
16	Una- Hamirpur	3044	BG	50	0
17	Hardoi to Gursahaiganj	1302	BG	59	0

(iii) Survey sanctioned and carried out during the year 2022-23

S. No.	Name of work as per Rly's blue book/ Rly. Bd's letter No.	Sruvey Cost (Rs. In Crores)	Progress % age/ Report submitted on
1	Updating Survey for new line between Joginder Nagar - Mandi	7.2	100
2	PET Survey for new line between Ganga Bridge at suitable location to give connectivity from Madhoganj to Kannauj	-	100
3	RET Survey for new line between Manwal-Talravia Ramkote	39	100
4	RET Survey for new line between Daulatpur Chowk to Kangra Valley via Chintapurni Deviji and Shrimata Chamunda Deviji	28.5	100
5	PET Survey for new line between 7 Nos. of Flyovers at Brar square, Moradabad, Unchahar, Lucknow-Manak nagar- Sitapur, Anand Vihar- Ghaziabad & Jakhal.	88	90
6	PET Survey for new line between 3 Nos. Bye passes at Amousi-Transport Nagar Chord, Kila Raipur, Sahnewal & Farukhnagar- Rewari .	25.5	100
7	FLS Survey for new Line between Jind-Panipat Bye pass Line	12.5	100

8	FLS Survey for new Line between Prithala-DFC Yard-Palwal	15	100
9	FLS Survey for 3rd Line between Bareilly-Roza	97.5	100
10	FLS Survey for Doubling between Moradabad-Chandausi	55	100
11	Updation Survey for Doubling between Baramulla-Kupwara.	7.02	100
12	RET New Line Una Himachal – Hoshiarpur	13.2	95
13	PET doubling Amritsar -Pathankot doubling	53.5	100
14	PET Sahnewal-Gill-Baddowal Bye pass to avoid Ludhiana	10	50
15	PET Chord line at Asthalbohar for going to Rewari from SSB without reversal	5	60
16	PET Chord line at Balamau for direct movement from Unnao to Moradabad	5	100
17	PET 8 nos Byepass at Roza, Bhatinda, Ambala, Saharanpur, Jakhal, Holambikalan, Shahganj and Jaunpur	40	-
18	Material modification Raibareilly to Akbarganj and via Jagdishpur (Nihalganj)	-	60
19	RET New Line updating at Rahon to Samrala	5.48	100
20	PET Doubling at Raiwala- Rishikesh	7.2	100
21	Updation New Line at Garhshankar - Sri Anandpur Sahib	7.35	100
22	FLS Doubling at Panipat - Rohtak	89.25	100
23	FLS Doubling at Firozpur-Bhatinda and Jakhal - Hisar	211	100
24	FLS Doubling at Asthalbohar - Rewari	94	100
25	FLS New Line at Hardoi - Gursahaiganj via Sandi	74.13	80
26	FLS New Line at Bypass between Rishikesh-Doiwala at Raiwala	-	65
27	PET New Line at Jagadhari to Poanta Sahib	-	75
28	Haridwar - Raiwala	-	100
29	Nemisharnaya to Farukkabad via Hardoi	-	10
30	FLS of New Line between Meerut - Panipat	-	100
31	PET survey on New NG line between Una and Hamirpur (54 KM)	32	10
32	Doubling between Jaunpur-Zafarabad	-	-
33	3rd line between Delhi Kishnganj-Shakurbasti	-	10
34	3rd line between Delhi Kishnganj-Shakurbasti	-	-
35	Chord line connecting KEA (NER)-AY-DRG bypassing Ayodhya Jn.	-	-

36	(FLS)By pass line between Didarganj Road/Khanja Halt (NER) to Bilwai (NR) to avoid reversal at Shahganj Jn	14.25	-
37	Chord line connecting GTNR (NER) - ML- LBII bypassing Malhaur Jn	8.9	-
38	Chord line connecting TPNR- UTR- BHA by passing UTR (Utretia Jn)	3.75	-
39	Chord line connecting BHA-LBH- ML by passing LBH (Dilkhush Cabin Junction)	2.5	-
40	Chord line connecting SIQ-ZBD- MAY by passing ZBD (Zafrabad Jn)	3.75	-
41	Chord line connecting MFJ(NER)- JNU- MGWN by passing JNU (Jaunpur Jn)	3.75	-
42	Chord line connecting SQN-JNH- MAY by passing JNH (Janghai Jn)	3.75	-
43	3rd and 4th line between Manak nagar- Kanpur with Grade separated bypass At Kanpur Central Station.	1344.4	-
44	Moradabad- 3rd and 4th line between Rosa-Moradabad.	3440	-
45	Final location survey for Flyover at Roza.	381.6	-
46	Final location survey for Bypass at Saharanpur	440	-
47	3rd line between Shakurbasti- Rohtak.	1200	-
48	Meerut- Hastinapur- Bijnor	1587	-
49	Chord line at Faridkot- Feroz Shah- Mallanwala Khas to avoid reversal at Firozpur (New Line)	100	-
50	Y-Connection at Ghari Harsaru to avoid reversal at Ghari Harsaru (New Line)	6.25	-
51	Chord line between Alal- Himtana to avoid reversal at Dhuri (New Line)	20	-
52	Doubling of Sirhind- Morinda Nangaldam Section	206	-
53	Doubling of Phaphamau Bypass	-	-
54	(FLS) 3rd line between Varanasi-Shivpur	-	-
55	(FLS) Chord line connecting Aishbagh (NER) - Alamnagar (NR)	-	-
56	(FLS) Elevated Rail Corridor from Delhi to Jaipur via Rewari	-	-
57	(FLS) Grade Separator Flyover across Jalandhar Cantt. for UP traffic coming for towards Jammu Tawi	-	-
58	(FLS) Chord line between Bishanpura Haryana-Jind City to avoid reversal at Jind.	-	-

59	(FLS) Grade Separator flyover between Manaknagar Malhaur.	-	-
60	(FLS)3rd line between Dilkusha-Malhaur	-	-
61	(FLS) Bhiwani-Rohtak-Panipat-Ambala/Shambhu- to be developed as feeder route of WDFC	-	-
62	(FLS)Chord line between Tanda-Akabarpur-Katheri.	-	-
63	(PET) New line between Mullanpur to Barnala via Raikot	-	-

5.5.2 Construction Works

(A) Progress of Gauge Conversion works

Nil

(B) Doublings

i) Doublings Completed During the Year 2022-23

S. No.	Name of work	Length (Kms)	Month of Commissioning
1	Neri-Sitapur	32	Apr'22
2	Amethi- Antu	14	Apr'22
3	Mehrawan-Khetasarai	18	Jul'22
4	Akbarpur- Goasiganj	23	Aug'22
5	Jaunpur- Mehgawan	6	Feb'23
6	Khetasari – Sahganj	10	Feb'23
7	Antu- Pratapgarh	21	Mar'23
8	Goshaiganj- Darshan Nagar	27	Mar'23

ii) Progress of Doubling Works

S. No.	Name of work	Length (Kms)	Estimated cost (Fig. in Cr. of Rs.)	% age of Physical progress
1	Jalandhar-Pathankot-Jammu Tawi	211.26	876	95
2	New Delhi-Tilak Bridge- 5th& 6th line	2.65	141.27	98
3	Dayabasti- Grade Separator	6	196	46
4	Utratia- Zafrabad- Doubling of balance portion (148km)	148	1582	90
5	Tughlakabad (Joint Cabin) Palwal- 4th line	33.5	365	90
6	Jakhal- Mansa Doubling on SPR Section	45.2	163	99

7	Phaphamau- Allahabad with new material modification for bye pass line between Northern Railway and North Eastern Railway track	12.9	152	90
8	Mansa- Bhatinda section (Phase-I)	53	449	98
9	Lohta- Bhadoi	39	184	90
10	Ambala Cantt- Dhapper (Ph-I) with new material modification of Dhapper-Chandigarh	45.16	359	95
11	Bhadohi- Janghai	31	160	95
12	Anand Vihar- Tilak Bridge – 3rd & 4th line	9.77	419	20
13	Meerut- Muzaffar Nagar- Patch doubling	55.47	415	80
14	Haridwar- Laksar	27.03	346	70
15	Alamnagar-Utretia	18.09	150	70
16	Muzaffarnagar-Tapri	51.53	525	90
17	Barabanki – Akbarpur	161	1116`	0
18	Jhangai- Pratapgarh – Amethi	87	700	0
19	Jaunpur – Tanda	77	676	0
20	Delhi- Shamli- Tapri	175	1500	0
21	Ludhiana - Mullanpur	21	82	0
22	Barabanki-Malhaur 3rd and 4th line	33	407	0
23	Varanasi –Mughalsarai 3rd line	17	1350	0
24	Ludhiana-Kila Raipur	19	230	0
25	Jaunpur Jn.- Jaunpur City	2	72	0
26	Phaphamau-Unnao via Kunda Harnamganj	200	1600	0
27	Amritsar- Chheharta	7	29	0
28	Varanasi-Moradabad bypassing Lucknow, with fly-over at Unnao	16.72	20000000	Nil
29	Bareilly-Chandausi-Aligarh (167.74 km)	167.74	22268600	Nil
30	Moradabad- Chandausi (44 Km) (Umbrella work)	44	4400000	Nil
31	Panipat- Rohtak (71.4 Km) (Umbrella work)	71.4	7140000	Nil

32	Firozpur- Bhatinda (88 Km) (Umbrella work)	88	1688000	Nil
33	Connectivity between Palwal (IR) and New Prithala (WDFC) (3.5 Km) (Umbrella work)	3.5	657500	Nil
34	Asthal Bohar- Rewari (75.20 Km) (Umbrella work)	75.20	7520000	Nil

(C) Progress of works under plan head "Workshops including Production units.

S.No.	Name of work	Original Cost	% age of Physical progress
1	Lucknow-Setting up of main line EMU car shed (10 rakes)	10.33	40
2	Ghaziabad extension of electric loco shed from 120 -150 locomotive.	17.36	90
3	Ghaziabad (Electric loco shed)- Augmentation of holding capacity from 150 AC locos to 175	8	45
4	Ludhiana (Electric loco shed)- Augmentation of holding capacity from 150 air conditioned locos to 175	8	85
5	Rai Bareilly- 26 coach length washing line and mini sick line	11.72	45
6	Kathua- Setting up of Railway bridge workshop including ancillary work.	45	0
7	Shakurbasti (Diesel Shed)- Augmentation of homing capacity for WDM2 locos (50 nos)	23	10
8	Faizabad- Construction of 26 coach length washing line.	5.38	0
9	New Delhi- dismantling of Pit lines & Sewage systems Rebuilding of 3 WL with proper pits & sewage arrangement at STB complex etc. FZR- Const of covered shed with provision of EOT gantry at sick line. BSB- Upgradation of 26 coach length WL.	6.31	0
10	Ambala Cantt., Khan Alampura joint goods yard, Moradabad, Ghaziabad, Tugalkabad & Shakurbasti improvement in existing infrastructure for freight train examination	23.32	0
11	Kalka- Extension of Broad Gauge washing line no. 5&6 towards Diesel shed end by 100 M.	4.46	0

12	Dehradun-Provision of Loco out pit	3.66	0
13	Bareilly (Carriage & Wagon Depot)- Covered shed with EOT crane incl AC maintenance shed.	10.67	0
14	Patel Nagar-Out Pit for Maintenance of Electric Locomotives	8	0

5.5.3 Progress of works under plan head “Traffic Facilities”

S. No.	Name of Work	Original Cost (in Cr.)	% of Physical Progress
1	Anand Vihar - Development of new terminal	83	90
2	Bijwasan - Land acquisition for development of freight & coaching terminal	84.54	90
3	Lucknow Division - Augmentation of loop line to standard length (12 stations)	5.82	90
4	Haridwar-Dehradun - Development of facilities for running 18-coach trains	32.22	50
5	Lucknow Division - Addl loops (5 stations)	8.75	30
6	Moradabad Division - Addl. directional up / down loops (5 stations)	11.31	0
7	Shakurbasti - Coaching terminal in meter gauge area	111.30	50
8	Bijwasan - Coaching / freight handling terminal	57.36	29
9	Lucknow-Saharanpur - Addl directional up & down loops (17 Nos)	51.28	49
10	Anand Vihar - Development of new coaching terminal (Phase-II)	93.96	90
11	Prayag Ghat - Upgradation as coaching terminal	51.13	90
12	Kalka - Yard remodeling for addl. broad gauge platform with provision of central panel.	5.34	92
13	Ballabhgarh Yard - Additions & alterations	3.22	0
14	Holambi Kalan - Addl acquisition of land & development of world class freight terminal	795.62	0
15	Lucknow - 4-line entry & exit with yard remodelling	34.80	0
16	Varanasi - Yard remodeling	41.27	70

17	Chheharta - Development of coaching cum maintenance facilities	42.00	0
18	Varanasi - Yard remodeling work (Phase-II)	194	25
19	Gotra & Alwalpur Idrispur - Crossing station	25	0
20	Mughalsarai - Lucknow - Moradabad - Ambala - Jalandhar - Amritsar (1150 km) - Longer loops	165	0
21	Raebareli - Yard remodelling	22.31	15
22	Pratapgarh - Yard remodeling	43.72	20
23	Bari Brahman - Development of satellite of freight goods terminal	118.40	26
24	Jammu - Second entry in c/w development of coaching terminal	360.13	1
25	Chhan Arorian - Goods handling line with covered goods shed and cement handling facility	16.49	15
26	Gharyala - New block station with shifting of goods traffic of Patti	21.76	0
27	Manak Nagar - Addl loop	27.10	0
28	Salarpur - Development as freight terminal station	130.83	2
29	Asaoti - Addition & alteration i/c/w provision of High rise OHE at Asaoti/Piyala station and merger of DFCCIL western corridor at Asaoti yard.	31.10	0
30	Direct connectivity of UP GAL with UP Goods lines and DN GAL with DN Goods lines to provide 3rd & 4th line in Tughlakabad yard	33.24	0
31	KHASA - Development of Khasa as freight terminal	15.35	0

5.5.4 Work Completed During 2022-23

(A) New Line Commissioned during 2022-23

- **New line Commissioning of Rohtak-Meham (32 km) section.**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of New line work between **Rohtak-Meham (32 km) section** on 05.12.2022. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 122 Kmph.

(B) Doubling commissioned during 2022-23

- **Commissioning of Neri - Sitapur City (32 km) section**

Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Neri - Sitapur City stations** on 11.04.2022. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 145 Kmph.





- **Commissioning of Amethi - Antu (14 km) section**

Commissioner of Railway Safety, Northern Circle carried out inspection of Doublinng work between **Amethi - Antu stations** on 02.04.2022. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 90 Kmph. Speed trial was done at 140 Kmph.

- **Commissioning of Mehrawan- Khetasarai (18 km)section**

Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Mehrawan - Khetasarai (18km) stations** on 04.07.2022. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 110 Kmph. Speed trial was done at 141 Kmph.



- **Commissioning of Akbarpur-Gosaiganj (23 km) section**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Akbarpur-Goshaiganj (23km) section** on 05.08.2022. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 127 Kmph.



- **Commissioning of Jaunpur- Mehgawan (6 km) section**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between J**aunpur- Mehgawan (6 km) section** on 02.2.2023. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 123 Kmph.





- **Commissioning of Shahganj - Khetasarai (10 km) section**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Shahganj - Khetasarai (10 km) section** on 27.2.2023. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 122 Kmph.





- **Commissioning of Antu-Pratapgarh (21 km) section**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Antu-Pratapgarh (21 km) section** on 02.3.2023. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 120 Kmph.





- **Commissioning of Goshaiganj-Darshan Nagar (27 km) section**

Chief Commissioner of Railway Safety, Northern Circle carried out inspection of Doubling work between **Goshaiganj - Darshan Nagar (27 km) section** on 26.3.2023. After inspection, Commissioner of Railway Safety authorized Railway for running passenger trains at a speed of 100 Kmph. Speed trial was done at 120 Kmph.





(C) Status of ROB/RUB/LHS works completed in current financial year-

- **Construction of ROB of UTR yard crossing RBL-UTR line at km 1042/11-13 and SLN-UTR line at km 1060/4-6 (Deposit Work)**



Work of Construction of UTR yard crossing RBL - UTR line at km 1042/11-13 and SLN - UTR line at km 1060/4-6 (Deposit Work) was sanctioned 2014-15. The work comprised of 05 spans of 2x25.24m +2x37.24m +1x19.08 with 08 nos. composite steel girders in each span. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of LC B-53 on Amritsar-Khemkarn section near Patti railway Station.**



Work of Construction of ROB in lieu of LC B-53 on Amritsar - Khemkarn section near Patti railway Station (NHAI work) was sanctioned on EPC mode in 2018-19. The work comprised of 01 spans of bow string girder of span 60m with carriage way width of 11m and footpath of 1.5 m on both sides. The work has been completed & commissioned during the month.

- **Construction of ROB in lieu of LC No. 122 on Ambala-Kalka section.**



Work of Construction of ROB in lieu of LC No. 122 on UMB - KLK section was sanctioned 2014-15. The work comprised of spans of steel girders (1x24m +1x36 m). The work has been completed in Railway portion during the month.

- **Construction of 4 lane ROB in lieu of LC No. 418-C at km 1402.940 on MB - SRE section near Moradabad.**



Work of Construction of 4 lane ROB in lieu of LC No. 418-C at km 1402.940 on MB-SRE section near Moradabad was sanctioned in year 2015-16. The work comprised of steel box girders having a span of 47.50 m. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of Level Crossing No. 153 (Dhobi Ghat) at Rly km 20/5-7 (Ex.DLI) on DLI-HWH Railway rout in Ghaziabad.**



Work of Construction of ROB in lieu of Level Crossing No. 153 (Dhobi Ghat) at Rly km 20/5-7 (Ex.DLI) on DLI - HWH Railway rout in Ghaziabad was sanctioned in 2015-16. The work comprised of Two spans of bow string girder having of span 76-50 m. The work has been completed during the month.

- **Construction of ROB in lieu of Level Crossing No. 102 at Amethi Town at Amethi.**



Work of Construction of ROB in lieu of Level Crossing No. 102 at Amethi Town at Amethi was sanctioned in 2011-12. The work comprised of One spans of composite steel girder (5 nos.) having a span of 30.28 m. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of Level Crossing No. 46 on Meerut Cantt. to Saharanpur section.**



Work of Construction of ROB in lieu of Level Crossing No. 46 on Meerut Cantt. to Saharanpur section was sanctioned in 2013-14. The work comprised of one spans of bow string girder having a span of 48 m. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of Level Crossing No. 75 on Meerut Cantt. - Saharanpur.**



Work of Construction of ROB in lieu of Level Crossing No. 75 on Meerut Cantt. - Saharanpur was sanctioned in 2013-14. The work comprised of One spans of bow string girder having a span of 54m. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of Level Crossing No. 41 on Meerut Cantt.-Saharanpur.**

Work of Construction of ROB in lieu of Level Crossing No. 41 on Meerut Cantt. - Saharanpur was sanctioned in 2013-14. The work comprised of One spans of bow string girder having a span of 48 m. The work has been completed in Railway portion during the month.



- **Construction of 2 lane ROB in lieu of Level Crossing No. 78-A on Allahabad-Phaphamau section near Prayag yard.**

Work of Construction of 2 lane ROB in lieu of Level Crossing No. 78-A on Allahabad - Phaphamau section near Prayag Yard was sanctioned in 2013-14. The work comprised of 2 spans, one of 31.2 m & other of 50 m of composite steel girders. The work has been completed in Railway portion during the month.



- **Construction of ROB in lieu of Level Crossing No. 359 & 359A at km –EP-1305/30 between Bareilly-Chanehti.**

Work of Construction of ROB in lieu of Level Crossing No. 359 & 359A at km –EP-1305/30 between Bareilly – Chanehti was sanctioned in 2016-17. The work comprised of span 1x46.05 m+2x35.61m composite steel girders. The work has been completed in Railway portion during the month.



- **Talheri Buxurg - Tapri Road Over Bridge in lieu of LC No. 79**

Work of Talheri Buxurg-Tapri Road Over Bridge in lieu of LC No. 79 was sanctioned in 2013-14. The work comprised of One spans of bow string girder having a span of 60 m. The work has been completed in Railway portion during the month.



- **Construction of ROB at LC No. S-81 Railway km 75/517/518 on JUC-FZR section.**

Work of Construction of ROB at railway km 75/517/518 on JUC-FZR section was sanctioned in 2020-21. The work comprised of 2 spans, one of 24 m plate girder & other of 60m of bow string girder. The work has been completed and commissioned during the month.



- **Construction of ROB at km 56+135 (near existing ROB No. 137A near Hapur section on Khurja-Meerut section (NHAI work).**



Work of Construction of ROB at km 56+135 (near existing ROB No. 137A near Hapur section on Khurja-Meerut section (NHAI work) was sanctioned in 2016-17. The work comprised of 2 spans, one of 24 m (track span) & other of 18 m (non- track span) of composite steel girders. The work has been completed in Railway portion during the month.

- **Construction of ROB at km 1429/06-08 and Road km 20.213 on GZB-KRJ section between Ghaziabad & Maripat Rly station (New Railway station Ghaziabad).**



Work of Construction of ROB at km 1429/06-08 and Road km 20.213 on GZB-KRJ section between Ghaziabad & Maripat Rly station (New Railway station Ghaziabad was sanctioned in 2017-18. The work comprised of 1 span of 115 m of steel truss girders. The work has been completed and Commissioned during the month.

- **Construction of ROB in lieu of LC-84-A at km 177/6-7 on MTC-SRE section of UMB division.**



Work of Construction of ROB in lieu of LC-84-A at km 177/6-7 on MTC-SRE section of UMB division was sanctioned in 2016-17. The work comprised of One spans of bow string girder having a span of 60 m. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of LC No. 84-Spl on Talheri Buzurg-Tapri section.**



Work of Construction of ROB in lieu of LC No. 84 Spl on Talheri Buzurg-Tapri section was sanctioned in 2013-14. The work comprised of One span of bow string girder having a span of 48 m. The work has been completed in Railway portion during the month.

- **Construction of 4 lane ROB in lieu of LC No. 5/C on Utretia-Alamnagar section.**



Work of Construction of 4 lane ROB in lieu of LC No. 5/C on Utretia - Alamnagar section was sanctioned in 2017-

18. The work comprised of One span of composite steel girder having a span of 43.75 m. The work has been completed & commissioned during the month.



- **Construction of 2 lane RUB in lieu of LC No. 514 in RK Yard on MB-SRE.**

Work of Construction of RUB in lieu of LC No. 514 in RK Yard on MB-SRE was sanctioned in 2017-18.The work comprised of 04 nos. RCC box of inner size 10.00mx 5.3 m & barrel length of 31.25 m. this work has been completed & commissioned during the month.



- **Construction of ROB in lieu of LC No. B-3/2-E at Railway km 4/7-8 on LDH-FZR section.**

Work of Construction of ROB in lieu of LC No. B-3/2-E at Railway km 4/7-8 on LDH-FZR section was sanctioned in 2010-11. The work comprised of One span of bow string girder having a span of 72.0 m. The work has been completed in Railway portion during the month.



- **Construction of ROB in lieu of LC No. 43-A on Meerut Cantt.-Saharanpur section.**

Work of Construction of ROB in lieu of LC No. 43-A on Meerut Cantt.-Saharanpur section was sanctioned in 2013-14. The work comprised of One span of composite steel girder having a span of 54 m. The work has been completed in Railway portion during the month.



- **Construction of ROB in lieu of LC No. 78 on Meerut Cantt.-Saharanpur section.**

Work of Construction of ROB in lieu of LC No. 78 on Meerut Cantt.-Saharanpur section was sanctioned in 2013-14.The work comprised of one span of Bow String Girder having a span of 54 m. The work has been completed in Railway portion during the month.



- **Construction of 2 lane ROB in lieu of LC No.524 on Laksar-Saharanpur near Chadiala.**

Work of Construction of 2 lane ROB in lieu of LC No.524 on Laksar - Saharanpur near Chadiala was sanctioned in 2012-13. The work comprised of One span of bow string girder having a span of 36 m. The work has been completed in Railway portion during the month.

- **Construction of 2 lane ROB in lieu of LC No. 40A at km 49/4-5 on Narwana-Kurukshetra section near Kaithal.**



Work of Construction of 2 lane ROB in lieu of LC No. 40A at km 49/4-5 on Narwana - Kurukshetra section near Kaithal was sanctioned in 2018-19. The work comprised of span 1x36 m+2x30m of composite steel girder. The work has been completed & commissioned during the month.

- **Construction of ROB in lieu of LC No.90-A on Saharanpur-Ambala.**



Work of Construction of ROB in lieu of LC No.90-A on Saharanpur-Ambala was sanctioned in 2013-14. The work comprised of One span 48 m of bow string girder. The work has been completed in Railway portion during the month.

- **Construction of ROB in lieu of LC No. S-28 on Amritsar-Sahnewal section near Wallah.**



Work of Construction of ROB in lieu of LC No. S-28 on Amritsar-Sahnewal section near Wallah was sanctioned in 2013-14. The work comprised of span of 72.00m of Bow string girder. The work has been completed in Railway portion during the month

- **Construction of ROB in lieu of LC No. B-22 at km 513/9-10 on Amritsar-Atari section at Khajana Gate near Amritsar.**



Work of Construction of ROB in lieu of LC No. B-22 at km 513/9-10 on Amritsar-Atari section at Khajana Gate near Amritsar was sanctioned in 2012-13. The work comprised of span 51.6 m of composite steel girder. The work has been completed in Railway portion during the month

- **Construction of ROB in lieu of LC No. 27at km 37/03-04 on DLI-RE section near Railway station Basai Dhankot.**



Work of Construction of ROB in lieu of LC No. 27 at km 37/03-04 on DLI-RE section near Railway station Basai Dhankot was sanctioned in 2019-20. The work comprised of track span of 31.36m of composite steel

girder and non track span of 1x20.535m 1x20.333 of PSC girder.. The work has been completed in Railway portion during the month

- **Construction of ROB in lieu of LC No.122 on Saharanpur-Ambala.**



Work of Construction of ROB in lieu of LC No.122 on Saharanpur – Ambala was sanctioned in 2013-14. The work comprised of spans of 2x18 m + 1x30 m of steel composite girder. The work has been completed in Railway portion during the month.

- **Construction of 4 lane ROB at railway Km 218.414 and NH Km 88.692 on SRE-UMB section on NH-73.**



Work of Construction of 4 lane ROB at railway Km 218.414 and NH Km 88.692 on SRE-UMB section on NH-73 was sanctioned in 2011-12. The work comprised of span of 1x37.25m + 1x19.25 m of steel composite girder. The work has been completed and commissioned during the month.

- **Construction of ROB at Km 246/19-21 on SRE-UMB section.**



Work of Construction of ROB at Km 246/19-21 on SRE-UMB section was sanctioned in 2021-22. The work comprised of span 1x24 m +1x36 m + 1x 30 of RDSO stander steel composite girder. The work has been completed and commissioned during the month.

- **Limited Height Subways Commissioned**

1. At LC No. 157 on Ambala-Ludhiana section
2. At LC No. C-24 on PHR-LNK section
3. At LC No. 359 & 359 A on Bareilly-Chanehti section
4. At LC No. 160 Cin UMB-LDH section
5. At LC No. 99 on SRE-UMB section
6. At Km 4.549 km in Rohtak-Panipat section
7. At LC No.72 on MTC-SRE section
8. At LC No.45 km in Meerut Cantt.-Saharanpur section.
9. At LC No.103-C on Saharanpur-Ambala section.
10. At LC No.B-27 km on ASR-PTK section.
11. At LC No.C-24 on Beas-TTO section.
12. At LC No.124 km on SRE-LDH section.
13. At LC No.C-59 on PHR-LNK section.
14. At LC No.88 on SRE-UMB section.
15. At km 8.812 on Rohtak –Meham section.

16. At km 9.601 on Rohtak –Meham section.
17. At km 9.922 on Rohtak –Meham section.
18. At km 10.395 on Rohtak –Meham section.
19. At km 10.963 on Rohtak –Meham section.
20. At km 11.342 on Rohtak –Meham section.
21. At km 11.923 on Rohtak –Meham section.
22. At km 13.200 on Rohtak –Meham section.
23. At km 13.710 on Rohtak –Meham section.
24. At km 14.190 on Rohtak –Meham section.
25. At km 14.540 on Rohtak –Meham section.
26. At km 15.015 on Rohtak –Meham section.
27. At km 15.207 on Rohtak –Meham section.
28. At km 16.446 on Rohtak –Meham section.
29. At km 17.891 on Rohtak –Meham section.
30. At km 19.006 on Rohtak –Meham section.
31. At km 19.790 on Rohtak –Meham section.
32. At km 21.812 on Rohtak –Meham section.
33. At km 22.338 on Rohtak –Meham section.
34. At km 22.778 on Rohtak –Meham section.
35. At km 24.128 on Rohtak –Meham section.
36. At km 24.606 on Rohtak –Meham section.
37. At km 25.407 on Rohtak –Meham section.
38. At km 25.574 on Rohtak –Meham section.
39. At km 25.805 on Rohtak –Meham section.
40. At km 26.165 on Rohtak –Meham section.
41. At km 26.788 on Rohtak –Meham section.
42. At km 27.492 on Rohtak –Meham section.
43. At km 27.882 on Rohtak –Meham section.
44. At km 28.250 on Rohtak –Meham section.
45. At km 29.895 on Rohtak –Meham section.
46. At km 30.183 on Rohtak –Meham section.
47. At km 30.576 on Rohtak –Meham section.
48. At km 31.245 on Rohtak –Meham section.
49. At km 31.420 on Rohtak –Meham section.
50. At km 32.334 on Rohtak –Meham section.

51. At km 32.700 on Rohtak –Meham section.

52. At km 33.070 on Rohtak –Meham section.

53. At km 33.270 on Rohtak –Meham section.

54. At km 33.418 on Rohtak –Meham section.

55. At km 34.170 on Rohtak –Meham section.

56. At km 34.419 on Rohtak –Meham section.

57. At km 34.863 on Rohtak –Meham section.

58. At km 36.174 on Rohtak –Meham section.

59. At km 37.395 on Rohtak –Meham section

60. At LC No.88 on SRE-UMB section.

61. At km 8.812 on Rohtak –Meham section.

62. At LC No.84-Spl on Talheri Buzurg-Tapri section.

63. At LC No.34 on RAC-SPC Section.

64. At LC No.42 on RAC-SPC Section.

5.5.5 Traffic Facility Works

Following traffic facility works have been completed during the year 2022-23:

- Mallhaur yard has been commissioned in connection with 3rd /4th line between Malhaur-Barabanki.



- Deoband yard has been commissioned in connection with doubling between MOZ-TPZ section.
- Motichur station and Dehradun- extension of existing shunting neck have been Completed (Haridwar -Dehradun-Development of facilities for running 18 coaches train)
- Anand Vihar(Development of new coaching terminal) PH-II (Additional holding line between Anand Vihar & Chandernagar station for 'B' Panel building)* has been Completed during the month (02.07.22).
- 4 longer loop line- Mahgawan, Shivpur & Pakhrauli station (Mughal Sarai-Lucknow-Moradabad-Ambala-Jallandhar-Amritsar longer loops (1150 km)) has been commissioned.

- Reabareli Yard remodeling (PH-II) has been completed.
- Chheharta - Development of coaching cum maintenance facilities (All major works of passenger amenities, sick line shed etc. completed) has been completed.
- Manak Nagar- Addl loop line work has been completed.
- Lucknow Division-Remodelling of Rasauli yard as doubling under BBK-ABP doubling has been commissioned.
- Bari Brahman- Development of satellite of freight goods terminal has been commissioned.
- Partapgarh Yard remodeling has been commissioned.





5.5.6 Construction of FOB

- FOB –Two FOB at Goshaiganj & Katahri station have been commissioned.
- 6 nos. FOB Completed in Doubling - Rasauli, Radauli, Mehrawan, Khata Sarai, Misrauli, Antu & 01 no. FOB Completed in Passenger Amenities - Trilochan mahadev station have been commissioned.
- 2 nos. FOB Completed in Doubling–Darshan Nagar & Bilhargha station have been commissioned.
- 4 nos. FOB Completed in Doubling– Alna Bhari, Chilbila, Pratapgarh & Jagesharhanj station have been commissioned
- 17 nos. FOB Completed in Doubling–Darshan nagar, Gosainganj, Katrhri, Mehrawan, Misrauli, Antu, Rudauli, Rasauli, Bilhar Ghat, Khata Sarai, ulna Bhari, Chilbila, Partapgarh, Jagesharganj, Akbarpur, Trilochan Mahadev & Sarkoni station have been commissioned

5.5.7 Bridge Work-

NIL

5.5.8 Workshop-

Shakurbasti (Diesel shed) –Augmentation of Homing Capacity for WDM2 locos (50 Nos.)

5.5.9 Staff Welfare–



➢ **Const. of 66 units Type-II quarters in replacement of old Type-I non-standard quarters and allied works in Railway colony at Ambala Cantt.**

36 units Type-II quarters which were targeted to be completed in 2020-21 has been completed.

5.5.10 Passenger Amenities

➢ Lucknow-Sultanpur- Raising of Platforms for running of Electrical Multiple unit trains Raising of platforms at Bhadayian & Sarkoni on Lucknow-Sultanpur has been completed during the month including one FOB at each station.

➢ 17 nos. FOB Completed in Doubling–Darshan nagar, Goshainganj, Katrhri, Mehrawan, Misrauli, Antu, Rudauli, Rasauli, Bilhar Ghat, Khata Sarai, ulna Bhari, Chilbila, Partapgarh, Jagesharganj, Akbarpur, Trilochan Mahadev & Sarkoni station have been commissioned.

5.5.11 Other Specified Works-

NIL

5.5.12 Training HRD-

NIL

यांत्रिकी
MECHANICAL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter VI

6.1 About the Department

Rolling Stock Department is headed by Principal Chief Mechanical Engineer. Rolling Stock Department is responsible for maintenance of all passengers and freight stock and Diesel locos over Northern Railway.

6.1.1 Maintenance of Mechanical Assets is being undertaken at:

Division	Freight depots	Coaching depots	DEMU Sheds	EMU/MEMU Sheds
DLI	TKD, GZB, SSB ICD - TKD, GHH, PT, AST, BDMJ, PWL, DWNA, MUZ, BLC only),FN	DLI, NDLS, HNZM, DEE, MTC, JHI, ROK, ANVT,PNP, SSB	SSB	GZB
LKO	LKO	LKO, BSB, AYC, SLN, RBL, PBH, PYGS		
FZR	LDH, JUC, ASR,JAT,FZR, PTK (ICD-DDL,SNL/GRF only)	FZR, ASR, JAT, PTK. PTK(NG) UHP, JUC, LDH, SVDK, BJPL(NG)	BDGM,JUC	
MB	MB	DDN, HW, NBD, MB, BE, BLM,SPN, YNRK		
UMB	UMB, KJGY, BTI, ICD-CHA, ICAK- QRP, GPHK-QRP	UMB, KLK, SRE, NLDM, CDG, BTI, SML(NG), KLK(NG)		SRE

6.1.2 Periodic overhauling of assets on NR is undertaken at following shops:

S.N.	Workshop	Major Activities
1.	Jagadhri	➢ POH of AC & NAC ICF coaches. ➢ POH of AC & NAC LHB coaches. ➢ Overhauling of ICF & LHB bogies for IOH of coaches. ➢ POH of freight stock. ➢ RSP works of Coaching & Freight stock. ➢ Wheel supply to Division.

2.	Charbagh, Lucknow	➢ Electric Loco POH. ➢ SPART/SPARME POH. ➢ DEMU & MEMU POH. ➢ Overhauling of ICF coach bogies for IOH. ➢ POH of T-18 bogies. ➢ RSP work of DEMU/MEMU. ➢ Wheel supply to Division.
3.	Alambagh, Lucknow	➢ POH of AC and NAC ICF coaches. ➢ POH of AC and NAC LHB coaches. ➢ Overhauling of ICF & LHB bogies for IOH of coaches. ➢ RSP works of coaching stock. ➢ Wheel supply to Division.
4.	Amritsar	➢ Manufacturing of BOXNHL, BVCM, BRN and other wagons on demand basis, ➢ Fabrication of LHB bogie frames for Pus. ➢ Wheel supply to Division.
5.	Kalka	➢ POH of NG coaches for Kalka-Shimla (KSR) & Pathankot - Joginder Nagar (KVR) sections. ➢ Manufacturing & Rehabilitation of NG coaches.
		➢ Manufacturing of NG Wagons. ➢ POH of RMC (Rail Motor Car).
6.	Sonipat	➢ MLR of LHB coaches. ➢ IOH of LHB coach bogies.

6.2 Coaching

6.2.1 Maintenance of trains

Division	Depot	Trains based for PM	Trains based for SM	Trains based for TE	Trains based for passing through	Total Trains
DLI	NDLS	21	19	38	68	146
	HNZM	12	24	20	31	87
	DLI	12	1	36	44	93
	DEE	8	5	16	0	29
	ANVT	21	3	27	0	51
	MTC	4	0	5	0	9
	JHI	3	0	9	0	12
	ROK	0	0	10	0	10
	PNP	0	0	1	0	1
	SSB	0	2	0	0	2
Total		**81**	**54**	**162**	**143**	**440**
FZR	ASR	16	7	24	8	55
	FZR	6	2	12	11	31
	JAT	6	14	8	8	36
	JUC	0	0	7	6	13
	LDH	0	0	9	97	106
	SVDK	7	4	8	0	19
	UHP	0	0	4	0	4
	PTK	0	0	7	8	15
	PTK (NG)	7	0	0	0	7
	BJPL (NG)	0	6	0	0	6
Total		**42**	**33**	**79**	**138**	**292**
LKO	BSB	7	3	20	112	142
	FD	4	1	6	0	11
	LKO	10	2	14	216	242
	PBH	0	0	6	0	6
	PYGS	3	1	14	0	18
	RBL	3	0	5	0	8
	JNU	0	0	4	0	4
	SLN	2	0	4	0	6
Total		**29**	**7**	**73**	**328**	**437**

MB	DDN	5	2	12	0	19
	HW	3	0	10	18	31
	NBD	3	0	4	4	11
	MB	2	0	13	172	187
	BE	9	0	4	12	25
	BLM	4	0	0	0	4
	RKSH	0	0	2	0	2
	SPN	0	0	4	0	4
	YNRK	0	3	4	0	7
Total		**26**	**5**	**53**	**206**	**290**
UMB	UMB	3	0	8	76	87
	CDG	6	4	11	0	21
	KLK	3	1	4	0	8
	NLDM	2	1	3	0	6
	BTI	3	0	3	44	50
	SRE	2	1	2	70	75
	KLK (NG)	7	0	0	0	7
	SML (NG)	0	7	0	0	7
Total		**26**	**14**	**31**	**190**	**261**
Grand Total		**204**	**113**	**398**	**1005**	**1720**

6.2.2 Primary Rakes based in Northern Railway:

Division	No. of Rakes
DLI	119
LKO	55
FZR	60
MB	50
UMB	44
Total	**328**

6.2.3 Electrical Coaching (TL&AC):

Division	Coach Holding		Main Maintenance Depot
	AC	TL	
DLI	2098	2269	NDLS***, HNZM***, DEE***, DLI***, ANVT*** MTC** ROK*, JHL*, JHI* SSB***

FZR	427	1066	JAT***, ASR***, SVDK***, FZR*** PTK**, JUC**, UHP**CIA***
LKO	236	682	LKO***, BSB*** AYC** PBH*, SLN*, JNU*, RBL*, PYGS*
MB	81	490	DDN*** BE**, HW** BLM*, NBD*, MB*
UMB	107	381	CDG*** UMB**, SRE**, KLK**, BTI**, NLDM**
Total			
2022-23	**2949**	**4888**	**Total Coaches (TL & AC) = 7837**
2021-22	**2841**	**5009**	**Total Coaches (TL & AC) = 7850**
% Variation	**+3.8**	**-2.4**	**Total Coaches (TL & AC) = -0.16 %**

*** Depots dealing with TL, AC & EOG/HOG coaches
** Depots dealing with both TL & AC coaches
* Depots dealing with TL coaches

6.3 Freight

6.3.1 ROH Depots

CONVENTIONAL STOCK	**UMB, KJGY, MB**
BLC	**TKD, MB, UMB**

6.3.2 Goods Trains Examined Per Day

Division	Total
DLI	25.40
UMB	12.37
LKO	0.62
MB	0.89
FZR	9.21
Total	**48.49**

6.4 DEMU/MEMU/EMU Stock

6.4.1 DEMU Holding

Shed	DPC			DTC		TC			Total
	700 HP	1400 HP	1600 HP	700 HP	1400 HP	700 HP	1400 HP	1600 HP	
JUC	10	45	0	17	0	19	106	0	197

SSB	3	29	6	1	0	0	81	24	144
BDGM	1	26	4	0	5	0	71	13	120
Total	14	100	10	18	5	19	258	37	461
Grand Total	**124**			**23**		**314**			**461**

6.4.2 DEMU Rakes and Utilization

Shed	No. of Rakes	Daily Train services run	Daily Kms earned	Average km/ rake
JUC	21	120	9939	473
SSB	9	40	2610	290
BDGM	7	30	2790	398
Total	**37**	**190**	**15339**	**414**

6.4.3 EMU & MEMU: Capacity vis-à-vis holding status

Div.	Shed	EMU/ MEMU	Rakes Holding as on 31.03.2023							
			6 car	8 car+ 3 ph	9/10 car	12 car+ 3 ph	15 car	16 car+ 3 ph	20 car	**Total**
DLI	GZB	**EMU**	-	-	02	07+04	03	-	-	16
		MEMU	-	0+1	-	19+01	-	04+02	01	28
		Total	-	01	02	31	03	06	01	44
UMB	SRE	**MEMU**	-	03+05	-	04+02	-	-	-	14
Grand Total				**09**	**02**	**37**	**03**	**06**	**01**	**58**

6.5 Accident Relief Infrastructure

	ARTs/ ARMEs/SPARMVs& BD Cranes				
Div.	**Location**	**Class of ART**	**ARME/SPARMV**	**BD Crane**	**HRE**
DLI	**DLI**	**A**	**SPARMV**	**140-T**	**BEMCO**
	NDLS	**Road Mobile Van**	**-**	**--**	**BEMCO**
UMB	**UMB**	**A**	**ARMV**	**140-T**	**BEMCO**
	UMB	**Road Mobile Van**	**--**	**--**	**LUKAS**
	BTI	A	SPARMV	140-T	MFD
	SRE	B	SPARMV	--	BEMCO
	KLK(NG)	B	ARMV	--	MFD

FZR	FZR	B	ARMV	--	MFD
	ASR	B	SPARMV	--	BEMCO
	LDH	A	ARMV	140-T	LUKAS
	PTK	A	ARMV	140-T	BEMCO
	PTK(NG)	B	--	--	--
	JAT	C(Tool Van)	---	--	MFD
	SVDK	--	---	140-T	--
	BJPL(NG)	C	ARMV	--	--
	BDGM	SPART	---	--	LUKAS
MB	MB	A	SPARMV	140-T	MFD
	RAC	B	ARMV	--	MFD
	HW	--	SPARMV	--	--
LKO	LKO	A	SPARMV	140-T	BEMCO
	AYC	B	ARMV	--	BEMCO

6.6 Highlights of the year

6.6.1 Improved maintenance of Rolling Stock

A. Coaching

- Average ineffective of coaching stock during 2022-23 was 5.23% as against Railway Board's target of 7.50%. This resulted in increased availability of coaches for traffic use.
- Average ineffective of freight stock during 2022-23 was 2.48% as against Railway Board's target of 3.80%. Hence, higher availability of wagons was ensured.
- SS-I/IOH outturn of coaches during 2022-23 was 3287 against 2970 during 2021-22.
- Freight DVS cases reduced to 27341 wagons during 2022-23 against 33546 wagons during 2021-22.

B. DEMU

- DEMU POH outturn during the year 2022-23 was 276 as against target of 253, thus 9.09% above target.

C. MEMU

- MEMU POH outturn during the year 2022-23 was 300 as against target of 309.

D. Electric/Diesel loco POH

- Elect/ Loco POH outturn during the year 2022-23 was 34 as against target of 25, target was successfully achieved, thus 36% above target.

6.6.2 Modification/Up gradation/ Manufacture of Rolling Stock

A. Coaching

- Commissioning of Automatic Coach Washing Plant (ACWP) at ASR, DLT/NDLS & Rajdhani /NDLS.
- Installation and commissioning of Pit Wheel Lathe at NDLS.
- Provision of fire and smoke detection system in coaches and power car/ pantry car.
- Elect/ Loco POH outturn during the year 2022-23 was 34 as against target of 25, target was successfully achieved, thus 36% above target.
- NG coaches POH outturn during the year 2022-23 was 146 as against target of 93, thus 56.99% above target.
- DEMU POH outturn during the year 2022-23 was 276 as against target of 253, thus 9.09% above target.
- MEMU POH outturn during the year 2022-23 was 300 as against target of 309.
- NAC ICF Coach POH outturn during the year 2022-23 was 2054 as against 1620, thus 26.79% above target.

B. Freight

- ASRW achieved best ever figure of 562 wagons manufacturing and turned out in FY 22-23 against the earlier best figure of 457 in 19-20.
- Wagon POH outturn during the year 2022-23 was 6374 as against target 6344.
- Retro-fitment of twin pipe brake system in Freight stock 2167 wagons have been provided with twin pipe in 22-23 by JUDW.
- Conversion of ICF coaches into NMGHS coaches, total 95 coaches have been converted into NMGHS coaches by workshops (i.e.JUDW-49 and AMVW-46) in 2022-23.
- Up Gradation and rehabilitation of BOXN to BOXNR wagons.

6.6.3 Other achievements

- CBW completed SS-2 schedule of Bogies of 1st Rake of Vande Bharat in Dec'22.
- **Saving of energy by 3-Phase EMU rakes by EMU/GZB shed.**

  During the year 2022-23, 2277550 KWh energy has been saved by regenerative

braking feature in 3-Phase EMU rakes w.r.t. 9525661 KWh energy consumed.

- **Shield for Best MEMU/EMU/DEMU of Northern Railway 2022.**

  DEMU shed JUC awarded the shield for best among MEMU/EMU/DEMU of Northern Railway for the year 2022-23.

6.7 Developments in EMU/MEMU Car Sheds

- **EMU Car Shed, Ghaziabad**

The shed has been accredited with ISO 14001:2015 for Environment Management System (EMS), ISO 45001:2018 for Occupational Health & Safety Management System (OHSMS) & ISO 50001:2018 for Energy Management System (EnMS) & 5S.

- **MEMU Car Shed, Saharanpur**

The shed is accredited with ISO 50001:2011 and '5S', ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, certifications.

- **POH OF EMU/MEMU coaches & Tower wagon.**

EMU car shed, GZB

S.No.	Activities	Target	Achievement (2022-23)
1.	POH of EMU coaches	114	114
2	POH of tower wagons	09	14

- **Commissioning of newly received 8 car MEMU**

Status of 3 phase MEMU rakes

S.No	Rake no.	Received from	Recd. on	Commissioned on	Remarks
1.	30151-30152-30153	M/s BEML/ Bangalore	09.06.20	23.07.22	
2.	218001-218002	M/s BEML/ Bangalore	25.03.21	01.08.22	Sent to SRE
3.	208135-208136	M/s BEML/ Bangalore	25.03.21	02.08.22	Sent to SRE
4.	218331-218332	ICF/Chennai	02.04.22	05.05.22	
5.	218557-218558	ICF/Chennai	09.06.22	12.08.22	
6.	228017-228018	M/s BEML/ Bangalore	25.07.22	10.08.22	Sent to SRE

7.	228009-228010	M/s BEML/ Bangalore	05.08.22	10.08.22	Sent to SRE
8.	208151-208152	M/s BEML/ Bangalore	05.08.22	30.08.22	Sent to SRE
9.	218003-218004	M/s BEML/ Bangalore	24.08.22	09.09.22	Sent to SRE
10.	208143-208144	M/s BEML/ Bangalore	24.08.22	23.10.22	Sent to SRE
11.	228161-228162	ICF/Chennai	06.09.22	12.10.22	
12.	228163-228164	ICF/Chennai	17.09.22	14.10.22	
13.	228165-228166	ICF/Chennai	17.09.22	03.10.22	
14.	218005-218006	M/s BEML/ Bangalore	22.09.22	23.10.22	Sent to SRE

- **Commissioning of 3-Phase MEMU rake at BDGM (2022)**

One 3-Phase 8-Car MEMU/ICF-MEDHA rake no. 208171-208172 was dismantled, transported, re-assembled & commissioned at Budgam and trial conducted successfully in April'2022. Further, training to BDGM, SSE/JE & Staff on maintenance of 3-phase rake was also provided by EMU Car Shed, Ghaziabad





- **Development of Testing Facility for Air Bellows Testing of Air Suspension Bogies by EMU/GZB**

There was no separate testing facility available in EMU/GZB for testing of Air Bellows of Air Suspension Bogies. Earlier this testing was carried on the coach itself and valuable time being consumed in case of leakage in Air Bellows of Air Suspension Bogies.

Now, air bellows are tested thoroughly before final mounting in coach during POH. This has prevented unnecessary coach lifting and wastage of manpower as well.

6.8 New works commissioned during 2022-23

Commissioning of Sick Line Shed at PYGS was done on 07.05.22 under sanctioned work of 'Prayag Ghat - Upgradation as coaching terminal' in PH-16. The shed is equipped with 15 Ton EOT crane which was commissioned on 04.05.22 and a set of Synchronized Lifting Jacks Capacity 25 Ton (Jamalpur make). This is the 2nd sick line over LKO division which will now cater coach maintenance requirements of BSB, SLN and PBH depots thus reducing movement of coaches to LKO.





- **Commissioning of Automatic Coach Washing Plant (ACWP) at ASR, DLT/NDLS & Rajdhani/NDLS:**

Automatic Coach Washing Plants (ACWP) have been commissioned at ASR, DLT/NDLS & Rajdhani/NDLS on 13.08.22, 27.08.2022 & 25.11.2022 respectively, resulting in saving of water and saving of revenue which is being incurred on contractual external washing of coaches and cost of water.



ACWP at Rajdhani Complex/NDLS

- **Installation of Quick watering system at LKO**

Quick Watering System started working from 30.05.2022 at Lucknow Station. This system consists of three pumps having capacity of 40 HP each dedicated water pump, Supervisory Control and Data Acquisition (SCADA) control panel, pressure sensor and flow meter in header.

Advantages

- Manpower reduction in valve operation.
- Proper flow will be available to ensure full watering in limited time.
- Improved watering in case of bunching.
- Water saving and flow/pressure monitoring.
- Uninterrupted water supply in peak summer when demands in colonies are high.

➢ **Start of IOH attention work at Coach Care Centre, Shakurbasti.**

IOH attention to coaches has been started at Coach Care Centre, SSB and first coach was turned out after IOH on 08.04.2022.

6.9 Major high value M&Ps (costing more than 50 lakhs commissioned during 2022-23 under PH-41:

➢ **Steam Coal Boiler CAP-1.5 TPH,** 10.54 kg/cm2 commissioned on 26.08.22 at Sleeper Plant, Khalispur.



➢ **Traverser 80T (2 track)** commissioned on 11.10.22 at Alambagh Workshop.



➢ **CNC Axle Turning Lathe** commissioned on 02.12.22 at Alambagh Workshop.



➢ **Hydraulic Double end CTRB Equipment** commissioned on 07.12.22 at Jagadhri Workshop.



➢ **CNC Surface Wheel Lathe (BG)** commissioned on 02.01.23 at ROH Depot/KJGY.



➢ **CNC Under Floor Wheel Lathe** commissioned on 20.02.23 at NDLS.





- **CNC Under Floor Wheel Lathe** commissioned on 01.03.23 at ELS/GZB.



- **Hydraulic Re-railing equipment** commissioned on 24.09.22 at ASR.





- **Installation and commissioning of Pit Wheel Lathe at NDLS.**

Installation and commissioning of Pit Wheel lathe has been done at Coach Care Centre, NDLS on 22.02.2023. This will reduce transit time and hence ensuring higher availability of coaches for traffic use.





6.10 Ongoing Major Projects

- **Setting up of Train set depot at SSB in PH-42:**

The subject work had been sanctioned by Railway Board on 29.07.21.CAO/ WPO/Patna as nominated as the Executing Agency for the project. DE amounting to Rs.213.36 cr. was

sanctioned on 21.12.21. Composite tender for Civil, Elect., S&T and Mech. works was opened on 21.01.22 and awarded on 06.04.22 to M/s HYT,Pune. Work is in progress. 40% work was completed during 2022-23. PDC: Nov '23.

➢ **Mission Raftar project for raising of speed to 160 KMPH on NDLS-BCT route in DLI area and NDLS-HWH route in LKO area**

- **At Delhi area:**

  The location for the work was finalized during 2021-22 at NDLS-DLT & Rajdhani complex. GAD for "Creation of mechanical maintenance facilities" has been approved by DLI Division on 19.08.21. Tender for Engg. Works opened on and awarded on 09.02.22. 25% work completed during 2022-23.

- **At Lucknow area:**

  The location for the work was finalized during 2021-22 at LKO North Coaching Complex. Revised GAD for "Creation of mechanical maintenance facilities" was approved on 25.02.22 and ESP of LKO yard approved on 08.03.22. Tender for Engg. works was opened on 22.09.21 and awarded on 21.11.21. 25% work completed during 2022-23.

- **USBRL project in PH-11:**

  The 1st revised estimate of the Katra-Banihal section of USBRL project has been sanctioned by Railway Board at a cost of Rs. 30293.13 cr. on 26.08.22, out of which 272.44 cr. has been sanctioned for M&P/T&P items. M&P items are under procurement at HQ and Divisional store. A fund of Rs. 62 cr. has been sanctioned for mandatory facilities in Kashmir Valley in revised estimate, out of which fund of Rs. 35 cr. is for mechanical maintenance facilities at BDGM for which tender opened on 30.03.2023 was under TC during 2022-23. Later, tender was discharged and RT opened on 06.06.23 and awarded.

  Work of construction of the 3rd washing line at Katra is in progress. 75% work completed during 2022-23.

  Work of "Extension of DMU Shed from 8 coaches to 12 coaches at Budgam" sanctioned under PH-42 during 2021-22 is in progress. 60% work completed during 2022-23.

- **Rishikesh- Karnaprayag (125KM) project under PH-11**

  ESP of Karnaprayag Yard had been approved on 30.11.22. Revised Estimate is under finalization with Executing Agency i.e. M/s RVNL.

6.11 New Works sanctioned under PH-42

Work sanctioned for upgradation of infrastructure at Coaching Depots, Freight Depots, Workshops, Diesel Sheds and Electric Loco Sheds under Umbrella works (PH-42) during 2022-23 are as under:

- **02 nos.** proposals costing **Rs. 11.52 Cr.** at CDG depot & ELS/KJGY have been sanctioned in **umbrella work 2019-20.**
- **07 nos.** proposals costing **Rs. 131.476 Cr.** at TKD Diesel shed, ELS/GZB (2), JUDW (2), KJGY ROH Depot and JUC depot have been sanctioned in **umbrella work 2020-21.**
- **16 nos.** proposals costing **Rs. 340.46 cr.** at CBW (3), DLI, LKO, GZB, TKD Diesel shed, DLI loco out pit, TKD loco out pit, LDH loco out pit, LDH Diesel shed, AMV Diesel shed, ASRW, AMVW, ASR and BDGM have been sanctioned in **umbrella work 2022-23.**

6.12 Other Initiatives in NR

- **Proliferation of Head On Generation (HOG) system (Environment, Heritage preservation & Promotion initiatives):**

Due to inherent features like no noise and air pollution on account of diesel generator set besides being energy efficiency & eco-friendly, proliferation of HOG system all 106 LHB type trains (134 rakes) have been made HOG compliant & shifted to HOG from EOG over N.Rly.

However, regular & special LHB trains worked on HOG scheme for 30980 trips (76.6%) during 2022-23. This has resulted in a saving of approx. 2.68 Crore Ltrs (Approx. Rs. 293.76 Cr.) of HSD oil from April'22 to March'23 earning 71798 Tonnes of carbon credits also.

- **Conversion of Garib Rath Coaches /power cars on HOG (All divisions).**

All (180) Garib Rath Coaches & Power Cars planned for modification. As on date, 156 coaches & 09 power cars are modified.

- **Retro-fitment of existing Fluorescent tube lights with LED lights in Coaches.**

LED lights have been provided in 772 AC & 1476 non AC coaches during 2022-23. With this N. Rly has completed all 6495 (4436 non AC & 2059 AC) coaches with LED lights. This has resulted in improvement in coach illumination from 30 to 65 lux as well as reduced maintenance needs due to higher reliability.

- **Provision of USB type mobile/laptop charging points.**

To provide each passenger of AC coaches with individual USB type charging point with reading light at each seat/berth in AC coaches, trial done in-house at JUDW in six AC coaches during 2022-23, further is planned in 750 coaches. Also, additional 18 mobile charging points provided in 474 Non AC LHB coaches during 2022-23.

- **Operation of Rajdhani/Shatabdi in Push Pull mode.**

Total 48 nos coaches (05 nos LWLRRM, 06 nos. LWFCZAC & 37 nos LWSCZAC) have been modified for push pull modification over DLI division. In 1st phase, 23 coaches and 02 power cars have been modified & trial have been conducted (Both Electric & Diesel). In 2nd phase, 20 coaches & 03 power cars have been modified & trial of these coaches is under planning.

6.13 System Improvement

6.13.1 Following COEs were developed by NR Workshops in 22-23:-

a. Centre of Excellence- EP contactor-CBW:

Fully equipped work stations have been designed and developed with provision for placement of tools for easy approach and handling. The section is equipped with PLC based test bench for recording the data and automatic testing has eliminated the human error and increased the efficiency of the process. A cloud based data recording system has been developed which helps in recording all the POH related information of a particular equipment and easily retrieving the data for failure analysis.







b. Centre of Excellence-Diesel Small motor section-CBW

KF, RF, oil pump motor, main compressor and baby compressor motors overhauling and testing are done which are used in MEMU coaches. Blower motor, Auxiliary motor is also overhauled and tested which are used in DEMU coaches



c. Centre of Excellence -LHB Air Brake Section-AMVW

- **Objectives**

Periodic Overhauling (POH) of LHB air brake components include

i. Panel mounted components- Isolating for bogie, check valve, distributor valve etc.

ii. Axle mounted components- Disc Brake Cylinder

iii. Pipeline components- PEAV, Brake Accelerator etc.

- **Facilities**

1. Testing Facilities -

i. Disc Brake Cylinder

ii. Distributor Valve

iii. Small Components

iv. FIBA device

2. Kiosk for training purpose related to LHB coaches





d. Centre of Excellence: LHB Electronics lab-AMVW

- **Objective**

Testing of Electrical components used in LHB coaches.

- **Facilities**

i. Safety equipment MMR (Measuring Monitoring Relay-HT &LT).

ii. EBC (Emergency Battery Charger) & RBC(Regulated Battery Charger).

iii. Microprocessor based controller for operation of RMPU units.

- **Capability to repair**

EBC (Emergency Battery Charger) & RBC (Regulated Battery Charger).





e. Centre of Excellence -Automated testing of RMPU- AMVW

- **Objective**

Automated Testing of RMPU.

- **Facilities**

Fully automated system for testing of coach RMPU.

- **Benefits**

i. RMPU is tested under (48 to 52)℃ ambient temperature resultant as minimum online failure.

ii. All the parameters are logged by the CPU and real time testing report is generated through system; no data manipulation is possible.

iii. All the parameters can be monitored through mobile application available on Google play store and previous data also can be downloaded.





f. Centre of Excellence- Carriage model room-JUDW

JUDW has developed the dedicated facility for model fabrication to preserve and pass on the specialized skills to the next generations.

- **Facilities**

  i. Separate work station for each activity

  ii. Separate Cabin for grinding &soldering with proper exhaust

  iii. Magnified light with adjustable arm

  iv. Cordless Drill Machine

  v. Dedicated Tool Boxes

  vi. False Ceiling, Wall Paneling, Tiles & LED Lights





g. Centre of Excellence- DV Overhauling (WR Shop)-JUDW

- **Objectives**

  i Ensure dust free and ergonomically compatible environment for POH of DV to eliminate the errors in the process and thereby reducing DV failures.

  ii Center of knowledge for DV and its components.

- **Facilities**

  i. 01 Nos Automatic test bench and 02 Nos Manual Test benches.

  ii. Digital kiosk & Model room for increased awareness about DV and Air Brake System.

  iii. Ergonomically designed working benches to improve productivity.

  iv. Proper material handling equipment is provided considering the female workforce.

  v. Soothing and Spacious workplace for betterment of workforce and good quality work.

- **Benefits**

  i. Upgraded DV room has a capacity of 30 DV per day with proper testing features.

  ii. Proper implementation of FIFO system for overhauling Kit.

  iii. Reduction in DV Failure cases, minimum human error.

  iv. Digital Knowledge Kiosk is provided for training and knowledge purposes





h. Centre of Excellence - Tup Hammer-JUDW:

Objectives

i. Testing of Draft gear as per specification WD 71 BD-15.

ii. Proper testing and validation of supplied Draft gears.

- **Facilities**

i. Railway board advised to develop a Center of Excellence in order to facilitate proper type testing of upgraded High-capacity Draft Gear as per RDSO specification.

ii. As per knowledge of this workshop, no Govt. lab has Tup Hammer facility for testing of upgraded high-capacity draft gear.

iii. Existing Tup Hammer setup has been revived to suit the requirement specified in RDSO specification.

iv. All operations are computerized and automated.

v. It is suitable for checking the rating travel and capacity of both WD-71-BD-15 & WD-49-BD-08.

vi. Following facilities of data storage and record generation are available:

- Peak reaction force (graphical and numeric).
- Peak travel (displacement) (graphical and numeric).
- Graph of load and displacement with absorbed energy.

- **Benefits**

i. It facilitates proper Type testing of new upgraded high-capacity draft gear.

ii. It is helpful in ascertaining the quality of reconditioned draft gear.

iii. It helps to reduce the Train-parting and dead draft gears.





i. Centre of excellence: Battery Room-JUDW:

- **Objectives**
  - i. Automation and data recording of Charging/discharging process of batteries.
  - ii. Reclaim discharge cycle energy of batteries through regenerative battery chargers.
- **Facilities**
  - i. Newly developed facility having better day light and air ventilation.
  - ii. Acid proof tiled floor and battery charging beds.
  - iii. Regenerative type battery chargers to recover discharge cycle energy of the batteries.
  - iv. Battery health monitoring system to handle 04 sets of battery banks simultaneously
  - v. Real time voltage and charging/discharging currents display for each cell
- **Benefits**
  - i. Improved workman efficiency by providing a neat & clean work environment.
  - ii. Energy Conservation by regeneration.
  - iii. Reduced human intervention.



Battery Section with Regenerative Charging, LED light, Ventilation fan, Wall Paneling & Acid proof tile facility



Regenerative type battery Charger

6.14 Infrastructural Improvements:

• Automatic Coach Washing Plant have been commissioned at ASR (Aug'22), NDLS-DLI (Aug'22) and NDLS-Rajdhani complex (Nov'22) using ERW funds. This has led to reduction in consumption of water used in exterior cleaning of coaches by as much as 80-90% while also improving the quality of cleaning of coaches. This also includes Water Re-cycling Plant.





AUTOMATIC COACH WASHING PLANT AT ASR



AUTOMATIC COACH WASHING PLANT AT NDLS-DLI



AUTOMATIC COACH WASHING PLANT AT NDLS-RAJDHANI COMPLEX

• **Quick Watering System** commissioned at **LKO** (May'22), **BSB** (Mar'23) and **LDH** (Mar'23) under PH-53. Work is in progress at **NDLS** and **NZM** stations. This has resulted in speedy watering of coaches and reduction in halt time at the station.





QUICK WATERING SYSTEM AT LUCKNOW





QUICK WATERING SYSTEM AT LUDHIANA

- **Development of Sanitization Room:**

Departmental mechanized laundry at Coach Care Centre, NZM has developed an additional sanitization room in addition to the existing sanitization room for sanitization of blankets.



- **Fabrication & Installation of big size shed entrance Gate.**

EMU Car Shed, Ghaziabad has undergone many changes & developments ever since it came into existence at the time of Asiad-1982. In compliance to DRM/NDLS instruction, another milestone development was made by constructing a big entrance gate of the shed to give an effective look. The different parts of entrance gate such as steel pillars, top round shape structure, write-up on the round portion, supports members, etc. were fabricated by using scraps and installations of these parts at the entrance was done by staff of body repair section with good finish. This overall structure of entrance gate is giving a feel of proud to staff and others.



6.15 Excellence in safety

- **Fire Safety Training**

Fire safety training was provided to 17 nos. Apprentice Technicians and Staff during refresher courses at C&W training Centre, GZB.





- **RDPT of side bearers for MEMU/DEMU:**



CBW started RDPT of side bearer of MEMU/ DEMU coaches to curtail the repeated occurrence of Side bearer being damaged, proper surface cleaning and surface preparation is done to conduct the RDP test of these side bearers at the time of Bogie repair. Water leakage test is then conducted to avoid any leak. Further, special attention is being taken to ensure checking of any side bearer crack at the time of lowering of coaches

- **Provision of Fire and Smoke detection system in coaches:**

Fire and Smoke detection system are provided in coaches designed for very early detection and very early warning against any smoke/fire and is able to protect entire passenger area, electrical panels, lavatory, doorway and gangway of coach. Cumulatively, 1637 coaches are equipped with this system.







- **Provision of Smoke detection and suppression system in Pantry cars and Power cars:**

Smoke detection and suppression system is being provided in pantry cars and power cars. The system is based on the use of water mist to fight the fire. The average droplet of the system yield a total surface area at least 100 times greater than conventional sprinkler droplets for the same volume of water. The water is forced at high velocity through specially designed nozzles arranged on spray heads and covers highly inflammable areas such as DG set, filters of power car and cooking area of pantry car etc. All NR based pantry & power cars have been provided with the same.





6.16 Innovative Measures

➢ **Development of Side Frame key pin with Bulb Cotter:**

To resolve the issue of missing side frame keys in wagons, Wagon Care Centre, GZB has developed a Side Frame key pin with Bulb Cotter. This pin is provided in place of Side Frame key nut and bolt.



➢ **Development of Dashboard for RailMadad analytics/statistical data**

A simple and user-friendly dashboard has been developed & designed by MB Division for quick and easy access to any information and data regarding RailMadad analytics/statistical data over NRHQ & MB Division which is compatible with both Android & iOS based mobile application and website named “Vigyapti Communique”.

Dashboard contains financial year wise & month wise RailMadad Complaints, Division wise performance, type wise & channel wise complaints & feedback, average disposal & pendency time, average rating, bottom 15 trains & stations, zone wise performance, complaints per million passenger etc. Same dashboard is under preparation for DLI, LKO, UMB & FZR Divisions.

➢ **Additional features:**

- Highly dynamic, interactive & speedy UI with bright & bold color schemes and good resolution.
- Profile/Account/User generated content customization/personalization.
- Multi-device synchronization and real-time activity/database entry & restoration/ recovery facility.
- Admin panel, built-in analytics tools-based dashboards.
- Ads-free, safe & secure authentication in order to maintain official data & information confidential.



- **Development of Angle Cock Test Bench at PNP:**

C&W depot, PNP has developed an “Angle Cock Test Bench” for testing and repairing of Angle Cock through in house resources.



- **Development of WSP simulator over DLI & FZR Divisions**

To diagnose the WSP faults of LHB coaches in standstill condition, a WSP Simulator has been developed in DLI & FZR Divisions and provided at NDLS, DLI, NZM, ANVT, DEE, ASR, FZR, JAT & SVDK coaching depots. This device provides a real-time interface for the WSP system in standstill coach condition to check the status of Dump valves, sensors and synchronization between them. Above points cannot be checked during rake examination in stabled condition through control unit of WSP.





➢ **Test bench for endurance testing of magnet valve of EP unit at RSW/CB:**

An endurance test bench has been designed to test the reliability of the Magnet valve of EP unit. It records the pick-up and drop voltage of the magnet valve. This has helped in increasing the reliability and quality of the EP unit.



➢ **CBW- New Overload test bench :**

A new Overload test bench is installed in Diesel relay section of RSW/CB. This test bench is being used to test OL1 to OL4 used in DEMU and MEMU coaches. OL5 and OL6 are also tested which are used in MEMU coaches. Separate transformer is installed for providing AC current upto 5000 Amp for testing of OL5 & OL6. OLP and EFRP can also be tested on this bench.



➢ **In-house fabrication and commissioning of test bench for levelling valve and duplex check valve**

CBW has fabricated a test bench for testing of levelling valve and duplex check valve in air spring suspension bogies of HHP MEMUs and 1400 DEMUs. This will prevent failure of these valves on line and ensure reliability of air spring suspension system in these bogies.



6.17 HR Initiatives

➢ **Training on pressurized flushing system of toilets:**

To attend troubleshooting and choking of pressurized flushing system during maintenance and in train service, training to Railway staff was provided by OEMs at Coach Care Centre, NDLS and ANVT from 17/08/2022 to 31/08/2022. A total of 177 staff attended the training.





➢ **Installation of LSD Test bench at C&W Training Centre, GZB:**

To grasp the working concept, troubleshooting and repair of LSD to trainee's viz. Apprentice Technician, LP/ALP, and Junior Executive/Mech. (DFCCIL) etc. in a very lucid manner, a new LSD test bench has been installed on CASNUB bogie at Model Park, C&W Training Centre, GZB.





➢ **Development of Knowledge Park in Coach Care Centre, NZM:**

To provide first-hand information/instruction to staff/maintenance engineer, regarding maintenance practices being followed at the coaching depot, a Knowledge Park has been developed in Washing Line Complex, NZM.





➢ **Start of promotional training for Junior Executive/Mech. (DFCCIL) at C&W Training Centre, GZB:**

A 24-days promotional training for Junior Executive/Mech. (DFCCIL) was conducted from 20.04.22 to 11.05.22 at C&W TRG. Centre/ GZB. A total of 10 candidates who were promoted from MTS to Junior Executive/Mech. (DFCCIL) attended this training.

This training was on payment basis, generating revenue for the Railways (Rs. 4,06,746/-).





➢ **Organization of technical webinar on Bio-Vacuum Hybrid Toilet (BVHT):**

To grasp the critical concept of BVHT and to provide knowledge about troubleshooting of problems which come during maintenance, a webinar was organized by C&W TRG. Centre, GZB. A total of 61-officials/staff from Division and depots participated in the webinar.





➢ **Celebration of World Yoga Day:**

World Yoga Day was celebrated in all Coaching and Freight depots of NR.





6.18 Staff Welfare Initiatives:

➢ **Creche:** In workshops where there is sizeable population of female employees, the facility of crèche has been provided. This enables the mothers to take care of their young children, while they are at work.

➢ **E-Kiosk:** The Kiosks help the employee see their status of leaves, passes, salary and other establishment details without any human intervention.

➢ **Changing Rooms & Lockers:** All Staff have been provided changing rooms and locker facilities. Separate toilet blocks for ladies called ping toilets have been provided for them.

➢ **Canteen:** Workshops have staff canteens that serve tea, snacks and meals at reasonable rates to the employees.

➢ **Health units:** Workshops have dedicated health Units within the premises to cater to emergencies in case of any injuries to the staff, while at work.

➢ **ATM:** Automatic teller machines have been installed inside the workshops for any emergent requirement of cash.

➢ **Library:** The Railways has provided libraries inside the workshop for any literary pursuits by the workers at the workshop.





8. Deluxe Toilets & Pink Toilet: Toilets for ladies, equipped with pad dispenser and incinerator.













6.19 Environment and Housekeeping efforts

➢ **Observance of World Environment Day – 5th June, 2022:**

World Environment Day (WED) was celebrated extensively in all units of Northern Railway on June 05, 2022. The theme of this year's WED was "Only One Earth" with focus on "Living Sustainability in Harmony with nature".

➢ **Zero-waste Railway station and Railway colony initiative with GIZ at Varanasi:**

A project has been undertaken by Northern Railway to make Varanasi Cantt a model zero-waste railway station and AEN Colony at Varanasi a model zero-waste railway colony. This initiative has been undertaken in partnership with the Government of Uttar Pradesh (GoUP) and German Development Cooperation (GIZ-India), as part of the Indo-German bilateral cooperation agreement in the State of Uttar Pradesh. In this project, the waste generated at Varanasi railway station will be segregated into wet and dry waste. The dry waste will be recycled and wet waste will be composted.

For segregation of dry waste, a Material Recovery Facility is under construction at Varanasi. Tender for civil work of MRF shed was floated on 16.07.2022 and opened on 08.08.2022. Tender was awarded to M/s Goel Construction Co. 9/150, Sector-3, Rajender Nagar Ghaziabad, U.P. on 26.09.2022 and construction of foundation of shed is complete. The construction of shed is under process. Draft Expression of Interest (EoI) to engage an agency

for operation and management of the same at no service fees has been prepared and will be floated shortly by Lucknow division.

Construction of an aerobic composting unit has been completed on 14 March 2023 by a third party, M/s Balancing Bits, hired by GIZ, at AEN Railway colony in Varanasi. The composting unit is in use.







- **Observance of Swachhata Pakhwada from 16th September to 2nd October, 2022:**

Swachhta Pakhwara was successfully organized from 16th September, 2022 to 2nd October, 2022 by Northern Railway over all the Divisions. The Pakhwara was started with administering of Swachhata pledge by Railway Officers to staff as well as Safai Karamcharis while observing physical distancing. In Divisions and Workshops, DRMs and CWMs administered Swachhata pledge to all the officers and staff. Several cleanliness campaigns were launched over all the divisions of Northern Railway.

During Swachhata Pakhwada, Hon'ble Minister of Railways visited Hazrat Nizamuddin railway station and observed the activities carried out by Northern railway. Chairman & Chief Executive Officer/Railway Board, General Manager/ Northern Railway, Divisional Railway Manager/Delhi Division along with ADRM/OP/DLI, ADRM/Admin/DLI, ADRM/Infra/ DLI and other Senior officers of Railway Board and Northern Railway were present. Hon'ble MR discussed with passengers about the service provided by Railways and cleanliness of stations. Hon'ble Minister of Railways also inaugurated the Blood Donation Camp at Northern Railway Central Hospital, New Delhi to mark the birth anniversary of Hon'ble Prime Minister Sh. Narendra Modi and donated blood himself to encourage Railwaymen and people.

Intensive cleaning drives were conducted by railway employees at various railway stations over Northern Railway. ED/EnHM inspected the cleanliness activities undertaken at Haridwar Railway station.



GM/NR welcomed Hon'ble MR at Hazrat Nizamuddin Railway Station





Hon'ble MR, GM/NR and other Senior officers participating in cleaning drive at Nizamuddin Railway station





Hon'ble MR discussing with passengers about the services provided by Railways




Hon’ble MR donating blood at Northern Railway Central Hospital, New Delhi




ED/EnHM inspected the cleanliness activities at Haridwar Railway station

- **Hon’ble Vice President’s visit to Ayodhya:**

Hon’ble Vice President of India boarded VP special train at LKO station for visit to Ayodhya on 15.04.22. VP special train was maintained to highest standards of cleanliness and safety by C&W team of LKO Division. Hon’ble Vice President returned to BSBS via BSB on same day.



➢ **Consent to Operate (CTO) in terms of water/air act/statutory rules under EPA:**

Consent to Operate in terms of water/air act/statutory rules under EPA has been received by 4 stations in the FY 2022-23 in FZR division, viz. JAT, UHP, SVDK & PGW. There are now a total of 47 stations, out of the 83 major stations, which have obtained CTO.

➢ **Water Audit of station over Northern Railway:**

Water audit of 5 stations was carried out over Northern Railway in the FY 2022-23 viz. FDN, FDB, SNP, BTU, PWL. Water audit of all 83 major stations of NR, including these 5 stations has been carried out previously.

➢ **Green Certifications:**

Two workshops in NR viz. JUDW and KLKW upgraded their Green-Co rating certification. Jagadhri workshop (JUDW) has been awarded Green-Co “Platinum” Rating on 13.04.2022 by CII. It has become NR’s first Workshop to achieve Green-Co Platinum Rating. C&W Workshop, Kalka (KLKW) has achieved Green-Co “Gold” Rating on 29.05.2022.

6.20 Passenger Amenities

➢ **Introduction of Vande Bharat trains:**

Hon’ble Prime Minister of India flagged off India’s fourth Vande Bharat Express Train no. 22447/48 having load 16=32 on October 13, 2022 from Una Himachal Railway Station. Regular train service were started w.e.f. from 19.10.2022. The train runs 06-days a week except Wednesday between New Delhi (NDLS) and Amb Andaura (AADR).



With a view to increasing the frequency of Vande Bharat express, one rake of Vande Bharat express received and put into service in train no. 22435/36 (NDLS-BSB) on 20/03/2023. Now the train runs 6 days a week except Thursday.




- **Operation of Bharat Gaurav Trains:**

Bharat Gaurav Tourist Train connecting destinations associated with the Ramayana Circuit in India and Nepal was jointly flagged off from the DSJ station by Hon,ble MR and Union Minister For Culture, Tourism and Development of North Eastern Region on June 21, 2022.

The primary maintenance of this train having load 14=28 was attended at Coach Care Centre, NDLS with zero deficiency of passenger amenity items and highest degree of cleanliness. The event received wide media coverage.



Hon'ble MR flagged off 'Shree Jagannatha Yatra- a Bharat Gaurav Tourist Train' from Safdarjung Railway Station, New Delhi on January 25, 2023 to showcase India's rich cultural heritage and magnificent historical places through trains.



Hon'ble MR flagged off Garvi Gujarat Bharat Gaurav train from Delhi Safdarjung Railway Station on 28.02.2023. The train with a load of 12=24 was maintained with highest standards of safety and zero deficiency of amenity fittings by Mechanical C&W wing of NR for a memorable passenger experience.

Salient features:

- State - of - the - Art Deluxe AC Tourist Train
- Fully air-conditioned train provides two types of accommodation viz.1-AC and 2-AC.
- Two fine dining restaurants, a modern kitchen.
- Shower cubicles in coaches, sensor- based washroom functions, foot massager
- Enhanced security features of CCTV cameras & security guards for each coach.
- Equipped with infotainment system









Minister of State for Culture Meenakashi Lekhi flagged off Bharat Gaurav Train –"North East Discovery: Beyond Guwahati" from Delhi Safdarjung Railway Station on 21/03/2023.

The launch of Bharat Gaurav Tourist Train is in line with the Union Government initiative "Ek Bharat Shrestha Bharat" and "Dekho Apna Desh" to promote domestic tourism.



➢ **Launch of "Rail Post Gati Shakti Express Cargo Service (Joint Parcel Product of Railways and India Post)**

Indian Railways and India Posts have launched Rail Post Gati Shakti Express Cargo Service, Joint Parcel Product of Railways and India Post on February 16, 2023. It is an initiative of a partnership between Indian Railways and India Posts in providing seamless logistics for the services sector in the country. The rake was maintained with highest standards of safety.

Salient features:

- Door step Pick-Up and Delivery
- Flexibility of Quantum of Load
- Time Tabled Service
- Safe Transmission
- Insurance
- Affordable Tariff
- Single Point of Contact
- Mobile Application



- **Flag-off Jan Aushadhi Train (Chhattisgarh Sampark Kranti Express)**

To spread awareness about Jan Aushadhi Generic medicines, Hon'ble MR Shri Ashwini Vaishnaw and Union Health Minister, Dr. Mansukh Mandaviya flagged off Jan Aushadhi Train (Chhattisgarh Sampark Kranti Express) from Hazrat Nizamuddin Railway Station on 03/03/2023. This train was wrapped with the branding of Jan Aushadhi Scheme.



- **Maintenance of Magh Mela Special trains at PYGS:**

05 nos. of Magh Mela Special rakes were timely maintained as per traffic requirement to clear extra rush



- **Improvement in OBHS services:**

To improve the performance of OBHS services during train journey, a unified revised duty list of escorting staff has been issued. In the revised duty list, escorting staff has been assigned additional duty to monitor the performance and work of OBHS staff.



सी एंड डब्ल्यू एस्कोर्टिंग स्टाफ की ड्यूटी लिस्ट

1. यात्रियों द्वारा आसानी से पहचाने जाने के लिए अपने बैज के साथ निर्धारित वर्दी में उपस्थित होना।
2. ट्रेन के निर्धारित प्रस्थान से एक घंटे पहले उपस्थित होना।
3. ट्रेन में चढ़ने से पहले उचित टूलकिट बॉक्स का सुनिश्चित करना।
4. यात्रियों की सुरक्षा या सुविधा से संबंधित, रास्ते में आने वाली समस्याओं के सुधार के लिए आवश्यक सभी पुर्जों की उपलब्धता सुनिश्चित करना।
5. यह जाँचना कि यात्रियों के आराम और सुरक्षा के लिए प्रदान की गई कोच में सभी अनिवार्य फिटिंग सही हैं और काम कर रहे हैं।
6. यह सुनिश्चित करना कि पानी की टंकियां पानी से भरी हुई हैं, कोच में सभी स्थानों पर पानी उपलब्ध है और बाथरूम में पानी की आपूर्ति और उपयोग के लिए सभी फिटिंग बरकरार हैं और काम कर रहे हैं।
7. जहां लागू हो वहां ट्रेन के इंजन का उचित अटैचमेंट/डिटैचमेंट सुनिश्चित करना।
8. यह सुनिश्चित करना कि बीपी और एफपी एयर होज़ को जीआई तारों से सुरक्षित किया गया है।
9. WSP के उचित काम को सुनिश्चित करने और यात्रा में एक बार सभी कोचों की रीडिंग लेना है।
10. ट्रेन की पूरी यात्रा में सभी सौचालयों/सभी बैक्यूम सौचालयों के समुचित कार्य को सुनिश्चित करना है। यदि कोई सौचालय खराब स्थिति में पाया जाता है, तो उसे एस्कोर्टिंग स्टाफ द्वारा ठीक किया जाना चाहिए। यदि खराबी को गाड़ी चलाने के दौरान ठीक नहीं किया जा सकता है, तो इसे उपयुक्त परिस्थितियों में एस्कोर्टिंग डायरी में नोट किया जाना चाहिए और संबंधित सुपरवाइजर को सूचित किया जाना चाहिए। खराब सौचालय को बंद किया जाना चाहिए और उसके दरवाजे पर उपयुक्त स्टिकर चिपकाया जाना चाहिए।
11. प्रत्येक कोच में VESDA प्रणाली के समुचित कार्य को सुनिश्चित किया जाना है और यदि कोई खराबी देखी जाती है, तो उसे एस्कोर्टिंग डायरी में नोट किया जाना चाहिए और संबंधित सुपरवाइजर को सूचित किया जाना चाहिए।
12. ट्रेन की पूरी यात्रा के दौरान कोचों की उचित सफाई के लिए ओबीएचएस कर्मचारियों की निगरानी करना।
13. ट्रेन के किसी भी असामान्य ठहराव की स्थिति में C&W से संबंधित मुद्दों को संबोधित करना और उन्हें ठीक किया जाना है और एस्कोर्टिंग डायरी में नोट किया जाना है।
14. यात्रियों द्वारा बताए गए सभी शिकायतों के अलग-अलग कोचों में यात्री सुविधाओं में किसी प्रकार की खराबी का सुधार किया जाना है।
15. ट्रेन की पूरी यात्रा के दौरान न्यूनतम शिकायतें सुनिश्चित किया जाना है।
16. सभी पैनलों/दरवाजों जैसे बीवीएचटी, शौचालय बुकेटल आदि को उचित रूप से बंद करना सुनिश्चित करना।
17. ट्रेन की पूरी यात्रा के दौरान सी एंड डब्ल्यू कन्ट्रोल से संपर्क में रहना।
18. किसी भी शिकायत या वीआईपी मूवमेंट के संबंध में ट्रेन की पूरी यात्रा के दौरान ऑनबोर्ड ट्रेन कैप्टन / टीटीई से संपर्क करना।
19. ट्रेन की पूरी यात्रा के दौरान ऑनबोर्ड एसी स्टाफ के साथ संपर्क करना और जहां भी आवश्यक हो, विशेष रूप से इंटीग्रेटेड एस्कोर्टिंग योजना के लिए सहायता करना।
20. यात्रा के दौरान देखी गई किसी भी खराबी को सुधारने के लिए दूसरे छोर के सुपरवाइजर को बताना, यदि इसे यात्रा के दौरान सही नहीं किया जा सकता है।
21. पावर कार/रास्पलस्पतजाजरी के सीबीसी पर रेस्ट्रिक्टर का उपयुक्त सुनिश्चित करना।
22. पावर कार/रास्पलस्पतजाजरी और लोकोमोटिव के बीच उपयुक्त स्लॉट्स का सिम प्रदान करना।
23. यात्रा के दौरान महसूस हुई किसी भी असामान्य आवाज या झटके के लिए ट्रेन की जांच करना और संबंधित अंतिम सुपरवाइजर को सूचित करना।
24. दूसरे छोर पर ट्रेनों के निर्धारित पड़ाव के दौरान कोचों की उचित पैड लॉकिंग सुनिश्चित करना।
25. एस्कोर्टिंग डायरी में एस्कोर्टिंग विवरण का उचित रिकॉर्ड रखना सुनिश्चित करना और आगे की आवश्यक कार्रवाई के लिए संबंधित मेंटेनेंस सुपरवाइजर को डायरी जमा है।
26. ट्रेन के आने के बाद टूलकिट को वापसी डिपो में जमा करना।
27. एस्कोर्टिंग स्टाफ को घंटे के अंतराल पर ट्रेन में नियमित चक्कर लगाते रहना है और ओबीएचएस कर्मचारियों, शौचालय की स्थिति, खाली सुविधाओं और किसी भी अन्य असामान्यताओं की जांच करनी है।
28. एस्कोर्टिंग स्टाफ को ये चीजें कभी नहीं करना चाहिए
    a. उचित अथॉरिटी, वर्दी, टूलकिट और आवश्यक पुर्जों के बिना ट्रेन में चढ़ना।
    b. जहां भी यात्रियों की सुरक्षा शामिल हो, वहां संक्षिप्त तरीके अपनाना।
    c. यात्रियों या अन्य कर्मचारियों के साथ दुर्व्यवहार करना।
    d. ट्रेन प्रबंधक या लोको पायलट को पूर्व सूचना के बिना किसी भी अंडरगियर की खराबी को सही कराने के लिए ट्रेन से उतारना।
    e. खाली गर्म ड्रेक लिक्स या बियरिंग पर पानी फेंकना।

Duty List of C&W Escorting Staff

1. To appear in prescribed uniform with his badge for easy identification by the travelling public.
2. To be present one hour before the scheduled departure of the train.
3. To ensure the possession of proper toolkit before boarding the train.
4. To ensure availability of all spares necessary for rectification of enroute problems, pertaining either to passenger safety or amenity.
5. To check that all internal fittings in the coach provided for the comfort and safety of passengers are intact and in working order.
6. To ensure that the water tanks are filled with water, availability of water at all locations in the coach and all fittings for supply and use of water in the bathrooms are intact and in working order.
7. To ensure proper attachment/detachment of the train engine where it is applicable.
8. To ensure BP and FP air hose pipe ends are secured with GI wires.
9. To ensure proper functioning of WSP and take the reading of all coaches once in the journey.
10. To ensure proper functioning of bio toilets/bio vacuum toilets in the entire journey of the train. If any toilet is found in a defective condition, it should be attended by the escorting staff. If the fault needs major attention and cannot be fixed during the run, it should be noted down in the escorting diary in the suitable proforma and should be informed to the concerned supervisor. The toilet should be closed and a suitable sticker has to be pasted on the defective lavatory door.
11. To ensure proper working of the VESDA system in each coach and if any fault is noticed, that should be noted down in the escorting diary and should be informed to the concerned supervisor.
12. To supervise OBHS staff for proper cleaning of the coaches during the entire journey of the train.
13. To communicate and attend issues pertaining to mechanical account in the event of any unusual stoppage of train and to be noted down in the escorting diary.
14. Rectification of all issues raised by passengers as well as defects in passenger amenities in the coaches.
15. To ensure minimum complaints during the entire journey of the train.
16. To ensure proper closing of all panels/doors like BVHT, toilet duxtion etc.
17. Liaising with C&W control during the entire journey of the train.
18. Liaising with onboard Train Captain/TTEs during the entire journey of the train regarding any complaint or VIP movement.
19. Liaising with the onboard AC staff during the entire journey of the train and assisting wherever necessary especially for the integrated escorting scheme.
20. To ensure communicating any defect noticed during the journey to the other end for rectification, if it cannot be attended during the journey.
21. To ensure provision of restrictor on CBC knuckle of power car/LSLRD.
22. To provide shim of suitable thickness between power car/LSLRD and locomotive.
23. To check the train for any unusual sound or jerk felt during the journey and communicate to the concerned end supervisor.
24. To ensure proper pad locking of coaches during the scheduled halt of trains at the other end.
25. To ensure proper record keeping of the escorting details in the escorting diary and submit to the concerned maintenance supervisor for further necessary action.
26. To deposit the toolkit after the arrival of the train at the primary end Depot.
27. The escorting staff should keep making regular rounds in the train at hourly intervals and should keep a check on the OBHS staff, lavatory working position, passenger amenities and any other abnormalities.
28. The escorting staff should never
    a. Board the train without proper authority, uniform, toolkit and necessary spares.
    b. Adopt shortcut methods wherever safety of passengers is involved.
    c. Misbehave with the passengers or other staff.
    d. Detrain to attend any undergear defect without prior information to the Train Manager or Loco pilot.
    e. Throw water on red hot brake discs or bearings.

Duty list of C&W Escorting Staff

6.21 Reliability & Improvement Measure

➢ **Provision of CBCs with Transition Coupling in LHB Power Cars:**

To make LHB power car reversible, 116 nos. Transition Couplings have been retro-fitted during the year. Cumulatively, 138 transition couplings have been retrofitted so far. By providing this arrangement on LHB power cars, shunting requirement for reversal of LHB power cars can be done away with.



➢ **Provision of Nylock Nuts:**

The issue of deficiencies of side frame key and its nut bolts during ROH cycle (within 18 months) and trip examination in yards/siding is being noticed. To resolve this issue, side frame key with Nylock Nut in place of normal nut in BLC rakes on trial basis were provided in 11 BLC rakes. The results were found encouraging.







➢ **Provision of Huck Bolting Machine at ROH depot, MB:**

Huck bolting machine has been provided in ROH depot, MB. Huck bolting machine is the best option for efficient fastening with minimum human efforts. Huck bolts are designed to provide permanent, vibration resistant & superior quality joining solutions.



➢ **SPC CR Installation of Automatic Rake Test Rig (RTR) at MB, BE & DDN:**

Automatic Rake Testing Rig (RTR) suitable for automatic brake testing has been installed at MB, BE & DDN. The machine is equipped with SCADA (Supervisory Control and Data Acquisition) based software with login security. The machine has 10” touch screen interface for graphics and visualization, USB port for connecting printer and is provided with 4 wheels for portability having 2 wheels with locking cum swivel arrangement. The machine consists of following:

MATERIAL	QTY	SPECIFICATIONS
Electro Pneumatic Pressure Regulator	01	24V DC
Electronic Pressure Sensors	03	0-10 kg/cm2, 4-20mA, 0-1”
Solenoid valves	04	24V DC
Micro-controller	01	Programmable
Moisture controller	01	0-1”





6.22 Performance of Rolling Stock Deptt. during 2022-23

S.N	Parameters	Target for 2022-23	Performance						Best Ever	
			2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Figure	Year
1	Ineffective AC coaches (%)	8.50	8.25	6.03	6.35	5.12	5.32	5.08	5.08	2022-23
2	Ineffective all coaches (%)	7.50	7.21	6.14	7.21	5.19	5.33	5.23	5.19	2020-21
3	IOH/SS-I of coaches in N. Rly. Coaching Depots	-	3233	3259	3516	3004	2970	3287	3516	2019-20
4	Enroute detachment of coaches (territorial)	9.00	2	10	13	1	6	3	1	2020-21
5	Enroute detachment of coaches (ownership)	8.55	5	6	7	1	6	2	1	2020-21
6	Punctuality loss on C&W account/1000 trains	1.90	1.74	2.93	2.91	2.03	2.25	2.21	1.74	2017-18
7	ROH of wagons	13560	13272	12254	11051	12028	12314	9543	13272	2017-18
8	Enroute wagon detachment	40	38	36	33	28	26	22	22	2022-23
9	Wagon indffective %	2.65	3.98	3.59	3.15	3.36	2.74	2.48	2.48	2022-23
10	Train partings	18	7	10	10	8	18	112	7	2017-18
11	BG AC Coach Outturn	1189	1133	1004	949	892	1084	1330	1330	2022-23
12	Total BG Coach Outturn	2809	3190	3097	2976	2578	2689	3384	3384	2022-23

13	BG diesel electric loco POH+IOH	22	97	69	68	31	1	0 (target-0)	100	2016-17
14	Wagon POH (VUs)+	6344	6132	6132	6151	5489	6244	6374	6374	2022-23
15	Electric loco outturn	25	30	26	33	32	28	34	34	2022-23
16	DEMU outturn	253	345	355	345	242	212	276	355	2018-19
17	MEMU outturn	309	0	41	99	178	278	300	300	2022-23
18	SPART outturn	8	0	4	4	5	11	7	11	2021-22

Coaching (Elect)- TL-AC: 2022-23

S.N	Item No.	Performance					Best Ever	
		18-'19	19-'20	20-'21 (Covid period)	21-22	22-23	Figure	Year
1	**Certified NON AC (CNAC)**							
1.1	-	0	0	0	0	0	**0**	**22-23**
2	**Short Service**							
2.1	-	0	0	0	0	0	0	22-23
3	**%age ineffective of coaches**							
3.1	SG	0.07	0.07	0.021	0.064	0.091*	0.021	20-21
3.2	EOG	0.06	0.06	0.038	0.060	0.071*	0.038	20-21
3.3	Conventional	0.004	0.002	0.002	0.003	0.005*	0.002	20-21
3.4	Power Car	0.28	0.22	0.143	0.659	0.870*	0.143	20-21

चिकित्सा
MEDICAL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter VII

7.1 About the Department

Northern Railway Network passes through the states of Uttar Pradesh, Haryana, Punjab, Himachal Pradesh, Jammu & Kashmir, Delhi and Union Territory of Chandigarh. The Railway System extends right from the hills of Himalayas in north and covers the best part of Gangetic plains.

The Medical Department of Northern Railway provides comprehensive health care services comprising of preventive, promotive, curative and rehabilitative care to Railway population and beneficiaries of RRECHS & RELHS. Bonafide passengers who take ill during their journey are also given medical assistance, on payment as per the norms stipulated by the Railways. It has an important role in the functioning of this Railway by Provision of Curative, Preventive, Promotive and Rehabilitative Health Services.

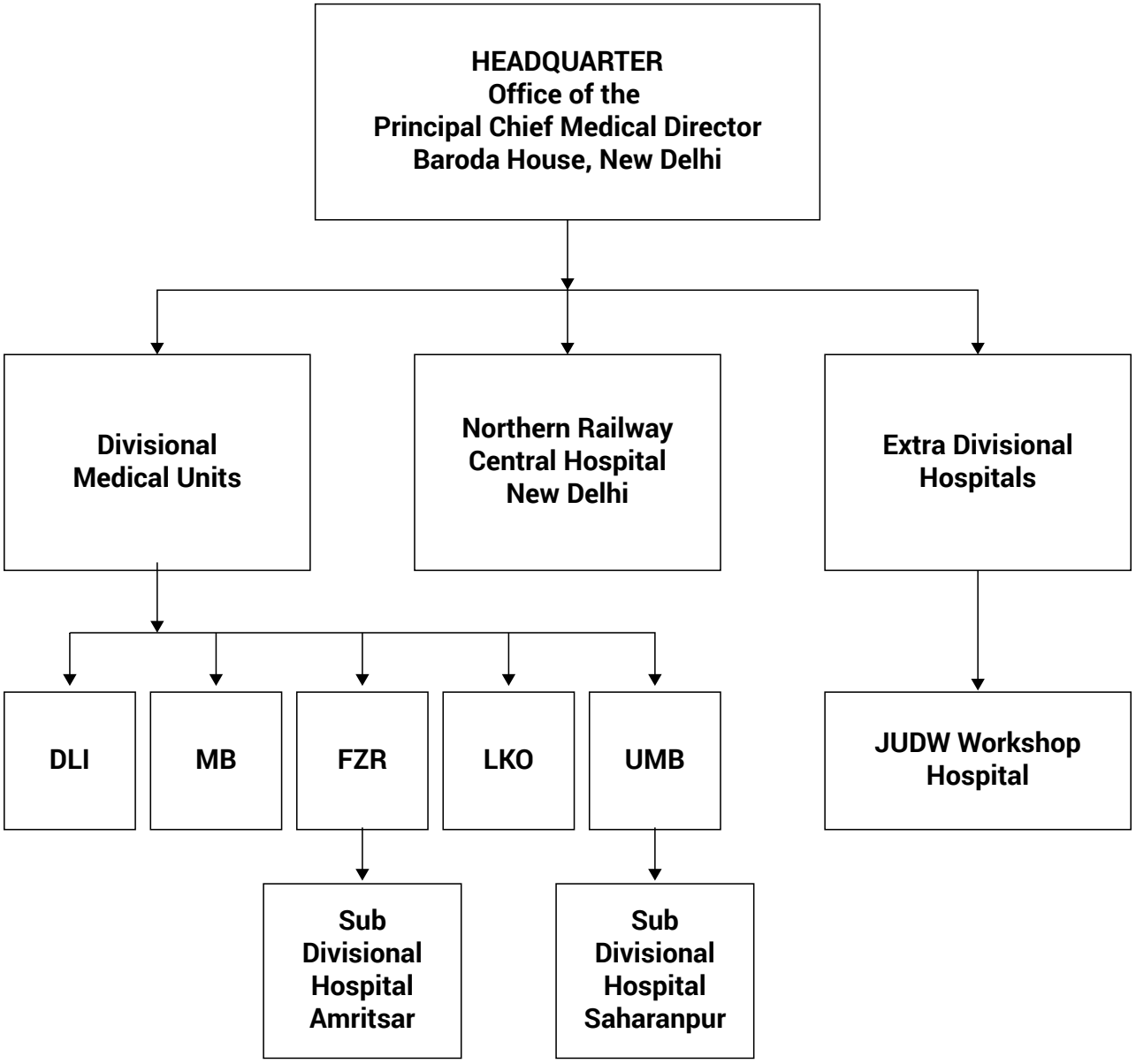
Occupational Health Services, including pre-employment and in-service Periodical Medical Examinations, Examination under Workmen's Compensation Act, monitoring of safety environment of Workshops etc. other activities include:

- Medical relief during Railway Accidents.
- Emergency Medical assistance to Railway passengers who take ill during their journey.
- Implementation of Food Safety and Standards Act within Railway premises.
- Monitoring of quality of drinking water in Railway Stations and Railway Colonies. Monitoring of Surface sanitation of certain Railway Colonies and some nominated Railway Stations.
- Reproductive and Child Health Services including Family Welfare and immunization of vulnerable groups.
- Implementation of National Health Programmes.

Medical Department is committed to the Mission Statement, Which is

"Total Patient Satisfaction Through Humane Approach & Shared Commitment of every single Doctor and Paramedic to Provide Quality Health Care Using Modern & Cost Effective Techniques and Technologies."

7.1.i Organization Chart of Medical Department



7.1.ii Establishment

Northern Railway has an established chain of medical care institutions under its jurisdiction to cater to the needs of about **1,30,998** Railway employees and their families and **1,78,043** Retired Railway beneficiaries.

7.1.iii Categories of Institutions

(i)	Central Hospital, New Delhi	:	**01**
(ii)	**Divisional Hospitals** Delhi, Lucknow, Moradabad, Ambala, Firozpur	:	**05**
(iii)	**Sub-Divisional/Workshop Hospitals** Amritsar, Saharanpur, Jagadhari Workshop	:	**03**
(iv)	**Health Units**	:	**62**

S.N.	Division/Under control of Hospital	No. of Health Units	Name of Health Units
1.	NRCH/NDLS	06	S. P. Marg, Basant Lane, Baroda House, Tilak Bridge, Sarojini Nagar, Lajpat Nagar.
2.	Delhi	17	Tuglakabad, AnandVihar, Shakur Basti, Punjabi Bagh, Delhi Kishan Ganj, Delhi Shahdara, Arya Nagar/GZB, Bhoor Sen Colony/GZB, Faridabad, Sonipat, Jind, Panipat, Rohtak, Meerut City, Shiamli, NOIDA, GURUGRAM.
3.	Moradabad	11	Balamau, Roza, Shahjanpur, Hapur, Chandausi, Najibabad, Haridwar, Dehradun,OSG/Jharipani, Laksar, Bareilly.
4.	Lucknow	12	Hazrat Ganj, C&W/LKO, Loco Workshop/ LKO, Running Shed, Sultanpur, Unnao, Partapgarh, Varanasi, Faizabad, Jaunpur, Barabanki, Rae-Bareli.
5.	Firozpur	11	Amritsar M, Amritsar Workshop, Ludhiana, Jalandhar City, Jalandhar Cantt, Kotkapura, Pathankot, Jammu Tawi, Baijnath Paprola, Sri Mata Vaishno Devi Katra, Badgam.
6.	Ambala	05	Shimla, Bhatinda, Dhuri, Kalka, Chandigarh.
	Total	**62**	

7.1.iv Lockup Dispensaries/First Aid Post : 03

The locations of lock-up dispensaries are as follows:

S.No.	Division	No.	Name of dispensaries/First Aid Post
1.	Delhi	1	S&T Workshop/GZB (First Aid Post)
2.	Moradabad	2	Hardoi, South Colony Harthala
	Total	3	

7.1.v Man Power Resources

The sanctioned strength of staff is 277 Medical Officers (Including 05 Dental Surgeons), 01 Designated Officer, 09 Assistant Nursing Officers, 01 Assistant Health Education Officer, 02 Assistant Pharmacy Officers, 01 Assistant Health Officers and 01 Designated Officer (Work Charged post) & 05 Food Safety Officers (group-C), 1380 paramedical group 'C' employees including ministerial Staff and 1926 Group 'D' employees. Northern Railway Central Hospital is recognized for imparting training to 23 Sr. Residents 60 DNB, 12 Jr. Residents. Vide Railway Board letter no.2015E(GC)10-2(IRHS)(64) 26/08/2022 cadre review of IRHS done by Railway Board, sanction strength of IRHS is over NR now 259.

7.1.vi Sanctioned Cadre

a. Gazetted staff (Group A & B)

Gazetted Post over Northern Railway Medical Department	Sanction Strength	On Roll	Vacancy
Regular Indian Railway Medical Services Group 'A' Post	259	265	12
Para Medical Group B Officers' Posts	18	9	9
Total	**277**	**274**	**21**

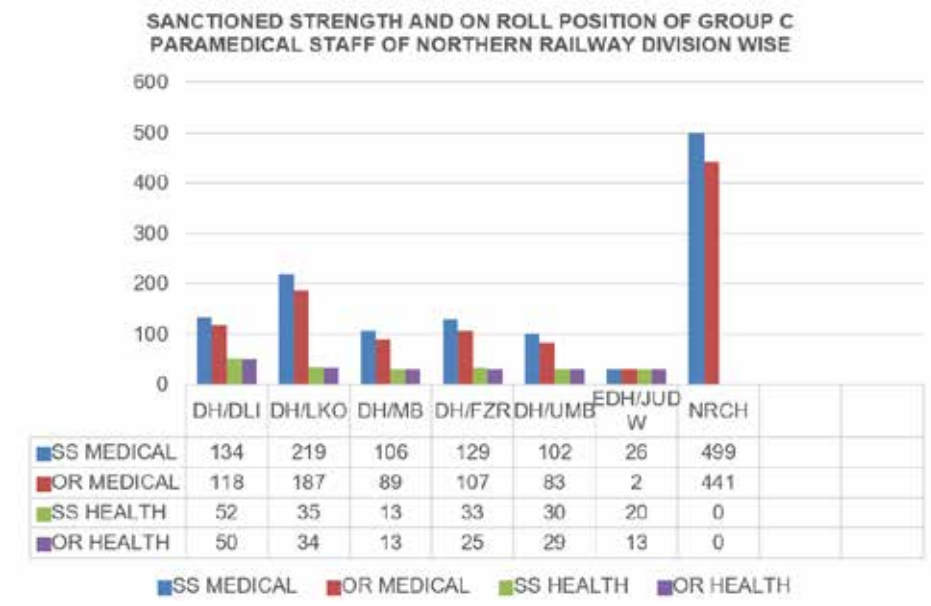
Post	Permanent	Temporary & WC	Sanction Strength	On Roll	Vacancy
Principal Chief Medical Director (HAG)	02	-	02	1	01 transfer to ER
Chief Health Director (SAG)	1	-	1	1	-
Medical Director/ Chief Specialist/ Chief Medical Supdt. SAG	12 Including dental	-	12	12	0
Addl. CMD/ T & A	1	-	1	1	-
Addl.CMD/ MS	1	-	1	1	-
Dy.CMD/H&FW	1	-	1	1	-
	0	-	0	0	-
ACHD/ACMS/ Sr.DMO/DMO/ ADMO (SAG, JAG SS & JS)/ACHD (Dental), Sr.DS/DDS	241	-	241	206	36
Total	**259**		**259**	**223**	**37**

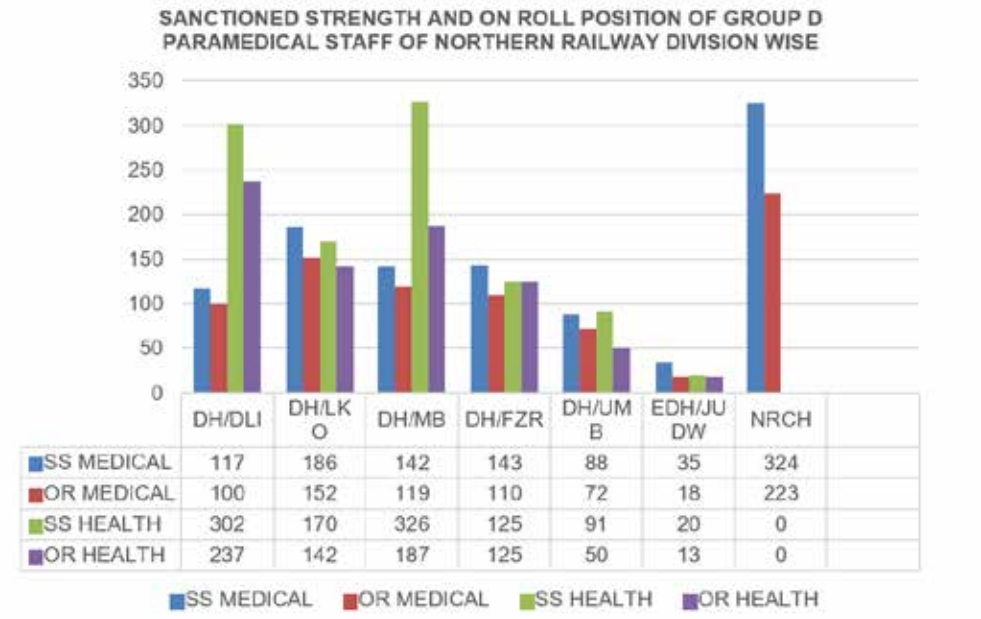
Contract Medical Practitioner posted against Vacant posts	-

Group ‘‘B” Officers					
Post	**Permanent**	**Temporary & WC**	**Sanction Strength**	**On Roll**	**Vacancy**
Asstt. Nursing Officer	9	-	9	3	6
Asstt. Pharmacy Officer	2	-	2	1	1
Asstt. Health Officer	4	-	4	1	3
Designated Officer	0	1(WC)	1	1	-
Asstt. Health Education Officer	1	-	1	1	-
Asstt. Physiotherapy Officer (Floating Post)	7	-	NIL	NIL	NIL
Asstt. Diet. Officer (Floating Post)	3	-	1	-	NIL
Total	**26**	**1**	**18**	**07**	**9**

b. Sanctioned Strength of Non-Gazetted staff (Northern Railway)

S.N.	Particulars	Group “C”			Erstwhile Group “D”			Total		
1	Medical Services	1215	1041	1002	727	2217	1728	1942	3258	2730
2	Health Services	165	153	734	1199	907	292	1364	1060	304
	Total	**1380**	**1194**	**1736**	**1926**	**3124**	**2020**	**3306**	**4318**	**3034**





c. Medical Services

GROUP- "C"				Erstwhile GROUP –"D"			
Category	**S. S.**	**OR**	**Vacancy**	**Category**	**SS**	**OR**	**Vacancy**
Nursing Personnel	496	475	21	Hospital Attendant(Male & Female)	687	539	148
Lady Health Visitor	2	0	2				
Pharmacists	214	206	8				
X-ray Tech./ Radiographer	44	26	18	Kitchen Staff	29	19	10
Physiotherapist	12	10	2	Ambulance Cleaner	12	6	6
Lab. Supdt.	56	38	18	Safaiwala (Medical Services)	219	152	67
Dieticians	3	1	2	X-ray Attendant	11	8	3
OT Assistant/ Dresser	197	156	41	Lab. Attendant	5	4	1
Ambulance Drivers	22	18	4	Other Group "D" (Peon, Khallasi, etc.)	126	86	40
Ministerial Staff	96	75	21				
Family Welfare Staff	6	2	4				
Other Group "C" (PA, CA, Comp. Clerk, Typist etc.)	75	48	27				
Total	**1223**	**1055**	**168**	**Total**	**1064**	**712**	**352**

d. Health Services

S.N.	Particulars	Group "C"			Erstwhile Group "D"			Total		
		Sanctioned Strength	On Roll	Vacancy	Sanctioned Strength	On Roll	Vacancy	Sanctioned Strength	On Roll	Vacancy
1	Health & Malaria Inspectors & other Sanitation Staff	174	165	9	934	713	221	1108	878	230
	Total	**174**	**165**	**9**	**934**	**713**	**221**	**1108**	**878**	**230**

7.1.vii Infrastructure

a. Hospitals & Health Units of Northern Railway

Div/Units	Hospital (Beds)				Health Units	Emer-gency Beds in Health Units	Lockup Dis-pensary
	Central & Divisional		Sub-Divisional.				
	Name of Hospital	No. of Beds	Name of Hospital	No. of Beds			
Headquarter	CH New Delhi	419	-	-	6	5	-
Delhi	Divl Hosp.	50	-	-	17	21	1
Moradabad	Divl. Hosp,	119	-	-	12	13	2
Lucknow	Divl.Hosp.	275	-	-	12	14	-
Firozpur	Divl. Hosp.	85	ASR	50	10	32	-
Ambala	Divl. Hosp.	60	SRE	15	5	8	-
JUDW	Workshop Hosp.	55	-	-	-	-	-
TOTAL		**1063**	**-**	**65**	**62**	**93**	**3**

b. Total No. of Hospitals & Health Units in Northern Railway

Central Hospital	01
Divisional Hospitals	05
Sub Divisional Hospitals	02
Workshop/Production Unit Hospital	01
Health Units	62
Lockup Dispensaries/First Post	3
Total No. of Beds in Hospitals	**1128**

c. Data of Northern Railway Hospitals

S.No.	Hospital & in charge of Hospital	No. of doctor's		Total	Section area in Km.	No. of employees served	No. of beds provided							Bed Occupancy Ratio		Average Indoor patients/ per day	Average no. of patients per day		Work Load/Drs per day in OPD	
		G.Duty	Specialist				Genl	Male	Female	ICU	Chest	Maternity	Total	Admissions	BOR %		New case	Old case	New case	Old case
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	NRCH/ NDLS	6	68	74		19848	310	20	37	21	0	31	419	18065	88	8	315	998	45	38
2	Divl. Hospital Delhi/CMS	06	12	15	171	4312	42	16	26	Nil	8	Nil	50	1526	42.80%	5.88	96	246	43	06
3	Divl. Hosptial LKO/CMS	02	20	22	-	25982	06	2982	2660	432	Nil	1047	56	42	29%	-	160	448	-	-
4	Divl. Hospital MB CMS	1	11	10	21	1401	5537		40	43	06	20	10	119	4080	34.24	4 Day	132	251	16.5
5	Divl. Hosptial FZR/CMS	3	7	10	280.89	3513+ 1455	0	32	28	5	4	0	69	2078	45.77	23.04	46.65	86.66	11.66	21.66
6	Sub. Divl. Hosptial ASR/ACMS	2	2	4	-	3808+ 4187	0	26	24	0	0	0	50	878	22.06	11.11	40.04	74.36	10.01	18.59
7	Divl. Hosptial UMB/CMS	1	11	08 (01 cmp)	23		14533	02	20	10	9+9	5	5	60	2373	60.13	8	03	05	14
8	Workshop Hospital JUDW ACMS	8	-	-	All Units of Workshop	8026+2218	23	15	15	-	02	0	55	2224	26.17	3.8	63	149	15.73	37.50

d. Data of Northern Railway Health Units

Delhi Division														
S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Delhi Kishan-ganj	ACMS	Colony	05	20	12766	3300	31	-	01	18	80	09	40
2	Arya Nagar	ACMS	Colony	03	17	1652	2051	50	-	01	66	80	22	27
3	Jind	DMO	292	02	07	3969	926	.27	-	01	10.96	51.94	10.96	51.94

4	Meerut	DMO	67	01	05	686	443	27.66	-	02	20	22	20	22
5	Panipat	DMO	187	01	06	1768	685	28.16	-	01	26.60	36.49	26.60	36.49
6	Rohtak	DMO	174.24	01	07	4675	746	20.83	-	01	09.96	47.52	9.96	47.52
7	Shakur-basti	Sr.DMO	Colony	02	9	8064	4058	10	-	01	45	80	20	40
8	Shamli	CMP	116	01	05	340	260	20	-	01	06	27	06	27
9	Tuglakabad	ACMS	Colony	02	07	6374	951	10.47	-	02	186	92	93	46
10	Pujabai Bagh	ACMS	Colony	01	07	3815	2213	14.66	-	02	6.12	56.86	6.12	56.86
11	Anand Viahr	ACMS	Colony	01	07	3398	3415	14	-	02	10.20	40.60	10.20	40.60
12	Delhi Shahdara	ACMS	Colony	01	05	7236	2571	19.00	-	-	07	37	07	37
13	Sonepat	CMP	Ganor to Badli	01	04	788	777	16.49	-	01	18	39	18	39
14	Bhoor Sen Colony	ACMS	Colony	02	07	7002	2557	40.66	-	01	88	52	88	52
15	Faridabad	Sr. DMO	39	01	05	721	838	26	-	01	-	45.50	-	45.50
16	Delhi Sarai Rohilla	ACMS	DEE to KIP	01	07	2000	250	20	-	-	07	25	07	25

Lucknow Division

S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/ per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Unnao	Dr. Bhupendre Kumar	183km.	01	04	807	92	08	01	01	06	10	06	10
2.	HZG/LKO	Dr. Pooja Nawal	DRM Office (Compus)	01	05	1480	-	07	-	-	12	7	12	07
3.	C&W/LKO	Dr. S.K. Sinha Dr. Sanjeev dixit	C&W/Amv Store/Amv RPSF 3BN JJRA/ RPFA	02	05	5372	1000	32	-	01	30	40	30	40
4.	LWS/CB	Dr. Akancha Tripathi (Stady Leave) look after of work Dr. Pooja Nawal	Work Shop Only	01	10	2550	513	07	-	01	25	39	25	39
5.	NR/HU/ RBL	Vacant of Post Doctor (Sr. Pharmacist Vijay Kumar)	169Km.	01	05	1200	393	34	-	01	10	12	10	12
6.	D Shed/ Amv/ LKO	Dr. Ashish Tripathi Dr. Pooja Agrawal CMP/ Dental	04 Km.	02	09	4510	1361	36	-	01	16	31	16	31
7.	PBH	Dr. B.P. Pathak (CMP)	268 Km.	01	05	1770	413	20	-	01	03	09	03	09
8.	FD	Vacant of Doctor Post (Sr. Pharmacist Ashish Kumar	166	01	03	1310	711	59	-	04	05	22	05	22
9.	BSB	Dr. K.M. Mishra	144 Km.	01	08	5175	277	39	-	02	26	12	26	12

10	SLN	Dr. Pancham Ram (CMP)	226	01	05	2380	551	37.8	-	03	13.86	11.15	14	11
11.	BBK	Vacant of Doctor Post (Sr. Pharmacist Mahendra	77	01	04	765	70	04	-	02	05	06	05	05
12.	JNU	Vacant Look after by Dr. Pancham Ram(Sr. Pharmacist Anil Duby)	122	01	04	1285	323	10	01	01	06	07	05	05

Moradabad Division

S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/ per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Jharipani	ACMS	O.G.S.	01	08	108	40	2.5	0	01	02	19	02	19
2.	Dehradun	ADMO	40.00	01	07	756	683	29	0	02	04	39	04	39
3	Haridwar	DMO	52.00	01	06	742	365	30	0	02	07	28	07	28
4	Lakshar	CMP	33.00	01	05	950	241	32	0	01	04	18	04	18
5	Najibabad	CMP	216.82	01	06	1165	355	28	0	01	09	23	09	23
6	Hapur	ADMO	179.00	01	06	1036	936	38	0	01	06	19	06	19
7	Chandausi	CMP	129.00	01	06	862	366	16	0	03	19	37	07	37
8	Bareilly	ADMO	112.00	01	05	1594	410	122	0	02	04	36	04	36
9	Shahjahanpur	CMP	8.00	01	05	343	147	11	0	01	3	25	03	25
10.	Roza	CMP	190.00	02	05	1960	248	56	0	02	08	32	04	16
11	Balamau	CMP	245.00	01	05	1038	188	33	0	02	2	13	02	13
12	Harthala	CMP	05	01	05	352	156	0	01	01	2	15	02	15

Firozpur Division

S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/ per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	ASR(M)	CMP	260.5	2	8	2798	180	3	0	0	2.75	5.11	1.38	2.55
2	ASR(WS)	CMP	-	1	4	2043	0	1	0	0	5.29	9.82	5.29	9.82
3	LDH	ACMS	176.44	6	26	6600	3485	75	0	16	31.38	58.28	6.27	11.66
4	JUC	ACMS	228.75	2	18	4282	1350	55	0	5	24.33	45.19	12.16	22.60

5	JRC	Sr.DMO	150.78	1	6	1850	1334	6	0	1	16.05	29.81	16.05	29.81
6	PTK	ACMS	162.52	2	6	2671	895	9	0	3	17.46	32.42	8.73	16.21
7	JAT	DMO	74.80	2	9	2500	90	9	0	1	9.88	18.36	4.94	9.18
8	KKP	-	165.47	1	4	589	134	1	0	-	4.20	7.81	4.20	7.81
9	SVDK	CMP	31.0	1	3	841	8	2	0	1	3.94	7.32	3.94	7.32
10	BDGM	CMP	117.9	1	4	350	5	1	0	-	9.88	18.36	9.88	18.36
11	BJPL	-		1	4	475	0	0	0	0	2.14	3.97	2.14	3.97

Ambala Division

S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/ per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	15
1	KLK	ADMO	56km	01	14	1074	1123	10	Nil	02	09	50	09	50
2	CDG	DMO	32.5Km	01	03	1175	506	20	-	1	08	44	08	44
3	SML	DMO	50km	01	01	437	62	11	-	00	02	07	02	07
4	DUI	CMP/GDMO	240km	01	04	1874	379	14	NIL	NIL	03	37	03	37
5	BTI	ACMS	287km	2	11	3147	1238	70	Nil	4	55	75	27	39
6	SDH	ACMS/SRE	164Km	02	34	4000	1867	87	NIL	01	38	76	19	38

Central Hospital/New Delhi (NRCH)

S.No	Name of Health Unit	In charge of Health Unit	Jurisdiction of Health Unit in Km.	Sanctioned strength of Doctors	Sanctioned strength of Paramedical	No. of employees, served (Serving+ RELHS)		Average Employees in sick list/ per month	Maternity Beds	Emergency Beds	Average daily OPD attendance		Work load of Dr. per day in OPD	
						Serving	RELHS				New Case	Old Case	New case	Old case
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
1	Basant Lane	Dr Kamal Kishaore	10	2	7	2613	1419	27	0	1	15	65	15	65
2	Lajpat Nagar	Dr Keshav Sharma	15	1	5	589	1419	3	0	1	10	50	10	50
3	S P Marg	Dr Alka Nagpal	30	1	6	240	1739	4	0	1	6	38	6	38
4	Sarojini Nagar	Dr Mamta Kaushal	8	1	5	1080	461	5	0	0	9	29	9	29
5	Tilak Bridge	Dr Neeti Gupta	5	1	5	1303	924	8	0	1	6	38	6	38
6	Baroda House	Dr Suniti Sharma	0	1	4	13730	0	2	0	1	5	43	5	43

e. Specialties-wise Facilities available (Secondary Health Care) in Hospitals

Hosp	SPECIALITIES									
	Surgery	Gynecology	Orthopedics	Physician	Eye	ENT	Pediatrics	Dental	X-ray U/S	Path.
CH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DLI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LKO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
UMB	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
FZR	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
JUDW	✗	✓	✓	✗	✗	✗	✗	✓	✓	✓
ASR	✗	✓	✗	✗	✗	✗	✗	✗	✓	✓
SRE	✓	✗	✗	✓	✗	✗	✗	✗	✓	✓

7.2 Performance of Medical Department during the year

7.2.1 Curative Services

S No.	Particulars	2022-23	2021-22
(A)	No. of Hospital beds per 1000 Employees	30.30	6.87
(B)	No. of In-patients treated		
	(i) Males	20010	14564
	(ii) Females	16684	10919
	Total	36694	25483
(C)	Bed Occupancy Ratio	47.97	41.94
(D)	No. of bed days per patient	2.56	5.60
(E)	No. of outdoor patients		
	(i) Males	904238	890915
	(ii) Females	734563	635530
	Total	1638801	15,26,445
(F)	No. of operations performed		
	(i) Major	6633	5395
	(ii) Cataract	1712	1043

(G)	Diagnostic		
	(i) Investigations	2422479	1961540
	(ii) No. CT Scans/MRI's	18482	13164

7.2.2 Mandays Lost

S No.	Particulars	2022-23	2021-22
01	Total no. of RMC issued	26739	24,352
02	Total no. of Mandays Lost on RMC	517891	4,15,947
03	Average days per RMC	19.36	17.08
04	Total no. of certificate issued on IOD	1095	1011
05	Total no. of Mandays Lost on IOD	29022	20,152
06	Average days per Certificate	26.50	19.93
07	Total no. of certificate issued on PMC	2026	2,571
08	Total no. of Mandays Lost on PMC	64404	75,424
09	Average days per certificate	31.78	29.33

7.2.3 Financial provisions and expenditure:

The Revised Budget on Medical and Health Services **during 2022-23 was Rs. 6,82,03,91 as compared to 2021-22 where it was Rs. 447,051,966.** The detailed budgetary provision and expenditure for 2022-23 compared to 2021-22 is as follows:

(Rupees in Thousands)

Budgetary Head	Particulars	2022-23 Revised	2022-23 AE	2021-22 Revised	2021-22 AE
210	Medical services-control & superintendence at HQ and Divisions.	26,97,44	-	2299,46,23	2103,41,07
220	Hospitals and Dispensaries excl. cost of Medicines	14,14	-	17,34,92	12,96,38
230	Cost of Medicines	5,42,83	-	473,77,46	500,10,34
240	Reimbursement of Medical expenses/ referrals to private empaneled Hospitals	10,30,51	-	1001,19,98	1015,86,10
250	Public Health	5,56	-	15,33,83	8,19,91

260	Maintenance of equipment's	25,78	--	29,72,73	23,27,30
270	Cashless Treatment Scheme	0	--	80,44	98,18
280	(ABPM-JAY) योजना	1,73,66	--	3,04,46	16,24,75
310	Health & Family Welfare Services:- Sanitation in Rly Colonies.	6,37,13,99	-	629,81,61	584,27,09
	Grand Total	**6,82,03,91**	**--**	**447,051,966**	**42653112**

7.3 Public Health

Northern Railway Medical Department provides sanitation services in nominated Railway Colonies. Engineering Branch looks after water supply including Chlorination of drinking water. Joint inspections are carried out along with Engineering Officials covering the aspects of functioning of chlorination plants, drinking water storage tanks, condition of D.W. distribution system etc. The quality of drinking water is monitored regularly as per laid down schedules. The results of tests i.e. the presence or absence of residual chlorine and bacteriological quality are advised to Engineering Branch from time to time. Medical Branch carries out the monitoring of food quality including the hygienic upkeep of catering establishments, medical examinations of food handling staff. FSS Act provisions are implemented in Railway areas. Joint inspections are carried out along with the Officials of Commercial Branch covering aspects of sanitation of stations, upkeep of catering establishments etc. The results of tests of food samples lifted under quality control are advised to respective branches for appropriate action wherever necessary. The FSS defaulters are prosecuted as per the provisions of the FSS Act.

7.3.1 Status of Food Samples under FSSAI & Quality Control

S.No.	FSSAI	2022-23	2021-22
i)	No. of food samples collected under FSSAI	217	177
ii)	No. of unsatisfactory reports received under FSSAI	6	0
iii)	No. of Cases filed for adjudication	13	131
iv)	No. of prosecutions launched under FSSAI	13	00
v)	No. awarded punishment under FSSAI	7	00

7.3.2 Family Welfare & other National Programmes

Medical Organization provides Family Welfare Services to Railway population and the Community.

S. No.	Achievement in	2022-2023	2021-2022
1.	Sterilizations	153	93
2.	IUD's	483	415
3.	BCG	1309	1168
4.	DPT	1656	1576
5.	Measles	2148	1531
6.	TT (PW)	1693	2749

Universal Immunizations Programme for children and expectant mothers is an ongoing activity.

7.3.3 Immunization:

S.N.	Division	BCG	DPT 3rd dose	OPV 3rd dose	Measles	TT (PW)
1	NRCH	761	328	328	448	886
2	Delhi	20	261	257	372	163
3	Lucknow	301	456	456	781	277
4	Moradabad	80	104	104	94	42
5	Firozpur	52	51	51	14	73
6	Ambala	69	221	221	280	172
7	JUDW	0	31	9	59	10
	TOTAL	**1283**	**1452**	**1426**	**2048**	**1623**

7.3.4 Division – wise Family Welfare Activities (2022-2023)

S. No.	Division	Sterilizations	IUD Insertion
1	Delhi	86	170
2	Lucknow	39	268
3	Moradabad	02	03
4	Firozpur	11	06
5	Ambala	15	36
	TOTAL	**153**	**483**

(Figures of NRCH are included in Delhi, JUDW in Ambala)

7.4 Sanitation

Medical Department of Northern Railway is responsible for sanitation of Northern Railway Hospitals, Northern Railway Health Units and Railway Colonies.

7.5 HIV/AIDS Prevention & Control Programme

S No.	Division	Tests done	Found +ve	Deaths
1	NRCH/NDLS	9737	34	NIL
2	Delhi	728	0	NIL
3	Lucknow	4724	04	NIL
4	Moradabad	1396	02	NIL
5	Firozpur	497	0	NIL
6	Ambala	106	05	NIL
7	JUDW	164	0	NIL
	TOTAL	**17352**	**45**	**00**

- **No. of HIV/AIDS patients on ART :52**

(Positive patients advised ART continued medicine by Health units)

- **Availability of Blood Bank: Yes**

7.6 Drinking Water Quality

The number of samples collected for bacteriological quality during the year was 7055 and 95.84% of samples were found to be conforming to the quality standards.

Division-wise Water samples tested for Bacteriological Quality

S No.	Division	Collected	No. of found fit	% age fit
1	Delhi	2973	2897	97%
2	Moradabad	904	874	97%
3	Ambala	942	942	100%
4	Firozpur	1382	1352	98%
5	Lucknow	847	693	82%
6	JUDW	7	4	58%
TOTAL		**7055**	**6762**	**95.84%**

Division-wise Water samples tested for Residual Chlorine

The number of samples collected for the presence of Residual Chlorine was **89370,** out of Which 89.78% had the required amount of Residual Chlorine.

S. No.	Division	Collected	No. of found fit	% age fit
1	Delhi	26618	25920	97%
2	Moradabad	16413	13538	82%
3	Ambala	15184	15048	99%
4	Firozpur	14964	12933	86%
5	Lucknow	15144	11758	78%
6	JUDW	1047	1047	100%
	TOTAL	**89370**	**80244**	**89.78%**

7.7 Surveillance of Communicable diseases

Northern Railway has been actively participating in the implementation of National Health Programmes viz. Control of Malaria, Filaria and other Vector Borne Diseases, Control of Tuberculosis, AIDS Awareness etc. Surveillance is also kept on various other communicable diseases. No communicable disease in epidemic proportions was reported during the year

Communicable Diseases

A statement showing the no. of attacks and death due to various diseases is as follows:-

S. No.	Name of disease	No. of attacks	No. of Deaths
1.	Cholera	NIL	NIL
2.	Plague	NIL	NIL
3.	Small Pox	NIL	NIL
4.	Malaria	1180	NIL
5.	Other fever/ Enteric fever	3059	NIL
6	Tuberculosis	138	17
7.	Leprosy	NIL	NIL
8.	Diphtheria	NIL	NIL
9	Other cases (Influenza, Mumps, Measles, Chicken Pox, Whooping Cough, etc.)	101	NIL

7.8 Health Education:

The importance of Health Education is recognized in Northern Railway. Continuous efforts were made to impart Health Education to various sections of Railway population through Multi-Purpose Health Drives. Medical Officers and paramedical staff gave regular lectures on health topics in various Training Courses. Railway beneficiaries were educated on health related subjects at Railway Health Units.

7.9 Training:

Northern Railway is conscious of the importance of In-service Training as a tool for Human Resource Development. Medical Officers were motivated to participate in the Continuing Medical Education Programme. Following steps were taken in this direction to facilitate their attendance:

- Arranging CME programs.
- On line Seminars were conducted.
- Orientation Training Programme were conducted.
- Weekly online Clinical Meeting for all doctors of NR by PCMD/NR.

7.9.1 Gazetted Staff

S. No.	Medical Officers	No. of attacks
01.	Total No. of UPSC selected doctors working as GDMO/Specialists	
	i. GDMO	64
	ii. Specialists	139
02.	Total No. of Doctors attending scientific conferences, once during the year while working as	
	i. GDMO	18
	ii. Specialists	12
03.	Total No. of Doctors attending scientific conferences twice during the year while working as specialist.	30
04.	Number of doctors who underwent professional training of one week more duration	
	i. Total number of SAG Medical Officers	71
	ii. Number of SAG Medical Officer who attended Hospitals administration training of one week or more duration.	01

7.9.2 Training Programme Paramedical:

Training was provided to medical personnel like H&MIs, Nurses, Office Supdt., Safaiwalas, HAs, Radiographers. The modules of training for Group C & D staff were used with some modifications. Matrons, Health & Malaria Inspectors, Office Staff were also sent for Management Development Programmes for senior supervisors.

S.No.	Training of Paramedical Personnel	Nos.
01.	Total No. of UPSC selected doctors working as GDMO/Specialists	2164
	i. Number of Paramedical Personnel trained in-house	2169
	ii. Number of Paramedical Personnel deputed for training to outside institutions	34

7.10 Non-Railway Earnings

There was decrease in the earnings from Non-Railway sources. Amount collected **Rs. 1,01,74,556/-** during the year 2022-23 as against 1,13,75,770/- in the previous year.

7.11 Division wise position of St. John Ambulance Brigade

SN	Division	Ambulance	Nursing	Cadet	Total
1	Delhi	1	4	750	755
2	Ambala	0	0	0	0
3	Moradabad	0	0	0	0
4	Lucknow	0	18	40	58
5	Firozpur	0	0	0	0
6	JUDW	0	0	0	0
GRAND TOTAL					**813**

Co-operation was sought and assistance was obtained from various Voluntary Organizations wherever necessary to supplement the Administration's efforts in implementing the National Health Programme. NRWWO, St. John Ambulance Brigade and The Bharat Scouts and Guides have given their valuable assistance in implementing F.W. programmes, Pulse Polio Immunization, First Aid in fairs and festivals etc. Financial assistance was provided to needy employees suffering from chronic diseases such as TB, Cancer and Leprosy from CSBF.

7.12 Accident Relief :

There are 13 ARME Scale-I and 46 ARME Scale-II on Northern Railway to provide rescue and relief at the time of accidents. ARME Scale-I of SRE is of Self Propelled type. The locations of ARME are as follows:

S.No.	Division	ARME Scale-I	ARME Scale-II
1	Delhi	Delhi	Jakhal, Rohtak, Panipat, Kurukshetra, Muzaffarnagar, Shamli, Delhi Sarai Rohilla (7)
2.	Lucknow	Lucknow, Ayodhya	Unnao, Barabanki, Raebareli, Sultanpur, Jaunpur, Janghai, Shahganj, Akbarpur, Unchahar, Haldargarh, Varanasi (11)
3.	Ambala	Ambala, Saharanpur, Bhatinda	Shimla, Dharampur (H.P), Kalka, Dhuri, Nangal Dam, Sirhind, (6)
4.	Firozpur	Firozpur Cantt, Ludhiana, Pathankot, Amritsar	Fazilka, Moga, Jammu Tawi, Mukerian, Kotkapura, Baijnath Paprola, Kangara, Patti, Batala, Nawanshahar, Jalandhar City, LohianKhas, Udhampur, Badgaon. (14)
5.	Moradabad	Moradabad, Rosa, Haridwar	Dehradun, Laksar, Najibabad, Hapur, Chandausi, Bareilly,.Balamau, Shahjehanpur (8)
	Total	**13**	**46**

7.13 The Highlights of 2022-23

7.13.1 NRCH, New Delhi

Details of New technologies introduced during the year 2022-2023 in NRCH.

- **Radiology**
  - Successful commissioning of CT, MRI on PPP model with “Latest state of the art “3T MRI, 128 Slice CT, DEXA, Mammography and USG Doppler on 11.02.2023 was concluded.
- **Ophthalmology**
  - Toric Trifocal Inntra ocular Lens implantation
  - Toric Extended Mono Vision (EMV) Intra Ocular Lens Implantation.
  - Epiretinal Membrane (ERM) removal Surgery
  - Pagenax (Brolucizumab) intra vitreal injection for Diabetic, Retinopathy and ARMD
  - Management of Corneal astigmatism by FLAC’s during Phaco emulsification

- **Psychiatry**
  - PGI battery of brain dysfunction (PGI BBD).
- **Microbiology**
  - Gene Xpert test for Mycobacterium Tuberculosis detection
  - HBV DNA Quantitative PCR (HBV Viral Load)
  - HCV RNA Quantitative PCR (HCV Viral Load)
- **Dental**
  - Replantation of mandibular molar after hemisection
  - Surgical gingival depigmentation
  - Augmentation of healing in dry socket and periodontal bone loss surgery
  - Introducing Ultrasonic irrigation for disinfection of root canals
  - Using endotip of removal of pulp stones and root canal orifice widening
  - Post and core build up of crowns using fibre posts
  - GTR membrance placement for bone defect
  - Using bio-active dentine regeneration materials for maintain pulp vitality.
- **Paediatric**
  - PICC line insertion is being routinely done in PICU and NICU in NRCH

7.13.2 CMS/Moradabad

Details of New technologies introduced during the year 2022-2023 in MB. Div.

- Minidivas.
- Dental Chair.
- Anesthesia Works Station.
- Phaco Emulsification Machine.
- 4.2KW Mobile Digital Radiography Machine.
- Operating Microscope (OMS 800 with accessories.
- Computerized Radiography system.
- PSA Oxygen Plant.

7.13.3 CMS/Firozpur

Details of New technologies introduced during the 2022-23 in FZR Div.

- Mannequins procured for CPR & all paramedical staff trained for it.
- Defibrillator procured.
- STP Plant installed at DH/FZR.
- For green hospital certificate:-
  - STP installed.
  - Solar panels installed at DH/FZR.
  - New garden prepared at DH/FZR.
- Negative pressure wound management started.
- Slit lamp procured DH/FZR.

7.13.4 CMS/Ambala

Details of New technology introduced during 2022-23 in Ambala Division.

- Slit lamp and Non contact tonometer, installed in Eye OPD.
- Foetal doppler was installed in Gynae ward.
- HMIS all modules implemented all over Ambala division.
- New dark room created at NRDH Ambala for mass medical examination of RRC/RRB candidates.
- Harmonal immunoassay auto analyser also installed in pathology lab.

SPECIAL ACHIEVEMENTS NRCH 2023

1. **February 4th: World Cancer Day:** A public discussion on cancer prevention and treatment was done, discussing the newer facilities, treatment options being provided to cancer patients at NRCH, and nutritional supplement in the form of Protein powder were distributed to Cancer patients at Chemotherapy centre. Cancer survivors also participated in the function and appreciated the facilities provided by NRCH to the beneficiaries.



2. **March 3rd: World Hearing Day:** Health talks and pamphlets were given on the theme "Ear and Hearing care for all", with the aim of creating awareness regarding hearing-early detection, screening, prevention, and rehabilitation, with special focus on geriatric and paediatric age groups.



3. **June 14th: World Blood Donor Day:** Blood Grouping testing counters were set up in OPD areas and four esteemed doctors were felicitated for their remarkable dedication to regular blood donation. Several individuals took the initiative to donate blood, and a pledge to commit to blood donation was signed during the event.



4. **July 10: National Doctors Day:** The theme “Celebrating Resilience and Healing Hands” aimed to recognize and appreciate the tireless efforts of medical professionals during the COVID-19 pandemic.



5. **July 28th:** World Hepatitis Day: A talk was given on the theme One Liver, One Life” to raise awareness about hepatitis.

6. **First Week of August:** World Breastfeeding Week: Nurses performed a Nukkad Natak in the OPD area and postnatal ward to create social awareness about the benefits of breastfeeding.













7. **August 25th:** Maxillofacial Trauma Awareness Campaign: Organized by the Dental Department as part of a nationwide campaign by AOMSI. Objectives included raising awareness about the consequences of maxillofacial injuries, importance of wearing seatbelts and helmets, providing precautionary guidance to reduce the risk of maxillofacial injuries, and promoting early diagnosis and treatment of maxillofacial trauma.



8. **September 16th & 17th:** The IRHSA-organized Multi-Specialty Conference, hosted by NRCH, saw active participation from Railway Medical Officers nationwide, who expressed their appreciation for the relevance and quality of the presented topics. A souvenir was also released as a keepsake, featuring contributions from numerous doctors.



9. **September 29th: World Heart Day:** This awareness campaign was conducted in view of the increased burden of cardiovascular diseases globally and emphasizing the need to reduce risk factors, maintain the right diet, exercise, and prioritize sleep.



10. **September 29th: World Rabies Day:** Talk was given in the auditorium on the theme “All for one, One health for all”.

11. **October 1st: Swachhata Pakhwada:** A cleanliness drive, as well as tree plantation was organized, involving all the doctors and staff of NRCH.





12. **September 17th to October 2nd:** Sewa Pakhwada (Also including National Voluntary Blood Donation Day on October 1st): Two remarkable voluntary blood donation drives were organized at NRCH; first on 20th September, in collaboration with Railway Protection Force (RPF), receiving a total of 62 donations, including 4 from female donors; second on 29th September, exclusively for the doctors and paramedical staff at NRCH, resulting

in 22 donations, with 5 from female colleagues. These drives successfully replenished and fortified blood stocks.



13. **10th October: World Mental Health Day:** Celebrated in the OPD area of NRCH with the theme “Mental Health is a Universal Human Right.”



14. **October 18th:** AWAC Camp at Baroda House

15. **Outreach Immunization Camps** at NRCH and affiliated health units, under Intensified Mission Indradhanush Campaign.

These special programmes and campaigns at NRCH demonstrate a commitment to healthcare, awareness, and community service throughout the year.

CMS/DELHI

Special Achievements during the year 2022-23

1. HMIS

HMIS effectively manage all the health facilities & its resources Monitor performance of hospitals across the administrative channel Impart quality health care services to its beneficiaries. All Modules of HMIS are implemented –

Registration Module covers the integration of UMID with automatic validation of beneficiary in a seamless manner without any difficulty to the patient. It is functional at all Delhi area Health units. **OPD Desk Module** covers all the process of Patient Examination and Diagnosis details which will help in generating the Electronic Medical Records, **OPD module is functional at Divisional Hospital and at all Delhi area Health Units**

The Pharmacy Module seamlessly connects to easily dispense the medicines prescribed by

the doctor and optimize inventory management. It is functional at Divisional Hospital, DSA, PB, DEE and DKZ Health units.

Investigation module, IPD module and Inventory module also started at NRDH.

Self registration for HMIS also started at NRDH.

The status of implementation of various Modules of HMIS is implemented as below:-

S.N.	Modules	To be Implemented at	Currently Implemented at
1	OPD	SNP, SMQL, GZB, BHOOR	NRDH, DKZ, PB, SSB, JHI, DSA, MTC, DEE, TKD, ANVR, ROK, PNP, FDB
2	Pharmacy	SNP, SMQL, GZB, BHOOR	NRDH, DKZ, PB, SSB, JHI, DEE, TKD, ANVR, DSA, PNP, MTC, FDB, ROK
3	Investigation	-	NRDH (NA for HUs) Completed
4	IPD	-	NRDH (NA for HUs) Completed
5	Inventory	GZB, SMQL, BHOOR, SNP,	NRDH, DKZ, PB, SSB, DEE, TKD, ANVR, DSA, ROK, JHI, PNP, MTC, FDB

2. Health Check-up camp for Railway Beneficiaries

a. Annual Wellness Awareness Camps

Annual Wellness Awareness Camps were organized at different workplaces under jurisdiction of Divisional Hospital N. Rly. Delhi. Camps were held at RPF/NDLS, HNZM station, RPF/ DLI station, DEE station, Old Delhi Railway Station and different Railway workshops under Delhi division, where a total of 19982 employees and their family members were examined.

b. Swachata Hi Sewa Pakhwada

Swachata Hi Sewa Pakhwada organized at Divisional Hospital Delhi and its Associated Health Units from 15.09.2022 to 29.09.2022 (details are as under).

(Swacch Awareness): Swachhta pledge was administered to all Railway Medical staff and Officers by CMS/DLI Dr. Man Singh at Divisional Hospital and Health unit In-charges at their respective health units and by CHI in CHI's office.

(Swachh Samwad Cleanliness dialogue to public): Painting and posters on the theme of cleanliness were organized in the premises in Divisional Hospital and health units to stress upon the need of proper sanitation and upkeep of clean premises by the participation of public.

3. Mosquito Terminator Train-

It was flagged off By ADRM/DLI & CMS/DLI from NDLS Station to control vector born diseases like Dengue and malaria, it will spray insecticides during train movements to sanitize the

areas up t0 50-60 meters along the track on ring railway up to 16/09/22 to 22/10/2022.During Corona pandemic period this will reduce the menace of mosquito larvae breeding.



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CMS/Moradabad

Special Achievements during the year 2022-23

1. दिनांक 16.09.2022 से स्वच्छता पखवाड़ा मनाया गया। जिस दौरान सर्विस बिल्डिंग्स, कालोनियों की स्वच्छता, खाद्य पदार्थों व पेयजल की गुणवत्ता पर विशेष ध्यान दिया गया। साथ ही विभिन्न प्रकार से मरीजों, कर्मचारियों और कालोनी वासियों को स्वच्छता के प्रति जागरूक किया गया।
2. टांके रहित नेत्र शल्य क्रियाऐं आरंभ की गई।
3. कुल 239 ए0डब्ल्यू0ए0सी0 कैम्प आयोजित किये गये, जिनमें कुल 5412 कर्मचारियों का स्वास्थ्य परीक्षण किया गया।

4. दिनांक 15.07.2022, 23.07.2022 और 27.09.2022 को स्वास्थ्य केन्द्र, झरीपानी द्वारा ओकग्रोव स्कूल, झरीपानी में कोविड-19 वैक्सिनेशन कैम्प आयोजित किये गये। जिनमें कुल 296 विद्यार्थियों को डोज दी गई।

5. दिनांक 13.08.2022 को मण्डलीय चिकित्सालय, मुरादाबाद द्वारा कोविड -19 वैक्सीन महोत्सव कैम्प आयोजित किया गया, जिसमे कुल 30 रेल लाभार्थियों को डोज दी गई।

6. दिनांक 27.08.2022 व 24.09.2022 को स्वास्थ्य केन्द्र देहरादून द्वारा कोविड -19 वैक्सीन कैम्प आयोजित किया गया, जिसमें कुल 127 रेल लाभार्थियों को डोज दी गई।

7. दिनांक 20.09.2022 को स्वास्थ्य केन्द्र, बरेली में रेलवे सुरक्षा बल और सिविल अस्पताल, बरेली के सहयोग से रक्तदान शिविर आयोजित किया गया, जिसमें कुल 14 रेलवे सुरक्षा बल कर्मचारियों ने रक्तदान किया।

8. दिनांक 23.09.2022 व 24.09.2023 को स्वास्थ्य केन्द्र, हरिद्वार द्वारा एण्डब्ल्यू0ए0सी0 प में स्वास्थ्य परीक्षण के साथ ही 176 रेल कर्मचारियों को कोविड-19 वैक्सीन दोज दी गई।

9. दिनांक 29.09.2022 को स्वास्थ्य केन्द्र, देहरादून द्वारा योग नगरी ऋषिकेश स्टेशन पर कोविड-19 वैक्सिनेशन कैम्प आयोजित किया गया। जिसमें कुल 104 रेल लाभार्थियों को डोज दी गई।

10. दिनांक 28.09.2022 और 29.09.2022 को स्वास्थ्य केन्द्र, झरीपानी द्वारा ओकग्रोव स्कूल, झरीपानी में डिप्थीरिया और टेटनेस टीकाकरण कैम्प आयोजित किये गये। जिनमें कुल 232 विद्यार्थियों को इनकी डोज दी गई।

11. दिनांक 09.12.2022 और 10.12.2022 को मण्डलीय चिकित्सालय, मुरादाबाद में सेवानिवृत्त रेल कर्मचारियों के स्वास्थ्य परीक्षण शिविर आयोजित किये गये, जिनमें कुल 127 सेवानिवृत्त रेल कर्मचारियों का स्वास्थ्य परीक्षण किया गया।

12. दिनांक 19.11.2023 से जनरल सर्जरी आरंभ की गई।

13. फेको इमल्सिफिकेशन मशीन व ऑपरेटिंग माइकोस्कोप उपकरणों द्वारा ऑपरेशन थियेटर का अपग्रेडेशन किया गया।

14. डेंटल वेयर के कय द्वारा ओ0पी0डी0 का अपग्रेडेशन किया गया। डेंटल एक्स-रे मशीनकी भी प्रक्रिया चल रही है।

15. ओ0पी0डी0 व ऑपरेशन थियेटर बिल्डिंग का नवीनीकरण किया गया। जिसका उद्घाटन महाप्रबन्धक महोदय, उत्तर रेलवे, नई दिल्ली द्वारा किया गया।

CMS/Lucknow

Special Achievements during the year 2022-2023.

1. Annual Wellness Awareness Camps

   - Total No. of Annual Wellness Awareness Camp was organised -43
   - Total People attendance- 1,038
   - Total HTN cases 59 (New cases- 38 , Old cases - 21)

- Total DM Cases- 57 (New cases- 19, Old cases -38)
- Total anaemia cases -03.
- As a part of **Azadi Ka Amrit Mahotsav** Health Check-up camps for Women was organized at various places.
- AYC/ HU on 21-3-2023, Total person examined-63
- RBL HU on 22-3-2023, Total person examined-19
- PBH HU on 23-3-2023, Total person examined-22
- SLN HU on 27-3-2023, Total person examined-26
- BSB HU on 28-3-2023, Total person examined-51
- JNU HU on 29-3-2023, Total person examined-17
- AWAC at JJR Academy Date on 25.03.2023.
- Total no. of RPF Personal's health check up done Checked -137

2. Radiology Department of NRDH LKO.
   - No. of Total C T Scan- 216
   - No. of NCCT-159
   - No. of CECT-54
   - No. of Coronary Angiography -04
   - No. of Abdominal Angiography-02
   - No. Renal Angiography-01
   - No. of vertebral Angiography-01
   - No. of BMD-03
   - Total No of USG-476
   - Total No. of X-RAY-3248
   - No. of Special Investigations-03
3. A group of 41 group D staff of NRDH /LKO were vaccinated for protection against deadly Hepatitis Virus on occasion of Women's Day celebrated on 9-3-2023.
4. A seminar was conducted by Dr S. Dixit on occasion of World TB Day celebrated at NRDH Lko. On 24.3.2023.
5. Ram Navami Mela के अवसर पर दि0 02.4.2022 से 10.04.2022 तक Ayodhya cantt स्टेशन पर लगभग 529 यात्रियों का फर्स्ट एड दूध पर उपचार किया गया।

6. माननीय उपराष्ट्रपति के लखनऊ वाराणसी तक की यात्रा के दौरान योगदान दिया।
7. ओ पी डी उपचार हेतु आये वरि0 नागरिक को बैठने की सुविधा प्रदान की गयी।
8. दि0 07 अप्रैल को मण्डल चिकित्सालय में वर्ल्ड हेल्थ डे मनाया गया।
9. मरीजो की सुविधा के लिए ओ पी डी के ठंडा पेय जल उपलब्ध कराने के लिए वाटर कूलर की व्यवस्था की गयी।
10. The Health check up Camps are organised at Unnao, Jaunpur & Faizabad, PBH,BBK Health units.
11. No tobacco day Celebrated on 31.05.2022.
12. On 04/06/22 World Environment Day Celebrated.
13. 14.06.22 National Blood donor day was observed.
14. On 21.6.22 International Yoga day was Celebrated as well as health check up Camp was organised in Railway Stadium Lucknow.
15. Integration of two Lab equipment in HMIS done.1
16. On 15.6.2022 A Comprehensive Medical checkup camp organised at N Rly Station Kanpur Bridge.
17. On 30.05.22 A Comprehensive Medical checkup camp organised at N Rly Station Sonik.
18. Medical Officer and 13 Staff awarded by DRM as DRM award week.
19. On 02/07/2022, Annual Wellness Awareness Camp for RPF was organised in JJRPF Academy, Lucknow.
20. On 02/7/22, Pulmonary CT Angiography has been performed in a 53 years old Employee which presented with sudden onset chest pain.
21. On 06.07.22, Annual Wellness Awareness Camp was organised at RPSF, 3rd Battalion, Amv LKO.
22. On 12.07.22,Annual Wellness Awareness Camp was organised at Magarwaa, Unnao
23. On 13.07.22, Annual Wellness Awareness Camp was organised in the office of PWI, Bhadhohi, Varanasi
24. On 13.07.22, Annual Wellness Awareness Camp was organised at Raibareilly.
25. On 14.07.22.Annual Wellness Awareness Camp was organised in the office of PWI, PBH.
26. On 14.07.22.Annual Wellness Awareness Camp was organised at Safedabad, Barabanki.
27. On 15.07.2022,Annual Wellness Awareness Camp was organised for Trackman and other Employee at Sultanpur.
28. On 15.07.2022, Annual Wellness Awareness Camp was organised at AYC.

29. On 16.07.2022,Annual Wellness Awareness Camp was organised at Jaunpur city station, Jaunpur.

30. On 18.07.2022,Annual Wellness Awareness Camp was organised in PWI office Gullar ward, Varanasi

31. On 19.07.22, in the Tri monthly meeting of Raj Bhasha, a technical paper was presented by Dr. Shivangi Shukla, ADMO/Eye.

32. 21.7.22, a CME is organised in NRDH/LKO on subject" pioneering shift in the Management of 2DM"

33. On 21.07.2022, National CPR day is observed in NRDH/LKO.

34. On 07.09.22, Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO

35. On 06.09.22, CT Angiography was done in Department of Radiology, DH/NR/LKO.

36. On 10.09.22, CT Carotid Angiography was done in Department of Radiology, DH/NR/LKO.

37. On 14.09.22, Annual Wellness Awareness Camp was organised at Nihalgarh, Sultanpur.

38. On 14.09.22, Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO.

39. On 15.9.2022, Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO

40. On 16.09.2022, Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO

41. On 26.09.22, World Pharmacy Day was celebrated in NRDH/LKO.

42. On 29.09.2022, World Heart Day was celebrated at NRDH LKO The speakers Dr. Shivangi Shukla ADMO and Dr. Swati Bharadwaj DMO deliberated on the Symptoms of heart diseases `and the preventive aspects Respectively.

43. On 10.10.22, World Mental Health Day was celebrated in DH/NR/LKO.

44. On 14.10.2022,Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO

45. On 18.10.2022, Annual Wellness Awareness Camp was organised for RPF and other employees at C&W Health unit, LKO

46. On 31.10.2022, Integrity pledge was taken on the occasion of Vigilance Awarness Week at NRDH/LKO.

47. On 31.10.2022, Rashtriya Ekta Diwas Pledge is taken on the occasion of Rashtriya Ekta Diwas at NRDH/LKO.

48. DG/RHS HAS DONE INSPECTION OF ayc ON 16.10.2022 and 17/10/2022 of NRDH/ LKO and awarded a cash prize of Rs. 7000.00 for AYC and Rs. 50000.00 for NRDH/LKO

49. A Dental Specialist on contract is appointed for Services in Health Units.

50. Vigilance Awareness Week is observed from 31st October to 6 th November with the theme of “Corruption” free India for a developed nation.

51. On 26.11.2022, a pledge was taken on the occasion of Constitution day in DH/NR/LKO.

52. On 29.11.2022, Mock drill of Accident was timely attended by Medical team.

53. On 01.01.2022, World Aids Day was celebrated in DH/NR/LKO.

54. On 15.12.2022,Annual Wellness Awareness Camp was organised at Railway station unnao

55. 15.12.2022, Annual Wellness Awareness Camp was organised at RBL HU.

56. On 15.12.22, Annual Wellness Awareness Camp was organised at C&W HU Amv, LKO.

57. On 15.12.2022, Annual Wellness Awareness Camp was organised at AYC,HU.

58. On 15.12.22, Annual Wellness Awareness Camp was organised at BSB HU

59. 21.01.2023 to 20.02.2023 abdominal angiography 01, Coronary angiography 3, Carotid Angiography 3, BMD 31

60. On 04. 02. 2023 -on occasion of “World Cancer Day” a women health check up awareness camp was organized at NRDH/LKO by a team of all lady doctors, Physicians, Radiologist, Eye Surgeon, Gynaecologist, Dental Surgeon at BMD, ECG,USG, PEP Semar BP, RBS,BMI, Gynaecological check-up.

61. One Composting plant of 50Kg capacity daily of 45 days cycle had been installed working satisfactory since 15 march 2023.This composting plant has been installed by M/s Balancing Beat of Guru Gram through GIZ company as a pilot project on zero base management in AEN Colony , Varanasi Northern Railway.





कार्मिक
PERSONNEL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter VIII

8.1 About the Department

The task of the Personnel Department of Northern Railway is to manage and look after the welfare of this large mass of employees and their families. Generally Personnel department's role is to communicate and implement policies. They play an important role by providing the required expertise in maintaining industrial relations by Liaisoning with the technical executives.

Functions of Personnel Department

- Man Power Planning.
- Recruitment.
- Training and Development.
- Placement.
- Transfer.
- Performance Appraisal
- Promotions and Demotions.
- Guidance on Disciplinary matters.
- Wage and Salary administrations.
- Settling Industrial Disputes.
- Grievance Redressal.
- Incentives and Financial aids.
- Settlement and Pension.
- Arranging Post retirement benefits and Grievance Redressal of Pensioners.
- Setting up and maintenance of Welfare Activities.

8.2 Highlights of the year

8.2.1 Industrial Relations

The industrial relations with both the recognized unions i.e. NRMU & URMU are cordial and harmonious on this railway. The issues raised by the unions with in personnel matter are being promptly sorted out in various forms of formal and informal meetings, held as per

schedule. Regular PNM at HQ level as well as at Divisional workshop level are being held in a cordial atmosphere. Besides the meetings, several other issues are also resolved through correspondence, Non-payment meetings, informal and joint meetings with both the unions.

8.2.2 General Manager's Level PNM Meetings

DESCRIPTION	NRMU	URMU
No of PNM's held	3	2
No. of Items pending as on 01.04.2022	101	114
No. of fresh items added	70	60
No. of items finalised	68	23
No. of items pending as on 31.03.20.23	103	151

8.2.3 Correspondence Items.

In addition to PNM Meetings, the Union raises various issues through correspondence, addressed to GM, AGM, PCPO & other HODs, which are examined at various levels and replies showing final decision are conveyed to the Union. The detailed position during the year 2022-2023 is as under:-

DESCRIPTION	NRMU	URMU
No. of Correspondence letters pending as on 01.04.2022	42	53
No. of Correspondence letters fresh added	180	285
No. of Correspondence letters finalized	161	272
No. of Correspondence letters pending as on 31.03.2023	61	66
No. of items pending as on 31.03.20.23	103	151

8.2.4 Memorandum

Whenever, GM/AGM and other PHODs/HODs go on line for inspections. The Branch Representatives and Divisional Representatives of the Union hand over the memorandum, which are examined and detailed position of each item of memorandum is sent to the General Secretary. The position of Memorandum for the year 2022-2023 is as under:-

DESCRIPTION	NRMU	URMU
No. of memorandum in hand as on 01.04.2022	10	12
No. of memorandum received during the period	14	10
No. of memorandum finalized	20	18
No. of memorandum pending as on 31.03.2023	04	04
No. of items pending as on 31.03.20.23	103	151

8.2.5 Membership of the Union

For the year ending December 2022, NRMU & URMU had enrolled 1, 05,108 and 1,09,575 members respectively. For the year ending, March 2023, NRMU had 130 Branches (incl. Central Body & Divisional Body) and 1526 Office Bearers whereas URMU had 129 Branches (incl. Central Body & Divisional Body) and 1512 Office Bearers on this Railway.

8.2.6 Number & Cost of Staff as on 31.03.2023

Open line	Number of Staff		URMU	
	2021-22	2022-23	2021-2022	2022-23
Group A	0.97	0.90	273.12	289.34
Group B	0.50	0.53	115.29	126.02
Group C (including erstwhile Group-D)	130.58	128.05	14695.15	16430.03
Total	**132.05**	**129.48**	**15083.56**	**16845.39**
Construction				
Group A	**0.13**	**0.12**	**40.83**	**43.76**
Group B	**0.10**	**0.10**	**25.35**	**27.42**
Group C (including erstwhile Group-D)	**1.79**	**1.62**	**254.22**	**254.32**
Total	**2.02**	**1.84**	**320.40**	**325.50**
Grand Total	**134.07**	**131.32**	**15403.96**	**17170.89**

8.2.7 Department - wise

Departments	Sanctioned			Reduction		Operated			Reduction		Vac	%age
	01.04.22	28.02.23	31.03.23	31.03.23	%age	01.04.22	28.02.23	31.03.23	31.03.23	%age		
Administration	1994	1899	1851	-143	-7.73	1297	1283	1277	-20	-1.57	574	44.9
Accounts	3264	3239	3234	-30	-0.93	1801	1790	1861	60	3.22	1373	73.8
Civil Engg.	41171	40393	39791	-1380	-3.47	29551	28217	28097	-1454	-5.17	11694	41.6
Mechanical	46516	46224	45762	-754	-1.65	38728	37384	37231	-1497	-4.02	8531	22.9
Transportation	19774	19580	19424	-350	-1.80	14910	14570	14526	-384	-2.64	4898	33.7
Commercial	13108	13016	12652	-456	-3.60	9791	9544	9012	-779	-8.64	3640	40.4
Sig. & Telecom	8193	8149	8043	-150	-1.86	6139	6043	6026	-113	-1.88	2017	33.5
Electrical	17829	17794	17492	-337	-1.93	14117	13736	10179	-3938	-38.69	7313	71.8
Medical	3692	3514	3438	-254	-7.93	2898	2785	2763	-135	-4.89	675	24.4
Personnel	1526	1504	1484	-42	-2.83	1200	1195	1213	13	1.07	271	22.3
Store	3374	3354	3160	-214	-6.77	1974	1939	1922	-52	-2.71	1238	64.4
RPF	7293	7293	7293	0	0.00	7130	7069	7052	-78	-1.11	241	3.4
Total	**167734**	**165959**	**163624**	**-4110**	**-2.51**	**129536**	**125555**	**121159**	**-8377**	**-6.91**	**42465**	**35.0**

8.2.8 Railway Recruitment Board

<table>
<tr><th>Para No.</th><th>Subject</th><th colspan="8">Remarks</th></tr>
<tr><td rowspan="3">10.02</td><td rowspan="3">Representation of minority communities in case of direct recruitment to erstwhile Group-D posts.</td><td colspan="4">Total for disposal</td><td colspan="4">NIL</td></tr>
<tr><td colspan="4">Finalized</td><td colspan="4">NA</td></tr>
<tr><td colspan="4">Percentage</td><td colspan="4">NA</td></tr>
<tr><td rowspan="3">10.03</td><td rowspan="3">No. of Class - III staff recruited on open line/ Construction</td><td colspan="8">Panels received from RRBs are sent directly to Division/Unit/ Workshop for further necessary posting as per their demand and concern Divisions post staff in open line/Construction. Details of the total panel sent upto 2022-23 is as under: -</td></tr>
<tr><td>UR</td><td>SC</td><td>ST</td><td>OBC</td><td>EWS</td><td>Total</td><td>ExSM</td><td>PwBD</td></tr>
<tr><td>1069</td><td>406</td><td>206</td><td>695</td><td>249</td><td>2646</td><td>178</td><td>48</td></tr>
<tr><td rowspan="3">10.11 (5)</td><td rowspan="3">Railway Recruitment Board</td><td colspan="8">Details of total panel of Class-III received upto 2022-23 is as under: -</td></tr>
<tr><td>UR</td><td>SC</td><td>ST</td><td>OBC</td><td>EWS</td><td>Total</td><td>ExSM</td><td>PwBD</td></tr>
<tr><td>1069</td><td>406</td><td>206</td><td>695</td><td>249</td><td>2646</td><td>178</td><td>48</td></tr>
<tr><td>10.11 (6)</td><td>Rectt. of Physically Handicapped</td><td colspan="8">48 candidates recruited through DR quota.</td></tr>
</table>

8.2.9 Human Resources Development (HRD) and Manpower Planning.

A lot of emphasis is laid on development of human resources, by providing training in the Training Institutes run by Northern Railway. The whole exercise is aimed to improve the productivity level of the staff. In addition, in-house training is also being provided by organizing Seminars and Workshops. As a step forward, this Railway has introduced a system of organizing “Quiz Competition” for different departments, wherein the basic focus is given on improving the day-to-day working and their professional knowledge. One week’s training, under Management Development Program, is arranged for Senior Subordinate In charges, at various locations, to improve their managerial skills. During the period from 01.04.2022 to 31.03.2023 total non-gazetted staff trained as under:-

Initial Training	Promotional Training	Refresher Training	Specialized Training	Other Training	Total
2826	2869	12790	4902	982	24369

Apart from this training centre, for providing training to clerks, Law assistants and inspectors of personnel department is functioning at Jodhpur wherein, different modules have been prepared for different categories. The course has helped in improving the day to day functioning of personnel department staff. This has also provided an opportunity to the personnel staff of different units to interact and discuss the problems being faced by them in their day to day

working.

8.2.10 Establishment of Training Centers for imparting teaching trg. to staff

For imparting training to the teaching staff there is no established training center on Northern Railway. However, for up-gradation and improving teaching skills of the teachers of Oak Grove School/Jharipani /Mussorrie, training programs run by the Kendriya Vidyalaya Sangathan are organized from time to time and teaching staff are nominated and participating in these programme.

8.2.11 Railway Men's Co-operative Credit Societies:

To create the habit of saving and financial assistance to the Railway Employees, the Northern Zone Railway Employees CTC Society Limited is functioning on Firozpur, Ambala, Delhi Divisions, and Jagadhari Workshop including Headquarters Office / New Delhi. This society is functioning with 11 Branch offices in different Divisions / Workshops with Headquarter at New Delhi. In Kalka Workshop,

The Kalka Workshop Railway employees Urban Salary Earners Co-Operative Thrift & Credit Society Limited. In Lucknow and Moradabad Division Northern Railway Co-operative Banks are in operation with headquarter at Lucknow.

8.2.12 Railway Men's Co-operative Housing Societies:

No such Co-operative Society is functioning over Northern Railway under Personnel Department.

8.2.13 Railway Schools

Northern Railway is running a prestigious Boarding School named Oak Grove School at Jharipani near Mussoorie Hills in Uttrakhand. The educational standard of this School is very high. This School has been a pioneer in education and sports activities and has consistently won number of Inter School Tournaments and other Competitions. For the benefit of Railway employees' children, one High School is also running at Bareilly in Moradabad Division.

Oak Grove School-Result

Comparative result of class X & XII for the year 2022 & 2023							
Class X	**Total No. of students who had appeared**		**Number of students who secured 90% and above marks**	**Number of students who secured 80% and above marks**	**Number of students who secured 60% to 80% marks**	**Number of students who secured 33% to 60% marks**	**Failures**
	Year						
	2022	**63 (Boys 35 and 38 Girls)**	**33**	**17**	**13**	**Nil**	**NIL**
	2023	**57 (Boys 33 and 24 Girls)**	**26**	**12**	**16**	**03**	**NIL**

Class XII	**Total No. of students who had appeared**	**Number of students who secured 80% and above**	**Number of students who secured 60% to 80%**		**Number of students who secured 33% to 60%**		**Failures**
		Stream					
	2022	Science	28	17	11	NIL	NIL
		Humanities	12	10	02	NIL	NIL
		Commerce	05	01	04	NIL	NIL
	2023	Science	09	03	05	01	NIL
		Humanities	16	09	07	NIL	NIL
		Commerce	07	02	05	NIL	NIL

8.2.14 Staff Benefit Fund Committee

Welfare Activities:-

Rs. 13,41,87,200/- (Rs. Thirteen Crore Forty One Lakh Eighty Seven Thousand and Two Hundred Only) were allocated under the Staff Benefit Fund to Northern Railway for the year 2022-23 and the amount has been gainfully utilized for activities such as Education, Recreation, Culture, Women Empowerment, Ayurveda, Homeopathy, Institute & Club Facilities, Sports, Scouts & Guides, Relief in distress etc.

The Central Staff Benefit Fund Committee (CSBFC) functions at the Headquarters office and Divisions/Workshop Staff Benefit Committee are functioning on Divisions & Workshops under the aegis of CSBFC. The allotment of staff benefit fund for the year of 2022-23 for different staff welfare activities is as under:

Head No.	Activities Head	Total (In Rs.)
1	Education Scholarship for Higher Technical/Professional education for wards of staff in grade pay of above Rs. 2400/- and up to Rs. 4200/- @ Rs. 1500 p.m.	19457144
2	Scholarship for higher technical/professional education of girl child of staff in GP Rs. 2400/- @ Rs.1500/- p.m.	18450740
3	Scholarship for higher technical/professional education of Male child of staff in GP Rs. 2400/- @ Rs.1500/- p.m.	16773400
4	Women Empowerment Activities including Seminar, camps, training programme and gender sensitization camps etc.	4696552
5	Recreation other than sports	5367488
6	Recreation facilities at institutes and clubs etc.	6038424
7	Promotion of Cultural Activities	2683744
8	Relief of distress, sickness etc. for staff in grade pay up to Rs. 4600/-	20128080
9	Sports activities	5032020
10	Scouts & Guides Activities	3690148
11	Indigenous System of Medicine Including Homeopathy	6038424
12	Immediate relief in times crisis arising out of floods famines, landside, fire or any other calamity	4025616
13	Developing occupational skills of physically/mentally challenged railway employees and their wards including purchase of wheel chairs, other aides, special software etc. and organizing workshops, seminars, camps etc.	8386700
14	**Miscellaneous**	13418720
	Total	**134187200**

8.2.15 Relief to Patients

Assistance continued to be given in the case of sickness to the employees, both in Group ‘C’ or Group ‘D’ staff who remains on Leave without Pay (LWP) for a period exceeding one month, on the basis of a sick certificate issued by the Railway Medical Officer. The benefit is available only in case of employees suffering from T.B, Cancer, Leprosy, Paralysis, Mental and Cardiac diseases. The assistance is given at the flat rate of Rs. 10,000/- pm. to all Railway employees belonging to group ‘C’&’D” staff.

8.2.16 Cultural ctivities

Inter Divisional Cultural Activities details as under:-

1. Inter Divisional Cultural Competition (Dance) – 2022 was held at UMB Division on 21.07.2022.

2. Inter Divisional Cultural Competition (Drama) – 2022 was held at Amritsar Workshop, FZR Division on 03.08.2022.

3. Inter Divisional Cultural Competition (Nukkad Natak) – 2022 was held at MB Division on 30.09.2022.

4. Inter Divisional Cultural Competition (Music) – 2023 was held at LKO Division on 14.03.2023.

5. Inter Railway Cultural Competition (Dance) – 2022 organized by Kharagpur Division of SER from 24.12.22 to 26.12.2022.

6. Inter Railway Cultural Competition (Music) – 2023 organized by Prayagraj, Uttar Pradesh on 17.03.23 to 18.03.2023.

8.2.17 Women Empowerment

In compliance of Railway Board's letter No. 2023/E(LL)NPWE/1 dated 27.03.2023 International Women's Day was organized all over Northern Railway including Headquarter office, Baroda House. A daylong event on Workshop on Women's Health and Legal Rights at Lohagarh Farms, Gurugram was organized on 01.03.2023 with the main function and felicitation of the women employees held at NRM, Chanakyapuri, New Delhi on 06.03.2023 by Head quarter. As a part of the event, health camp was also organized for all women employees at Baroda House which included cancer detection camp, Bone density scan and other tests which was attended by almost all the women employees. Other competitions like Rangoli, Cooking & Dish Presentation competitions, Quiz competitions were also organized during the day on 2nd, 6th and 13th March 2023 and the winners were awarded at main function held at NRM, Chanakyapuri on 6th March 2023. Experience sharing by women Crew Controller/UMB, Track maintainer/Patiala, SM/DEE and LPP/DEE was appreciated by all.

8.2.18 Canteen Welfare

26 Non-Statutory and 09 Statutory Canteens for the benefit of staff are running on "No profit No loss" basis over Northern Railway in different Divisions and Workshops/Units.

8.2.19 Recreation Club, Institute & Children Park

09 Officers Clubs & 09 Railway Institutes are functioning all over Northern Railway. Staff and their families are provided facilities for recreation & amusement, like Indoor Games, Out Doors Libraries, GYM etc. A number of Children Parks, in Railway colonies, have been equipped with Swings, Sea-saw and Slippery Slides etc. wherever possible, all over the Northern Railway.

8.2.20 Holiday Homes

To refresh staff and their families, well-furnished Holiday Homes with facilities of crockery, utensils and cooking-gas are run by this railway. Accommodation is provided to the staff in the Holiday Homes at very nominal charges. At present, Holiday Homes are available at Shimla, Barog, Haridwar, Baijnath Paprola, Muni Ki Reti Rishikesh, Patnitop, Mussorrie

(Garhwal Hotel), Palampur, Kasauli, Salogra and Manali. In addition Holiday Home at Katra is likely to be completed and would become operational, as soon as the same is handed over by the Construction Department.

8.2.21 Holiday Camps

Holiday camps for employees, spouse camp, women's camps and camps especially for physically challenged employees are being conducted regularly on this Railway with staff benefit fund. An amount of Rs. 71, 50,000/- (Rs. Seventy One Lakh Fifty Thousand Only) has been allotted for Division/Units and Workshops of Northern Railway during the year 2022-23.

8.2.22 Scholarship granted for technical education to children of railway employees during 2022-23.

Over Northern Railway Rs. 1, 94, 57,144/- (One Crore Ninety Four Lakh Fifty Seven Thousand One Hundred Forty Four only)has been granted for scholarship for technical education to children of railway employees during year 2022-23 under following heads:-

1. Scholarship for higher technical/professional education for wards of non gazetted railway servants whose grade pay are above Rs. 2400/- @ Rs. 1500/- per month.
2. Scholarship for higher technical/professional education of Girl children of staff in grade pay up to Rs. 2400/- @ Rs. 1500/- per month.
3. Scholarship for higher technical/professional education of male children of staff in grade pay up to Rs. 2400/- @ Rs. 1500/- per month.

8.2.23 Film Show

No, such activity is running on the Northern Railway

8.2.24 Labour Welfare Organization

The Labour Welfare Organization on Northern Railway, functions under the administrative control of Principal Chief Personnel Officer in Headquarters Office and the Sr. DPOs/Dy. CPOs in Divisions/Workshops. The Welfare Inspectors are posted in most of the Establishments including Workshops, Stores Depots, who are required to contact the staff within their beats in respect of their grievances including non-payment claims etc. They are also required to educate the staff regarding various welfare schemes available for their benefits. The Welfare Inspectors also visit Hospitals, Schools, Handicrafts Centers, Recreation Clubs, Staff Canteens, Sheds and Stations to ensure their proper functioning. This also serves as internal machinery for ensuring proper implementation of various Labors Laws.

8.2.25 Handicraft Centers

To augment the earning of the employee's family and also to provide training to give them opportunity to earn some money, Northern Railway has set up 04 Handicraft Centers at various locations. Tailoring, Knitting, Embroidery work & file cover making are also done by the wives and daughters of Railway Employees in these Handicraft Centers.

8.2.26 Railway Men's Consumer Co-operative Societies:

At present no consumer co-operative societies is in operation over Northern Railway.

8.2.27 Pension Adalat

The Pension Cell in the Headquarters Office continues to provide guidance for implementation of the Board's order received from time to time. The benefits of Liberalised Railway Pension rules and the Family Pension are brought to the notice of the employees. The Inspectors of 'Personnel Branch' are deputed to chase the outstanding cases and help in quick disposal of settlement cases referred to Headquarters Office. They also assist the widows in submitting their claims for the grant of Ex-gratia payment, which is paid to the widows of those CPF beneficiaries, who had died prior to 1.1.86 and after. Inspectors also help in filling up of pension form of retiring employees. Now, the Ex-gratia payment has been allowed to alive SRPF opted also and these cases are dealt with in the Pension Section.

In the Divisional Offices, an APO has been specifically nominated to ensure expeditious payment of settlement dues. By taking action in advance of the date of retirement, in respect of verification of service and leave account etc. Instructions have also been issued that Sr.DPOs along with Sr. DFM will review the settlement cases once in a month.

The Pension Cell in the Headquarter Office keeps a watch on the progress of settlement cases and also issues clarification on the points raised by various Divisions and Extra Divisional Offices in this connection.

Pension Adalat from 01.04.2022 - 31.03.2023				
Pension Adalat held at	Pension Adalat held on	Cases Received	Cases Finalised	%
Division Level	15-12-2022	337	333 (4 rejected)	100%
HQ Level	15-12-2022	15	15	100%
Total		**352**	**348 (4 rejected)**	**100%**

The position of settlement cases is also discussed in the Divisional Office by holding Meeting with respective Divisional Railway Managers and between Principal Officers and General Manager.

8.2.28 Position of Settlement cases of Northern Railway as on 31.03.2023 was as under: -

S.No	**Pension Cases**	
1	Opening balance on 1st April 2022	335
2	Intake during the year from 1.04.2022 to 31.03.2023	4722
3	Number of cases, in which pensioner benefits were sanctioned during the year 01.04.2022 to 31.03.2023.	4437
4	Balance at the end of the year ending 31.03.2023	362

5	Case pending due to reason beyond Control (Cases pending due to DAR/Vig./Comml. Debits) and non-vacation of railway quarter.	37
6	Cases pending due to other reasons within control like non-availability of Service record non-submission of pension booklets, etc.	325

8.2.29 Northern Railway Trekking & Mountaineering Association.

Trekking/Mountaineering Programmes Organised By NRTMA during the Year 2022-23

S.No.	Activity	Date (From/ to)
1.	Trekking Expedition to Pindari Glacier (Uttrakhand)	26th May – 03rd June 2022
2.	Trek to Kunzum La – Chandratal (H.P.)	10th June – 16th June 2022
3.	Trekking & Adventure camp at Leh (Ladakh)	22nd Aug – 31st Aug 2022
4.	Trekking Expedition to Om Parvat & Adi Kailash (Uttrakhand)	25th Sept – 30th Sept 2022
5.	Coastal Trekking to Puri (Orissa) for differently abled/ Physically Handicapped persons	16th Nov - 23rd Nov 2022
6.	Trekking camp at Tawang (Arunachal Pradesh)	09th Dec – 18th Dec 2022
7.	Desert Trekking camp at Jaisalmer (Rajasthan)	26th Dec – 31st Dec 2022
8.	Skiing camp at Gulmarg (J& K)	03rd Feb – 09th Feb 2023

8.2.30 Sports

1. Northern Railway has won the Kaul Gold Cup 2022-23 for the second time in continuation.

2. The performance of Northern Railway in All Indian Railway Championship during 2022-23 in different events are as under:-

S. No.	Discipline	Position	S. No.	Discipline	Position
1	ATHLETICS-(M)	First	19	BASKETBALL-(M)	PARTICIPATION
2	BADMINTON-(W)	First	20	BASKETBALL-(W)	PARTICIPATION
3	BOXING-(M)	First	21	BODYBUILDING	PARTICIPATION
4	CRICKET-(W)	First	22	BRIDGE	PARTICIPATION
5	CYCLING ROAD-(M)	First	23	CHESS	PARTICIPATION
6	HANDBALL-(M)	First	24	CROSS COUNTRY-(M) 10 KM	PARTICIPATION
7	HANDBALL-(W)	First	25	FOOTBALL-(M)	PARTICIPATION
8	WRESTLING-(FS)	First	26	GOLF	PARTICIPATION
9	WRESTLING-(GR)	First	27	GYMNASTICS (M)	PARTICIPATION
10	BADMINTON-(M)	Second	28	HOCKEY-(M)	PARTICIPATION
11	BOXING-(W)	Second	29	HOCKEY-(W)	PARTICIPATION
12	CRICKET-(M)	Second	30	KHO-KHO-(M)	PARTICIPATION

13	KABADDI-(M)	Second	31	POWERLIFTING-(M)	PARTICIPATION
14	WEIGHTLIFTING-(M)	Second	32	TABLE TENNIS-(M)	PARTICIPATION
15	CYCLING TRACK-(M)	Third	33	VOLLLYBALL-(M)	PARTICIPATION
16	KABADDI-(W)	Third			
17	SHOOTING	Third			
18	AQUATICS-SWIMMING	Participation			

3. Northern Railway successfully Organized All India Railway Wrestling, Badminton (M&W), Cycling Track & Cricket Men (League and Knock out) Championship 2022-23 at Karnail Singh Stadium New Delhi and Wrestling secured first position, Badminton (w)- First, Badminton (m) - Second Position, Cricket Men secured Second Position & Cycling secured Third Position.

4. 33 Sportspersons has been recruited through Talent Scouting Quota and 1 under process through Open Advertisement Quota in the year 2022-23.

5. International and National events details are as under:-

S. No	Game	Event	Championship	National/ International	Name of Sportsperson/ Divsion	Venue	Dates	Medal/ Performance
1	Athletics (Hammer throw)	Individual	Commonwealth Games	International	Sarita/MB	England	23/7/22 to 8/8/22	Participation
2	Cross Country	Team	USIC	International	Ratti Ram Saini/LKO	Germany	13/7/22 to 16/7/22	Participation
3	Boxing-Women	Individual	World Championships	International	Siksha/DLI	Turkey	6/5/22 to21/5/22	Participation
4	Boxing-Women	Individual	World Championships	International	Nandini/UMB	Turkey	6/5/22 to21/5/22	Participation
5	Boxing Men	Individual	Commonwealth Games	International	Rohit Tokas/DLI	England	23/7/22 to 8/8/22	Third
6	Boxing Men	Individual	Commonwealth Games	International	Rohit Tokas/DLI	England	23/7/22 to 8/8/22	Second
7	Wt.Lifting	Individual	Sr.Asian Championships	International	Harshit Sehrawat /DLI	Baharin	6/10/22 to 16/10/22	Participation
8	Billiards	Team	World Team Championships	International	Pushpinder Singh/MB	Malasiya	5/10/22 to 9/10/22	Participation
9	Hockey-Men	Team	Commonwealth Games	International	Jarmanpreet Singh	England	23/7/22 to 8/8/22	Silver
10	Cricket-Women	Team	Commonwealth Games	International	Sneh Rana/FZR	England	23/7/22 to 8/8/22	Second
11	Cricket-Women	Team	Commonwealth Games	International	Meghna/MB	England	23/7/22 to 8/8/22	Second

12	Cricket-Women	Team	Commonwealth Games	International	Renuka Thakur/UMB	England	23/7/22 to 8/8/22	Second
13	Hockey -Women	Team	Commonwealth Games	International	Neha Goel	England	23/7/22 to 8/8/22	Third
14	Hockey-Women	Team	World Cup	International	Neha Goel /OSD/DLI	Spain & Netherland	27/6/22 to 17/7/22	Participation
15	Wrestling	individual	Sr.Asian championships	International	Bajrang Punia /OSD	Mongolia	19/4/22 to 24/4/22	Second
16	Wrestling	individual	Sr.Asian championships	International	Satyawart Kadian / DLI	Mongolia	19/4/22 to 24/4/22	Third
17	Wrestling –Women	individual	Sr.Asian championships	International	Nikki/DLI	Mongolia	19/4/22 to 24/4/22	Participation
18	Wrestling-Men	individual	Commonwealth Games	International	Bajrang Punia /OSD	England	28/7/22 to 8/8/22	First
19	Wrestling-Women	individual	Commonwealth Games	International	Vinesh/OSD	England	28/7/22 to 8/8/22	First
20	Wrestling-Women	individual	Commonwealth Games	International	Sakshi Malik /OSD	England	28/7/22 to 8/8/22	First
21	Wrestling-Women	individual	Commonwealth Games	International	Divya/OSD	England	28/7/22 to 8/8/22	First
22	Wrestling Men	individual	World Championships	International	Bajrang Punia /OSD	Serbia	10/9/22 to 18/9/22	Third
23	Wrestling-Women	Individual	World Championships	International	Vinesh/OSD	Serbia	10/9/22 to 18/9/22	Third
24	Cricket-Women	Team	Asia Cup	International	Renuka/UMB	Bangladesh	1/10/22	First
25	Cricket-Women	Team	Asia Cup	International	Meghna/MB	Bangladesh	15/10/22	First
26	Cricket-Women	Team	Asia Cup	International	Sneh Rana/FZR	Bangladesh	/10/22	First
27	Cycling-Men	individual	Commonwealth Games	International	Vishwajit Singh/UMB	England	28/7/22 to 8/8/22	Participation
28	Cycling-Men	individual	Commonwealth Games	International	Naman Kapil/UMB	England	28/7/22 to 8/8/22	Participation
29	Cycling Men	individual	Asian Championships	International	Vishwajit Singh/UMB	New Delhi	18/6/22 to 22/6/22	Third
30	Cycling Men	individual	Asian Championships	International	Naman Kapil/UMB	New Delhi	18/6/22 to 22/6/22	Third
31	Boxing -M	individual	Asian Championships	International	Govind Sahani	Jordan		Third
32	Boxing -M	individual	Asian Championships	International	Amit	Jordan		Participation
33	Handball-Women	Team	Asian Women championships	International	Monika	Korea	24/11/22 to 4/12/22	Participation
34	Cricket-W	Team	World cup T-20	International	Renuka	South Africa	Jan-Feb 23	Third
35	Cricket-W	Team	World cup t-20	International	Sneh Rana	South Africa	Jan-Feb 23	Third

36	Snooker	Individual	World Championships	International	Pushpinder Singh	KualaLampur	5/10/22 to 9/10/22	Participation
37	Judo	Individual	Sr.National	National	Deepak Arya/HQ	Lucknow	16/8/22 to 20/8/22	Participation
38	Judo	Individual	Sr.National	National	Sandeep/DLI	Lucknow	16/8/22 to 20/8/22	Participation
39	Athletics	Individual	National	National	Akash/DLI	Banglore	15/10/22 to 19/10/22	Silver/ Relay 4x400
40	Athletics	Individual	National	National	Jashanjot/UMB	Banglore	15/10/22 to 19/10/22	Participation
41	Athletics	Individual	National	National	Akash/DLI	Banglore	15/10/22 to 19/10/22	Duplicate name
42	Athletics	Individual	National	National	Romit/MB	Banglore	15/10/22 to 19/10/22	Participation
43	Athletics	Individual	National	National	Vikrant/DLI	Banglore	15/10/22 to 19/10/22	Gold Relay
44	Athletics	Individual	National	National	Gaurav/DLI	Banglore	15/10/22 to 19/10/22	Gold/Relay
45	Athletics	Individual	National	National	Yugant Shekhar/LKO	Banglore	15/10/22 to 19/10/22	First place
46	Athletics	Individual	National	National	Karanvir/FZR	Banglore	15/10/22 to 19/10/22	Second
47	Athletics	Individual	National	National	Prashant Kumar/DLI	Banglore	15/10/22 to 19/10/22	First
48	Athletics	Individual	National	National	Sukhdev/UMB	Banglore	15/10/22 to 19/10/22	Participation
49	Athletics	Individual	National	National	Bhupender/MB	Banglore	15/10/22 to 19/10/22	Participation
50	Athletics	Individual	National	National	Karanveer/FZR	Banglore	15/10/22 to 19/10/22	Silver
51	Athletics	Individual	National	National	Sarita/MB	Banglore	15/10/22 to 19/10/22	Silver
52	Power lifting	Individual	National	National	Anjali Sharma/DLI	Karnatka	27/4/22 to 30/4/22	First
53	Cricket-Women	Team	Sr.Women T-20	National	Tanuja Kanwar/UMB	Rajkot & Surat	15/4/22 to 4/5/22	First
54	Cricket-Women	Team	Sr.Women T-20	National	Renuka Thakur/UMB	Rajkot & Surat	15/4/22 to 4/5/22	First
55	Cricket-Women	Team	Sr.Women T-20	National	Meghna Singh/MB	Rajkot & Surat	15/4/22 to 4/5/22	First
56	Cricket-Women	Team	Sr.Women T-20	National	Sneh Rana/FZR	Rajkot & Surat	15/4/22 to 4/5/22	First
57	Cricket-Women	Team	Sr.Women T-20	National	Preeti Bose	Rajkot & Surat	15/4/22 to 4/5/22	First
58	Cricket-Women	Team	Sr.Women T-20	National	Tanuja Kanwar/UMB	Banglore	29/10/22 to 5/11/22	First

59	Cricket-Women	Team	Sr.Women T-20	National	Meghna Singh/MB	Banglore	29/10/22 to 5/11/122	First
60	Cricket-Women	Team	Sr.Women T-20	National	Sneh Rana/FZR	Banglore	29/10/22 to 5/11/22	First
61	Cricket-Women	Team	Sr.Women T-20	National	Preeti Bose	Banglore	29/10/22 to 5/11/22	First
62	Aquatics'	individual	Sr.National	National	Himanshu Tiwari/LKO	Guwahati	6/9/22 to 10/9/22	Participation
63	Kabaddi-Men	Team	Sr.National	National	Pawan/DLI	Charkhi Dadri/	21/7/22 to 24/7/22	First
64	Kabaddi-Men	Team	Sr.National	National	Ravinder Pahal/UMB	Charkhi Dadri/	21/7/22 to 24/7/22	First
65	Kabaddi-Men	Team	Sr.National	National	Nitin /UMB	Charkhi Dadri/	21/7/22 to 24/7/22	First
66	Kabaddi-Men	Team	Sr.National	National	Mohit /DLI	Charkhi Dadri/	21/7/22 to 24/7/22	First
67	Handball-Men	Team	Sr.National	National	Dinesh/DLI	Lucknow	7/9/22 to 11/9/22	Third
68	Handball-Men	Team	Sr.National	National	Shubham/DLI	Lucknow	7/9/22 to 11/9/22	Third
69	Handball-Men	Team	Sr.National	National	Ankit/DLI	Lucknow	7/9/22 to 11/9/22	Third
70	Cricket-Men	Team	Syed Mushtaq Trophy	National	Mohd Saif/LKO	Rajkot	11/10/22 to 22/10/22	Participation
71	Cricket-Men	Team	Syed Mushtaq Trophy	National	Pratham Singh/DLI	Rajkot	11/10/22 to 22/10/22	Participation
72	Cricket-Men	Team	Syed Mushtaq Trophy	National	Harsh Tyagi/DLI	Rajkot	11/10/22 to 22/10/22	Participation
73	Basketball Men	Team	Sr.National	National	Palpreet Singh	Udaipur	27/11/22 to 4/12/22	Third
74	Basketball	Team	Sr.National	National	Himanshu Sharma	Udaipur	27/11/22 to 4/12/22	Third
75	Shooting	Team	Sr.National	National	Akhil Sheoran	Thiruvananthan-puram	20/11/22 to 9/12/22	Third
76	Wrestling	Individual	Sr.National	National	Aman	Vishakhapatnam	21/12/22 to 23/12/22	First
77	Wrestling	Individual	Sr.National	National	Vishal Kaliraman	Vishakhapatnam	21/12/22 to 23/12/22	First
78	Wrestling	Individual	Sr.National	National	Pritam	Vishakhapatnam	21/12/22 to 23/12/22	Third
79	Wrestling	Individual	Sr.National	National	Jitender	Vishakhapatnam	21/12/22 to 23/12/22	First
80	Wrestling	Individual	Sr.National	National	Satyawart F/S	Vishakhapatnam	21/12/22 to 23/12/22	Second
81	Wrestling	Individual	Sr.National	National	Nitin G/R	Vishakhapatnam	21/12/22 to 23/12/22	Second

82	Wrestling	Individual	Sr.National	National	Saurabh G/R	Vishakhapatnam	21/12/22 to 23/12/22	Participation
83	Wrestling	Individual	Sr.National	National	Vikas G/R	Vishakhapatnam	21/12/22 to 23/12/22	Third
84	Wrestling	Individual	Sr.National	National	Sangeeta F/S	Vishakhapatnam	21/12/22 to 23/12/22	First
85	Wrestling women	individual	Sr.National	National	Nikki F/S	Vishakhapatnam	21/12/22 to 23/12/22	Second
86	Boxing women	individual	Sr.National	National	Jyoti-DLI	Bhopal	20/12/22 to 26/12/22	Third
87	Boxing women	individual	Sr.National	National	Jyoti-HQ	Bhopal	20/12/22 to 26/12/22	Second
88	Boxing women	individual	Sr.National	National	Shiksha	Nagercoli	20/12/22 to 26/12/22	First
89	Weightlift-ing	individual	Sr.National	National	Amarjeet Guru	Tamil Nadu	27/12/22 to7/1/2023	First
90	Weightlift-ing	individual	Sr.National	National	Harshit Sehrawat	Nagercoli/Tamil Nadu	27/12/22 to 7/1/2023	Fourth
91	Cycling	individual	Sr.National	National	Naman Kapil	Nasik	7/1/23 to 10/1/2023	Participation
92	Cycling	individual	Sr.National	National	Vishvajit Singh	Nasik	7/1/23 to 10/1/2023	Second
93	Boxing Men	individual	Sr.National	National	Govind Sahani	Hissar	31/12//22to 6/1/2023	First
94	Boxing Men	individual	Sr.National	National	Sachin	Hissar	31/12//22to 6/1/2023	Second
95	Boxing Men	individual	Sr.National	National	Ankit Narwal	Hissar	31/12//22to 6/1/2023	Second
96	Boxing Men	individual	Sr.National	National	Sagar	Hissar	31/12//22to 6/1/2023	Second
97	Boxing Men	individual	Sr.National	National	Rohit Tokas	Hissar	31/12//22to 6/1/2023	Third
98	Boxing Men	individual	Sr.National	National	Manish Panwar	Hissar	31/12//22to 6/1/2023	Third
99	Hockey Men	Team	Sr.National	National	Parampreet Singh	New Delhi	2/12/22 to 10/12/22	First
100	Hockey Men	Team	Sr.National	National	Prashant Chauhan	New Delhi	2/12/22 to 10/12/22	First
101	Hockey Men	Team	Sr.National	National	Shivam Anand	New Delhi	2/12/22 to 10/12/22	First
102	Hockey Men	Team	Sr.National	National	Gursahibjit Singh	New Delhi	2/12/22 to 10/12/22	First
103	Hockey Men	Team	Sr.National	National	Jasjit Singh	New Delhi	2/12/22 to 10/12/22	First
104	Hockey Men	Team	Sr.National	National	Harsahib Singh	New Delhi	2/12/22 to 10/12/22	First
105	Basketball Men	Team	Sr.National	National	Ayush	Udaipur	27/11/22 to 4/12/22	Third
106	Cricket -W	Team	Sr.National	National	Tanuja Kanwar	Pondicherry	17 to 29 Jan 23	First
107	Cricket -W	Team	Sr.National	National	Preeti Bose	Pondicherry	17 to 29 Jan 23	First
108	Volleyball	Team	Sr.National	National	Vinod Khatkar	Guwahati	2/2/23 to 9/2/23	Participation
109	Badmin-ton-w	Team	Sr.National	National	Kanika Kanwal	Pune		First
110	Hockey -M	Team	Sr.National	National	Parampreet Singh	Banglore	25/2/23 to 8/3/23	Second

111	Hockey -M	Team	Sr.National	National	Jasjit Singh	Banglore	25/2/23 to 8/3/23	Second
112	Hockey -M	Team	Sr.National	National	Gursahib jit Singh	Banglore	25/2/23 to 8/3/23	Second
113	Hockey -M	Team	Sr.National	National	Harsahib Singh	Banglore	25/2/23 to 8/3/23	Second
114	Hockey -M	Team	Sr.National	National	Yashdeep Siwach	Banglore	25/2/23 to 8/3/23	Second
115	Hand-ball-W	Team	Sr.National	National	Menika	Varanasi	15/3/23 to 19/3/23	Second
116	Hand-ball-W	Team	Sr.National	National	Simran	Varanasi	15/3/23 to 19/3/23	Second
117	Hand-ball-W	Team	Sr.National	National	Priyanka	Varanasi	15/3/23 to 19/3/23	Second
118	Hand-ball-W	Team	Sr.National	National	Monika	Varanasi	15/3/23 to 19/3/23	Second
119	Cy-cling-Road	Individual	Sr.National	National	Vishavjeet Singh	Nashik	7 to 10 Jan 2023	Gold
120	Cy-cling-Road	Individual	Sr.National	National	Arvind Panwar	Nashik	7 to 10 Jan 2023	Gold
121	Cy-cling-Road	Individual	Sr.Nationals	National	Birma Ram	Nashik	7 to 10 Jan 2023	Participation
122	Cy-cling-Track	Individual	Sr.Nationals	National	Vishavjeet Singh	Guwahati	11 to 15 Dec 2023	Gold Gold Gold
123	Cy-cling-Track	Individual	Sr. National	National	Naman Kapil	Guwahati	11 to 15 Dec 2023	Gold Bronze
124	Cy-cling-Track	Individual	Sr. National	National	Amarjeet Singh	Guwahati	11 to 15 Dec 2023	Sliver
125	Cycling -Track	Individual	Sr. National (State Rajasthan)	National	Birma Ram	Guwahati	11 to 15 Dec 2023	Bronze
126	Boxing	individual	Sr. Nationals	National	Naman Tanwar	Hissar	31/12//22 to 6/01/2023	Participation
127	Cricket -W	Team	One day	National	Sneh Rana	Banglore		First
128	Cricket -W	Team	One day	National	Meghna singh	Banglore		First
129	Cricket -W	Team	One day	National	Renuka Singh	Banglore		First
130	Cricket -W	Team	One day (State Haryana)	National	Savita Malik	Mumbai	15 to 30 Jan 23	Participation
131	Cricket -W	Team	T-20 (State Hary-ana)	National	Savita Malik	Banglore	11to 21 Oct 22	Participation
132	Cricket -W	Team	One day (State Delhi)	National	Laxmi Yadav	Mumbai	15 to 30 Jan 23	Participation
133	Cricket -W	Team	T-20 (State Delhi)	National	Laxmi Yadav	Surat	8 to 22 Oct 22	Participation
134	Cricket -W	Team	One day (State A.P)	National	Anusha	Mumbai	15 to 30 Jan 23	Participation
135	Cricket -W	Team	T-20 (State A.P)	National	Anusha	Banglore	6 to 10 Oct 22	Participation
136	Cricket -W	Team	One day (State A.P)	National	V. Pushpa Latha	Mumbai	15 to 30 Jan 23	Participation
137	Cricket -W	Team	T-20 (State A. P.)	National	V. Pushpa Latha	Banglore	6 to 10 Oct 22	Participation
138	Cricket -W	Team	One day (State Punjab)	National	Kanika Ahuja	Nagpur/Ranchi	19th Jan to 7th Feb 23	Participation
139	Cricket -W	Team	T-20(State Punjab)	National	Kanika Ahuja			Participation
140	Weightlift-ing	Individual	Sr. National	National	Sushant Sahu	Bhubhneshwar	21 to 28 Jan 2023	Bronze

141	Shooting	Individual	Sr.Nationals (Rifle)	National	Akhuil Sheoran	Thiruvananthan-puram	20/11/22 to 12/12/22	Gold
142	Shooting	Team	Sr.Nationals (Rifle)	National	Akhuil Sheoran	Thiruvananthan-puram	20/11/22 to 12/12/22	Sliver
143	Shooting	Team	Sr.Nationals (Rifle)	National	Akhuil Sheoran	Thiruvananthan-puram	20/11/22 to 12/12/22	Bronze
144	Shooting	Team	Sr.Nationals (Rifle)	National	Nitesh	Thiruvananthan-puram	20/11/22 to 12/12/22	Participation
145	Shooting	Team	Sr.Nationals (Pistol)	National	Vipin	Bhopal	20/11/22 to 12/12/22	Participation
146	Shooting	Team	Sr.Nationals (Pistol)	National	Sachin	Bhopal	20/11/22 to 12/12/22	Participation
147	Shooting	Team	Sr.Nationals (Rifle)	National	Savita Thakur	Thiruvananthan-puram	20/11/22 to 12/12/22	Participation
148	Shooting	Team	Sr.Nationals (Pistol) (Delhi State)	National	Vikash	Bhopal	20/11/22 to 12/12/22	Participation
149	Shooting	Team	Sr.Nationals (Pistol) (Delhi State)	National	Amarjeet Kashyap	Bhopal	20/11/22 to 12/12/22	Participation
150	Shooting	Team	Sr.Nationals (Pistol) (UP State)	National	Sumit Mann	Bhopal	20/11/22 to 12/12/22	Participation
151	Powerlift-ing	Individual	National (Punjab State)	National	Gurvinder Singh	Bhilai Chhatis-garh	27 to 31 Dec 2022	Bronze
152	Powerlift-ing	Individual	National (Delhi State)	National	Amit Kumar	Bhilai Chhatis-garh	27 to 31 Dec 2022	Gold
153	Hockey Men	Team	National (Punjab State)	National	Hartaj	Bhopal	6 to 17 April 2022	Participation
154	Hockey Men	Team	National (Punjab State)	National	Dharminder	Bhopal	6 to 17 April 2022	Participation
155	Hockey Women	Team	National (State Haryna)	National	Shilpi	Kakinada A.P	15 to 26 Feb 2023	Participation
156	Hockey Women	Team	National (State Haryna)	National	Manisha	Kakinada A.P	15 to 26 Feb 2023	Participation
157	Hockey Women	Team	National (State Haryna)	National	Bharti	Kakinada A.P	15 to 26 Feb 2023	Participation
158	Hockey Women	Team	National (State Haryna)	National	Antim	Kakinada A.P	15 to 26 Feb 2023	Participation
159	Hockey Women	Team	National (State M.P.)	National	Manmeet	Kakinada A.P	15 to 26 Feb 2023	Gold
160	Badmin-ton-W	Team	National	National	Anuraprabhu Desai	Pune	22 to 28 Feb 2023	Participation
161	Badmin-ton-W	Team	National	National	Akita	Pune	22 to 28 Feb 2023	Participation
162	Badmin-ton-M	Team	National (Punjab State)	National	Love Kumar	Pune	22 to 28 Feb 2023	Participation
163	Basketball -W	Team	National (State Delhi)	National	Garima Gousani	Udaipur		Bronze
164	Volleyball	Team	National (State Uttrakhand)	National	Ankit Chaudhary	Guwahati	2 to 9 Feb 2023	Participation
165	Volleyball	Team	National (State Uttrakhand)	National	Aman Chaudhary	Guwahati	2 to 9 Feb 2023	Participation
166	Volleyball	Team	National (State Punjab)	National	Lakhbir Singh	Guwahati	2 to 9 Feb 2023	Participation
167	Volleyball	Team	National (State Delhi)	National	Shubham Seni	Guwahati	2 to 9 Feb 2023	Participation
168	Hand-ball-W	Team	Sr.Nationals (State UP)	National	Deepa Devi	Varanasi	15/3/23 to 19/3/23	Bronze
169	Hand-ball-W	Team	Sr.Nationals (State UP)	National	Deepa	Varanasi	15/3/23 to 19/3/23	Bronze
170	Cricket -W	Team	T-20 World Cup	International	Meghna Singh	South Africa	Jan-Feb 23	Bronze

Northern Railway Bharat Scouts & Guides

1. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स के 03 रोवर लीडर, ने दिनांक 12.05.2022 से 18.05.2022 तक नेशनल प्रशिक्षण केंन्द्र, पंचमढी में आयोजित हिमालय बुड बैज कोर्स में भाग लेकर सफलता प्राप्त की।

2. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स के 11 स्काउट मास्टर, ने दिनांक 21.05.2022 से 27.05.2022 तक नेशनल प्रशिक्षण केंन्द्र, पंचमढी में आयोजित हिमालय बुड बैज कोर्स में भाग लेकर सफलता प्राप्त की ।

3. नेशनल प्रशिक्षण केंन्द्र, पंचमढी में आयोजित प्री ए॰ एल॰ टी॰ स्काउट मास्टर, कोर्स में दिनांक 08.04.2022 से 12.04.2022 तक भाग लेकर सफलता प्राप्त की।

4. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स के द्वारा दिनांक 19.07.2022 से 23.07.2022 तक राज्य पुरस्कार गाईड व रेंजर का राज्य स्तरीय राज्य पुरस्कार टैस्टिंग कैम्प लीला बेरी प्रशिक्षण केन्द्र, रायवाला में आयोजित किया गया।

5. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स के द्वारा दिनांक 17.07.2022 से 23.07.2022 तक राज्य पुरस्कार रोवर का राज्य स्तरीय राज्य पुरस्कार टैस्टिंग कैम्प लीला बेरी प्रशिक्षण केन्द्र, रायवाला में आयोजित किया गया ।

6. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स के द्वारा दिनांक 30.09.2022 से 02.10.2022 तक राज्य पुरस्कार स्काउट का राज्य स्तरीय राज्य पुरस्कार टैस्टिंग कैम्प लीला बेरी प्रशिक्षण केन्द्र, रायवाला में आयोजित किया गया ।

7. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के द्वारा दिनांक 24.12.2022 से 28.12.2022 तक वोकेशनल कोर्स का आयोजन लीला बेरी प्रशिक्षण केन्द्र, रायवाला में आयोजित किया गया ।

8. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के द्वारा आजादी का अमृत महोत्सव का समापन समारोह पर दिनांक 30.08.2022 से 02.09.2022 तक रेल म्यूजियम चाणक्य पूरी नई दिल्ली में आयोजन किया गया । जिसमें 285 सदस्यों ने प्रतिभाग किया इस समारोह की महाप्रबन्धक उत्तर रेलवे द्वारा भूरी भूरी प्रशंसा की गयी।

9. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के द्वारा दिनांक 25.12.2022 से 28.12.2022 तक प्री जम्बूरी लीला बेरी प्रशिक्षण केन्द्र, रायवाला में आयोजित किया गया, जिसमें 18वी जम्बूरी की तैयारी करायी गयी ।

10. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के जिला आर॰ सी॰ एफ॰ द्वारा दिनांक 19.11.2022 से 25.11.2022 तक प्रार्थना सभा "Observance of Communal Harmony Week" में आयोजित किया गया।

11. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के समस्त जिलो द्वारा दिनांक 31.10.2022 से 06.11.2022 तक Vigilance Awareness Rally के तहत "Vigilance Awareness Week" आयोजित किया गया।

12. दिनांक 24.04.2022 को उत्तर रेलवे राज्य के द्वारा Yogabhys on International Day of Yoga 2022 को कर्नल सिहं स्टेडियम, नई दिल्ली में आयोजन किया गया, जिसमें उत्तर रेलवे राज्य के द्वारा प्रतिभाग किया गया।

13. दिनांक 05.06.2022 को पर्यावरण दिवस के अवसर पर उत्तर रेलवे के समस्त जिलो द्वारा सर्वधर्म प्रार्थना सभा, कैम्पफायर, पेट्रोल प्रोजेक्ट, दीक्षा संस्कार समारोह ,वृक्षारोपण, नुक्कड नाटक का आयोजन किया गया ।

14. दिनांक 21.06.2022 को उत्तर रेलवे राज्य के द्वारा International Day of Yoga 2022 को कर्नल सिहं स्टेडियम, नई दिल्ली में आयोजन किया गया, जिसमें उत्तर रेलवे राज्य के द्वारा प्रतिभाग किया गया।

15. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य मुख्यालय के द्वारा हरित दिवस का आयोजन दिनांक 20.07.2022 को लीला बेरी प्रशिक्षण केन्द्र पर 100 वृक्ष लगा कर किया गया।

16. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य के समस्त जिलो के द्वारा दिनांक 02.10.2022 को गाँधी जयन्ती के अवसर पर प्रातः रैली, सर्वधर्म प्रार्थनासभा, सफाई अभियान, नुक्कड़ नाटक व वृक्षारोपण के कार्यक्रमो का आयोजन किया गया ।

17. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य के समस्त जिलो के द्वारा दिनांक 21.09.2022 को रन फॉर यूनिटी कार्यक्रम का आयोजन किया गया।

18. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 21.12.2022 से 27.12.2022 तक मूडुबिदिरे दक्षिणा कन्नड कर्नाटक में आयोजित International Culture Jamboree में 62 सदस्यों के द्वारा सफलतापूर्वक प्रतिभाग किया गया।

19. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 04.01.2023 से 10.01.2023 तक पाली राजस्थान में आयोजित 18th National Jamboree में 154 सदस्य के द्वारा सफलतापूर्वक प्रतिभाग किया गया, जिसमें उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य ने विभिन्न प्रतियोगिताओ में भाग लिया 5 में A ग्रेड 11 में B ग्रेड प्राप्त किया।

20. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 31.03.2023 को नेशनल हैडक्वाटर नई दिल्ली में आयोजित International Women Day में 15 सदस्य के द्वारा सफलतापूर्वक प्रतिभाग किया गया।

21. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 31.10.2022 से 04.11.2022 तक राष्ट्रीय प्रषिक्षण केन्द्र पंचमढी मध्य प्रदेश में आयोजित First Aid Course में 4 सदस्य के द्वारा सफलतापूर्वक प्रषिक्षण प्राप्त किया गया।

22. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य के द्वारा दिनांक 22.11.2022 से 26.11.2022 तक National Integration Camp, Haryana में प्रतिभाग किया गया ।

23. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 21.11.2022 से 25.11.2022 तक जिला प्रशिक्षण केन्द्र जाबली में आयोजित नेषनल लेवल ट्रेकिग कम इनवायरमेंट अवैयरनेस प्रोगाम में 29 सदस्य के द्वारा सफलतापूर्वक प्रतिभाग किया गया।

24. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 15.10.2022 से 16.10.2022 तक राष्ट्रीय मुख्यालय भारत स्काउट्स एवम् गाइड्स नई दिल्ली में आयोजित 65वी World jamboree on the Air Joti and 25वी World Jamboree on the Internet Joti में 25 सदस्य के द्वारा सफलतापूर्वक प्रतिभाग किया गया।

25. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 07.11.2022 से 11.11.2022 तक राष्ट्रीय प्रशिक्षण केन्द्र पंचमढी मध्य प्रदेष में आयोजित Signalling Course में सफलतापूर्वक प्रशिक्षण प्राप्त किया गया।

26. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 31.10.2022 से 04.11.2022 तक राष्ट्रीय प्रशिक्षण केन्द्र पंचमढी मध्य प्रदेष में आयोजित Mapping & Star Gazing Course में सफलतापूर्वक प्रशिक्षण प्राप्त किया गया।

27. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 07.11.2022 से 11.11.2022 तक राष्ट्रीय प्रशिक्षण केन्द्र पंचमढी मध्य प्रदेष में आयोजित Pioneering and Estimation course में सफलतापूर्वक प्रशिक्षण प्राप्त किया गया।

28. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 17.09.2022 से 21.09.2022 तक शांतिकुज हरिद्वार में आयोजित National Level Yoga Training course में सफलतापूर्वक प्रशिक्षण प्राप्त किया गया।

29. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 01.11.2022 से 05.11.2022 तक त्रिकुटा भवन श्री माता वैष्णो देवी श्राइन बोर्ड जम्मू एवं कश्मीर में आयोजित National Level Adult Trekking में सफलतापूर्वक प्रतिभाग किया गया।

30. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 16.10.2022 से 20.10.2022 तक राज्य प्रशिक्षण केन्द्र मडपम दक्षिण रेलवे में आयोजित National Level Environment Awareness & Coastal Trekking Programme में सफलतापूर्वक प्रतिभाग किया गया।

31. उत्तर रेलवे भारत स्काउट्स एवम् गाइड्स राज्य के समस्त जिलो के द्वारा Har Ghar Tiranga to commemorate “Azadi ka Amrit Mahotsav” कार्यक्रम का आयोजन किया गया।

32. राष्ट्रीय मुख्यालय, नई दिल्ली के द्वारा दिनांक 03.08.2022 से 05.08.2022 तक वर्चुअल ऑन जूम प्लेटफार्म पर आयोजित Regional Level Master Trainers BSG – Digital Smart Generation, Surf Smart 2.0 Training (Virtual) for Northern Region में 10 सदस्य के द्वारा सफलतापूर्वक प्रशिक्षण प्राप्त किया गया।

8.3 PERFORMANCE OF PERSONNEL DEPARTMENT

S. No	Item	2018-19	2019-20	2020-21	2021-22	2022-23	Best Figure	Year
1	Sanctioned Strength/ Non-Gazett-ed(C+D)	171194	171901	169190	167734	163624	171901	**2019-20**
2	On Roll Strength/ Non-Gazetted (C+D)	131270	132974	131433	129536	121159	132974	**2019-20**
3	**SETTLEMENT CASES**							
A	Finalized	7886	7012	5447	4812	4437	7012	**2019-20**
B	Pending	285	211	207	335	362	211	
C	Percentage	96.50%	97.08%	96.34%	93%	87.74%	97.08%	

4	**SENIORITY LIST**							
A	Due	2079	141	141	141	2773	2773	**2022-23**
B	Finalized	2079	141	141	141	2773	2773	
C	Percentage	100%	100%	100%	100%	100%	100%	
5	ADHOC PROMOTION	NIL	NIL	NIL	NIL	NIL	NIL	
6	**COMPASSIONATE APPOINTMENT**							
A	Total for disposal	1228	985	989	1316	1032	1316	**2021-22**
B	Finalized	1187	1007	957	1394	804	1394	
C	Percentage	96.66	102.27	96.76%	105.92	77.9	96.76%	
7	**PENSION ADALAT**							
A	Cases received	8171	7223	5654	5174	352	352	**2022-23**
B	Finalized	7886	7012	5447	4812	348(4 rejected)	348 (4 rejected)	
C	Percentage	96.51	97.08	96.34%	93.00	100%	100%	
8	**MR/MOSR**							
A	Total for disposal	83	97	60	80	13	33	**2019-20**
B	Finalized	62	89	56	76	13	33	
C	Percentage	84%	92%	91%	95	100%	100%	
9	**LEGAL CASES**							
A	Total Finalized	792	792	256	319	509	509	**2022-23**
B	Cases decided in favor of Admn.	687	687	238	294	475	475	
C	Percentage	86.74%	86.74%	92.97%	92%	93%	93%	
10	**PNM MEETING HELD AT GM's LEVEL**							
A	PNM	6	04	1	4	5	5	**2018-19**
B	Items finalized	156	81	70	97	91	159	

सुरक्षा
SECURITY







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

CHAPTER – IX

9.1 About the Department

The Security Department of Northern Railway is being headed by Principal Chief Security Commissioner, Railway Protection Force. The RPF also performs duties relating to passenger facilitation, ensuring passenger's safety and security, action against unauthorized hawkers, beggars and urchins, trespassers etc. In addition, the RPF as a Central Police Organization (CPO) has to undertake duties pertaining to movements, Melas, Agitations etc.

The objectives of the RPF are to carry on an unrelenting fight against criminals in protecting railway property, Facilitate passenger safety and security by removing all anti-social elements form trains and railway premises, Co-operate with sister departments of the Railways in improving the efficiency and the image of the Indian Railways, Act as a bridge between the Government Railway Police/Local Police and the Railway administration and Adopt all modern technology and management techniques in the pursuit of these objects.

9.1.1 Security System on Indian Railways



Indian Railways has a three tier Security set up:-

(A) Railway Protection Force (RPF):

An armed force of the Union constituted under an Act of the Parliament, the RPF Act, for better protection and security of railway property, passenger area and passengers for matters connected therewith.

For proper execution of these duties, RPF is legally empowered under the following Acts and Rules:-

(i) The Railway Property (Unlawful Possession) Act, 1966 [RP(UP) Act]: This act empowers RPF to conduct enquiry & prosecution of cases involving theft, dishonest misappropriation, abatement, conspiracy, connivance and unlawful possession of the Railway Property.

Railway Property is defined as any goods, money or valuable security or animal belonging to or in the charge or possession of a railway administration.

(ii) The Railways Act, 1989: RPF is empowered to conduct enquiry and prosecution of offenders involved in offences like travelling without ticket, alarm Chain Pulling/ Hose pipe disconnection, unauthorized hawking/vending, begging, drunkenness, nuisance, trespass, endangering safety of persons travelling by railways, opening or breaking level crossing gates, entering into compartments reserved for female, smoking, unlawfully bringing dangerous/offensive goods, obstructing running of trains etc.

(iii) The Narcotics Drugs & Psychotropic Substances Act, 1985 [NDPS Act]: RPF has been empowered to conduct search & do seizure under this Act.

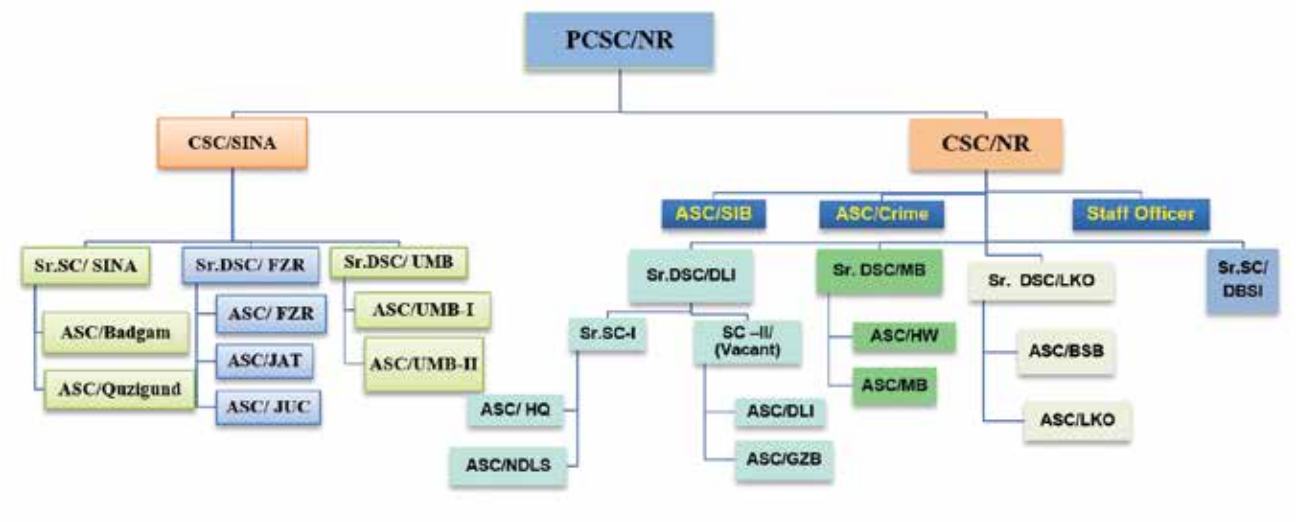
(iv) The Railway Passengers (Manner of Investigation of Untoward Incidents) Rules, 2003: Under this Rule, RPF is empowered to conduct enquiry on genuinely of claims and submit report to the DRM for submitting written statement, on behalf of the Railways, before the Railway Claims Tribunals (RCTs).

(B) Government Railway Police (GRP): GRP is a component of State Police. They are empowered to deal with offences against Passengers and register/ investigate cases under the Indian Panel Code (IPC).

(C) District Police:- In most of the states, District Police is empowered to deal with offences under the IPC, if place of occurrence is between two outer signals and on the tracks.

9.1.2 RPF set up over NR

a) Organizational Chart

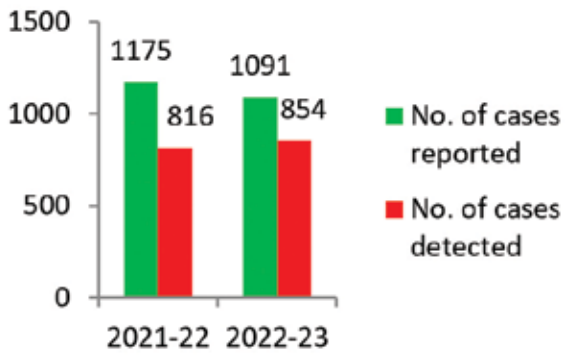


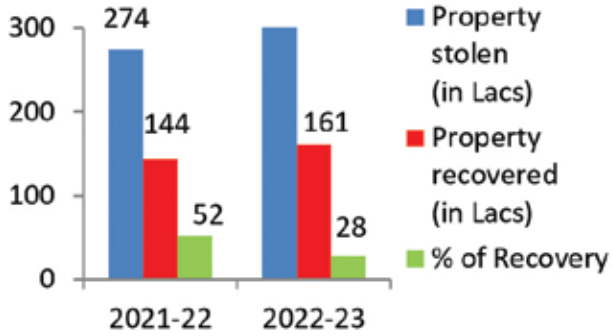
b) Sanctioned/Present strength of RPF/NR (as on 30.09.2023)

RanK	IG	CSC	JAG	SS	JS	IPF	SI	ASI	HC	CT	Dvr	Ancil/ Artis.	Total
Sanc-tioned strength	01	03	08	01	20	221	463	773	2405	3734	55	207/11	7902
Present Strength	01	04	08	-	20	205	404	718	1475	4491	26	191	7543
Vacancy	-	-01	-	01	-	16	59	55	930	-757	29	27	359

9.2 Performance of Security Department During the year

Year	No. of cases reported	No. of cases detected	Value of property Stolen	Value of property recovered	Criminals arrested
2021-22	1175	816	2,74,18,389	1,44,50,306	1613
2022-23	1091	854	5,67,90,794	1,61,02,127	1826





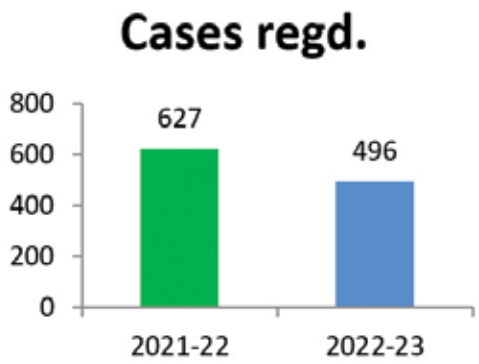
9.2.2 Offences under the Railways Act

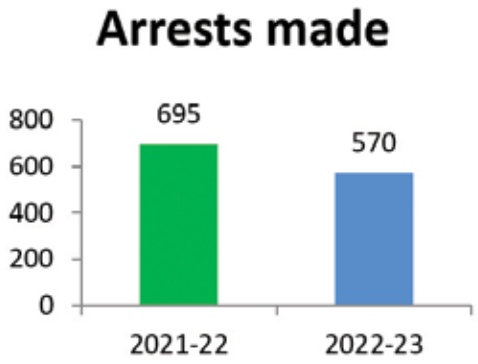
Sections of the Railways Act	2021-22		2022-23	
	Cases registered	Persons arrested	Cases registered	Persons arrested
Travelling without ticket (137 * 138)	89	92	205	206
ACP/HPD (141)	8235	6011	10492	7869
Touting (143)	627	695	496	570
Unauthorized hawking/vending (144)	12886	12913	18943	18941
Nuisance (145)	1602	1621	1996	1916
Trespass (147)	5645	5660	6501	6471
Endangering safety of passengers (153, 154)	1101	605	794	612
Opening or breaking LC gates (160)	908	726	1080	871
Entering into compartments reserved for female (162)	157	157	1819	1819
Bringing dangerous/ offensive goods (164)	6	12	04	06
Smoking (167)	35	35	12	11
Obstructing running of trains (174)	956	725	1025	892

Other sections (142,146,155,156,				
159,163,166,172,175)	1910	1917	4528	4546
Total	**34157**	**31169**	**47,895**	**44730**

9.2.3 Action against agents/Touts involved in illegal business of selling/ Procuring reserved railway tickets

Year	No. of cases registered	No. of persons arrested	Total no. of tickets seized	Total value of tickets seized (in Rs.)
2021-22	627	695	14965	1,77,01,720
2022-23	496	570	9639	1,65,84,160





9.2.4 Offences against passengers (registered by the GRP under the IPC)

a) IPC cases by GRP:

Offences	2021-2022		2022-2023	
	No. of cases registered	No. of cases detected	No. of cases registered	No. of cases detected
Theft of passengers' Belongings (TOPB)	1608	247	2128	694
Drugging	22	14	34	24
Robbery	27	15	79	51
Dacoity	-	-	01	01
Crime against Women passengers	19	16	47	31

b) Cases of the IPC detected by RPF and criminals handed over to the GRP for legal action.

Year	No. of cases detected by the RPF	No. of persons arrested by the RPF
2021-22	259	332
2022-23	548	832

9.2.5 Action by RPF under the NDPS Act:

Year	No. of cases detected by RPF	No. of persons arrested by RPF	Value of seized contraband items (In Rs.)
2021-22	59	49	1,73,85,305
2022-23	62	53	8,80,66,292

9.2.6 Seizure of smuggled wild life/ endangered spices by RPF

Year	No. of cases detected by RPF	Arrests made by RPF
2021-22	1	0
2022-23	2	2

9.2.7 Important initiatives.

a) Rail Suraksha: Drives with an objective of protection and prevention/ detection of crime against railway property including booked consignment, efforts to reduce any leakage of railway revenue.

b) Yatri Suraksha: Drives with an objective of Prevention and Detection of passenger crime, emergency response under 139/ Rail Madad.

c) MahilaSuraksha: Targeted for security of women passengers including “MeriSaheli”, “Matangini” and other squads. Special ladies escort in ladies coaches, drive against unauthorized travel in ladies coaches among others.

d) SEWA: Drives with an objective of assistance to passengers/ elderly/ women/ Divyangjan / sick/ injured/ infants etc.

e) Satark: Drives with an objective of action against illicit liquor/ FICN/ illegal tobacco products/ unaccounted gold/ cash/ precious items/ any other items for the purpose of tax evasion/smuggling. Recovery of arms / ammunitions/ explosives etc.

f) Matri Shakti: Drives with an objective of assistance to pregnant women passengers in child birth.

g) Uplabdh: Drives with an objective of action against touts and unauthorized entry in reserved coaches etc.

h) AAHT: Action against human trafficking (AAHT), rescue of the victim from the clutches of traffickers, apprehension of traffickers.

i) e-office: All office files are being dealt electronically through this.

j) E-Suvidha: Provides information to RPF Employees for their Bio-Data, Promotion, Posting Details, Transfer Order, Award, APAR, Leave, Family Details, Punishment, download Service Book in PDF etc.

k) R.B.M.S: RPF Barrack Management System. This has been developed for monitoring the progress of construction & provisioning of amenities along with redressal of grievances related to upkeep, repair & maintenance of the barracks meant for RPF/RPSF personnel.

l) RSMS: RPF Security Management System was developed -

- to help railways to develop paperless office,
- to track cases registered and enquired by RPF online 24x7,
- to allow seamless exchange of data between different modules,
- to ensure automatic generation of reports,
- to ensure quick and accurate data analysis etc.

It has become fully functional with proper utilisation of all modules from Post –level to Zonal Headquarter.

m) Security Helpline No. 139: This is an all India Security Helpline number which is available 24*7 for assistance to passengers in case they have any security related problem during journey. Complaints received on this number are as under:

Year	No. of complaints received through 139	No. of complaints redressed
2021-22	16181	16181
2022-23	35392	35392

n) Twitter/X Complaints: Complaints received on RPF Northern Railway twitter handle @rpfnr_:-

Year	No. of complaints received	No. of complaints redressed
2021-22	1719	1719
2022-23	2794	2794

o) Children in need of care and protection

- Railway Board issued Revised Standard Operating Procedure (SOP), 2021 in accordance with the directions of the Hon'ble High Court of Delhi in the Writ Petition (Civil) No. 5365/2012 Ms. Khusboo Jain Vs. Union Of India; Juvenile justice (Care & Protection of Children) Act, 2015 further amended in 2021; Juvenile Justice (Care and Protection of Children) model rules, 2016 and other existing guidelines/directions.

- Child Help Desk (CHDs) and Child Help Groups (CHGs) have been set up at important stations of NR representatives of nominated NGOs are also available at CHDs.
- 28 stations of NR have identified for extension of SOP and setting up of CHDs.
- CHDs are set up presently at 22 stations : Amritsar, Ludhiana, Jammu Tawi, Firozpur, Udhampur, Ambala Cantt, Chandigarh, Patiala, New Delhi, Anand Vihar, Delhi, Hazrat Nizamuddin, Meerut City, Delhi Cantt, Delhi Sarai Rohila, Moradabad, Bareilly, Dehradun, Rampur, Haridwar, Lucknow & Varanasi.

Children rescued by the RPF:-

Year	Female children rescued				Male children rescued				Grand Total
	United with parent	Handed over to NGOs	Handed over to police*.	Total	United with parents	Handed over to NGOs	Handed over to police*	Total	
2021-22	347	296	11	654	820	1643	06	2469	3123
2022-23	23	563	17	603	35	2033	26	2094	2697

Cases of child trafficking

9.3 Dog Squad in NR

RPF has a very strong and effective dog squad set up over NR.

S. Strength	Strength Available	Sniffer	Tracker
33	29	23	6

9.4 Incidents of Bandh Calls, Bomb threats, Sabotage over NR in 2022-23

Incident	No. of Incidents
Sabotage	14
Rail Roko/ Dharna	72
Bomb Calls (All calls were found hoax calls)	16

9.4 Incidents of Bandh Calls, Bomb threats, Sabotage over NR in 2022-23

Year	No. of complaints received	No. of complaints redressed
2021-22	272	272
2022-23	284	284

9.6 Awards to RPF Personnel:-

In recognition of their sincerity, devotion to duty and exemplary courage, RPF personnel of NR received 01 Indian Police Medal by the President of India and 06 DG's Insignia by the Director General/RPF in the year 2023.

9.7 Some exceptional cases worked out by RPF:-

- On 30.03.2023, one lady with her 05 years child slipped and fallen down in between train and platform gap, while boarding a moving T/No. 12414, at PF-1 of Gurgaon railway station. On duty RPF staff of Gurgaon quickly pulled them out and saved their life.



- On 17.03.23, RPF/Ambala & Ludhiana alongwith GRP, BBA team rescued 15 minor children with arrest of 04 traffickers from T/No.15707 (Katihar-Amritsar Exp.) at Ludhiana railway station. A case vide FIR No.52/23 u/s 370, 34 IPC and 79 JJ Act registered at GRP/Ludhiana.



- On 03.03.2023, RPF/Sahajahanpur recovered stolen Railway Copper wire scrap valued Rs. 5.7 Lakh with arrest of 08 criminals. A Case Crime No. 08/2023 u/s 3RP(UP) Act was registered against the arrested accused at RPF/Post Sahajahanpur.



- On 12.01.2023, a case vide CCNo. 01/2023 u/s 3RP (UP) Act was registered at RPF/Post/Rohtak for the theft of railway material valued Rs. 3.96 crore from the under construction railway line of Rohtak-Hansi-Meham section. Total 27 accused have been arrested so far with recovery of Rs. 63.41 Lakh and 17 accused have been declared wanted in the case.



- On 12.12.2022, a joint team of RPF/LKO & CIB/LKO arrested 05 notorious criminals and 03 railway employees involved in theft of Railway property of TRD items i.e. drum of Contact and Catnary wire & recovered stolen railway property valued Rs. 17.57 Lakh. A Case Crime No. 34/2022 u/s 3RP(UP) Act was

registered against the arrested accused at RPF/Post/LKO-M.



- On 21.11.22, a joint team of RPF & GRP/Ghaziabad arrested 03 ToPB criminals from Ghaziabad railway station with recovery of stolen Cash and gold ornaments, total valued approx. Rs.11.7 Lakh. The arrested persons were connected to previously registered cases at GRP/Ghaziabad vide FIR Nos.262/22, 292/22 & 119/22 u/s 380 & 411 IPC.



- On 17.11.22, a joint team of RPF & GRP/Varanasi arrested 03 robbers from Varanasi railway station with cash and gold ornaments, worth approx ₹4.19 lakh. The arrested persons were connected to registered cases at GRP/Varanasi vide FIR Nos.283/22 & 284/22 u/s 392 IPC, 259/22 u/s 382 IPC, 257/22 & 209/22 u/s 379 IPC and case registered at Civil Police, Mughalsarai vide FIR no.375/22 u/s 392 IPC.



- On 12.07.22, a joint team of RPF & GRP/Amritsar and CIB/ JUC arrested a drugging criminal from Amritsar railway station who had committed theft of one passengers' valuables, worth Rs.4.5 lakh at Amritsar railway station on 09.07.22 by offering psychotropic substance in milk bottle to the victim.

- On 17.04.22, RPF/Varanasi arrested 03 outsiders in possession of 21 stolen mobile phones, valued approx Rs. 1.97 Lakh at Varanasi railway station. Cases registered at GRP/Varanasi against the arrested persons.



- On 9/10.4.2022, an incidence of robbery was reported in train No. 14205 & 14615 near Moradabad Railway station. With pro-active role of RPF, breakthrough was made in 72 hours and 02 criminals were arrested with recovery of Looted property.



संकेत एवं दूरसंचार
SIGNAL & TEL.







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter X

10.1 About the Department

- Over Indian Railways, Signalling and Telecommunication systems are increasingly playing vital roles in enhancing safety in train operations by providing technical solution to avoid human error as well as facilitating increase in rail traffic by providing better communication for faster and smooth train operations and monitoring.
- Northern Railway also has been progressively modernizing its signalling infrastructure by way of introducing various modern signalling systems like Electronic and Relay based Interlocking system, Modern track vacancy detection devices viz, Track Circuits, Axle Counter, Automatic Signalling, Modern Block equipment like BPAC and UFSBI etc. The old mechanical signalling systems at remaining stations of the Railway are also being phased out and being replaced with modern signaling systems in a planned manner.
- Various Telecommunication systems are also being upgraded with the introduction of emerging telecom technologies like LTE, Optical Fiber Communication (OFC), Six Quad cables in place of other outdated systems deployed for Train control and administrative control communication between various points important for train operation as well as decision making.
- Action plan has been chalked out to create Signaling & Telecom infrastructure on Northern Railways for meeting the projected traffic growth requirements by way of having Electrical/ Electronic Interlocking at all stations in replacement of obsolete multi cabin/mechanical Signaling. Besides, provision of LED based color light signals for better visibility, lesser maintenance and high durability, Block proving by axle counters (BPAC)/Continuous track circuiting for automatic proving of clearance of block sections for improved safety as well as throughput has been done at several stations and its proliferation is being increased continuously. Some other important improvement actions are also being taken toward improving safety and reliability like complete track circuiting of station sections on all routes, On-line monitoring, predictive maintenance and asset management system with provision of Data loggers at every signaling installation etc. Use of IOT in failure diagnostics and preventive maintenance has also been planned recently.
- For improving train safety, automatic train protection is being provided on select sections. Train Protection Warning System is operational on Hazrat Nizamuddin- Palwal section. Indigenously developed train protection system “KAVACH” has also been planned and works sanctioned on Northern Railway’s portion of New Delhi-Mumbai, New Delhi-Howrah and several other sections.
- In Telecom sector, introduction of Mobile train radio communication, extension of Optical Fiber Cable (OFC) and Six Quad Cables over the entire route, IP based train control communication, voice network modernization, Wi-Fi, Baggage Scanner, Digital Clock, Coach Display Board, Train Display Board and replacement of overhead alignment with underground cables to improve reliability of the communication system and enhance the

capability of the rail transport system. Broad band internet and multimedia facilities, high quality train information displays, information boards at stations & running trains and CCTV cameras at Reservation centers, Railway Stations, Central & Divisional Hospital and Health Units are some of the important infrastructure provided and being provided to improve the quality of passenger service.

10.2 Brief Signalling and Telecom Profile on Northern Railway

- **Signalling & Inter locking system**

Interlocking is an arrangement of signals, points and other appliances, operated from a panel or lever frame so inter connected by Mechanical/Electrical/ Electronic locking or a combination of these so that their operation takes place in proper sequence to ensure safety. Details of Interlocked stations over NR are shown below:

Table 1: No. of Interlocked stations on NR

	Gauge	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
No. of Inter-locked sta-tions (STD-I® &above)(includ-ing Block Huts)	B.G.	691	694	698	709	710	712
	N.G.	2	2	2	2	2	2
No. of stations with MNI	B.G.	12	11	9	-	-	-
	N.G.	30	30	30	30	30	31
Total No of Interlocked stations		**735**	**737**	**739**	**741**	**742**	**745**

- **Type of Signalling:**

Type of Signaling on Northern Railway has undergone drastic change with extensive proliferation of Multi Aspect Color Light Signal stations increasing from 657 in March 2018 to 712 in March'2023 while Mechanical Semaphore signaling reducing from 45 in March 2018 to NIL March 2023 excluding 33 N.G. Details of type of Signaling are given below:-

Table 2 : Type of Signalling at stations on NR							
	Gauge	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
No. of stations with MACLS (including Block Huts)	B.G.	657	670	682	703	709	712
	B.G.	1	0	0	0	0	0
No. of stations with Semaphore Signalling	B.G.	45	35	25	6	1	0
	N.G.	32	32	32	32	32	33
Total No. of Stations		**735**	**737**	**739**	**741**	**742**	**745**

- **Panel/Route Relay Interlocking (PI/RRI/EI):**

All the Stations on route 'A', 'B', 'C', & 'D' on NR are being replaced progressively with Electrical/Electronic Interlocking to enhance Safety, provide faster and flexible train operations by reducing dependence on human interference due to centralized operation of points and signals. In addition, complete Track circuiting is also provided in station section. Stations with mechanical signaling on 'D' route are also being provided with Electronic Interlocking.

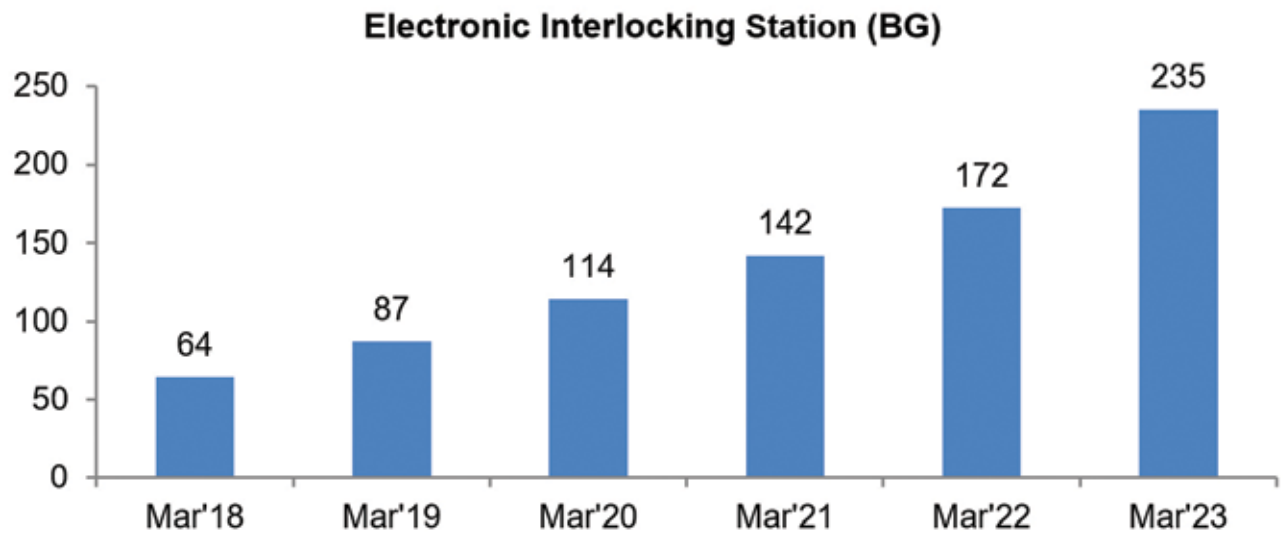
Details of Mechanical Signaling system and PI/RRI/EI on NR from 2017-18 to 2022-23 as shown in table below:-

Table 3: No. of RRI/PI/EI & Electromechanical Stations on NR							
	Gauge	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
No. of Stations with RRI/PI/EI (including Block Huts)	B.G.	533	545	565	579	597	632
No. of Stations with Mechanical/ Electro-Mech. Inter locking systems	B.G.	170	160	142	130	113	80
	N.G.	32	32	32	32	32	33
Total No. of Stations		**735**	**737**	**739**	**741**	**742**	**745**

Nos. remaining stations provided with Lever Frame & Semaphore Signaling are already sanctioned for replacement with PI/EI/RRI on Northern Railway.

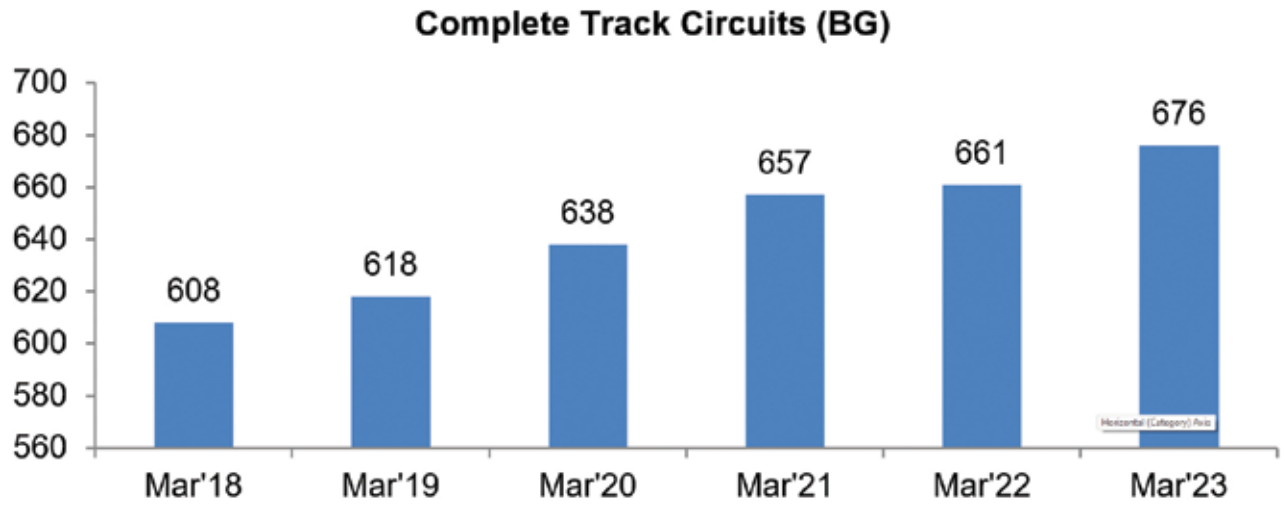
- **Electronic Interlocking (EI):**

Electronic Interlocking have been provided at 235 stations (B.G.) on Northern Railway for highest level of safety and reliability. The extent of proliferation of Electronic Interlocking over NR over last 5 years is indicated below:



- **Track Circuiting**

Complete Track Circuiting has been provided on all the stations on 'A' ,'C' and 'D' routes on Northern Railway. Track circuiting on balance stations of other routes is also being provided progressively. Complete track circuiting has been extended from 608 stations (B.G.) to 676 stations (B.G.) in last five years.



- **IPS (Integrated Power Supply)**

Integrated Power Supply system (IPS) provides all the power requirements for the Signaling & Telecom functions of a Railway yard from a single unit, with a single set of battery backup. Power from the mains, is converted, regulated and fed through a distribution board. The IPS helps to maintain reliable and continuous power, at the lowest cost, considering capital and maintenance costs.

Details of IPS provided on NR during last 5 years are shown in Table below:-

Table 4 : No. of IPS Provided at Stations on NR							
	Gauge	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
No. of Stations with IPS	B.G.	564	582	593	625	649	677
Total No of Stations (including Block Huts)	B.G.	703	705	707	709	710	712
	N.G.	32	32	32	32	32	33
	Total	**735**	**737**	**739**	**741**	**742**	**745**

No. of stations provided with IPS has increased from 564 in 2017-18 to 677 in 2022-23 in the last five years.

- **Data Logger:**

Data Loggers have been installed to monitor and record all activities and events in the Signaling System of a Railway station/yard in the chronological order. This data forms the basis for predictive and proactive maintenance.

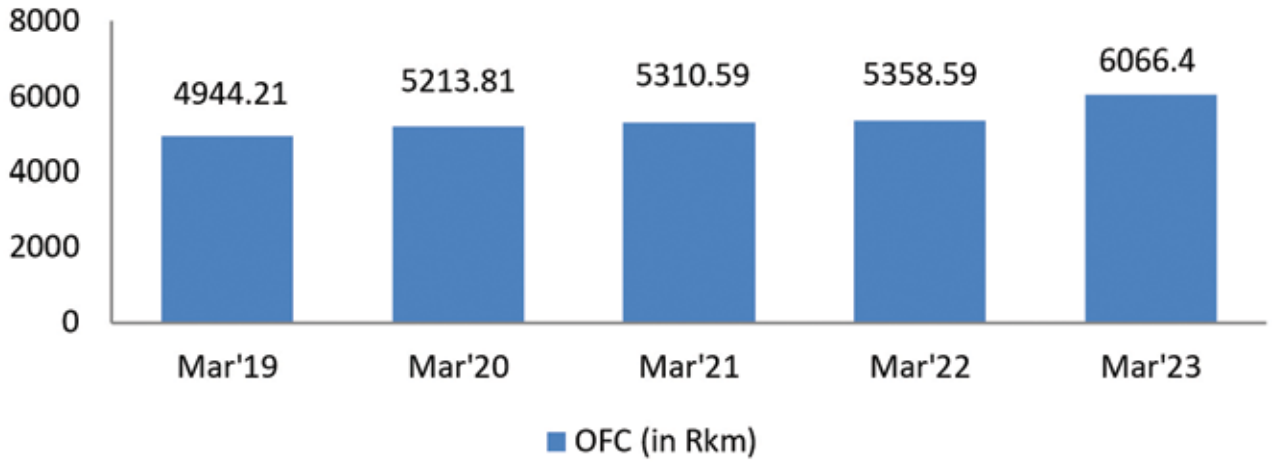
Details of Data loggers provided on NR during last 5 years are shown in Table below:-

Table 5 : No. of Data loggers Provided at Stations on NR							
	Gauge	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
No. of Data Loggers provided at Stations	B.G.	552	568	582	590	608	643
Total No of Stations (including Block Huts)	B.G.	703	705	707	709	710	712
	N.G.	32	32	32	32	32	33
	Total	**735**	**737**	**739**	**741**	**742**	**745**

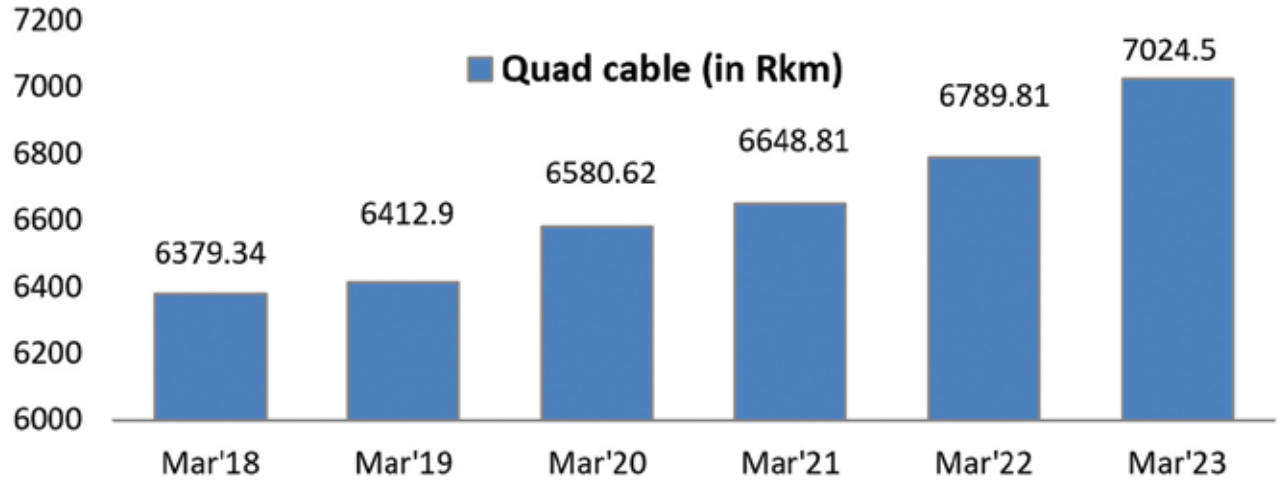
The Data Loggers have also been networked so that information is available at central locations. At present, all the data loggers are working in network mode.

- **Optical Fiber Cable & Quad Cable system:**

Optical fibers are extensively used in modern communication links as they offer very large bandwidths. At the same time, it is not prone to theft like copper cables. During the last five years, OFC links have increased manifold on Northern Railway from 4944.21 Kms in Mar’19 to 6066.40 Kms in Mar’23.



Quad cable network has increased from 6412.9 Kms in Mar'19 to 7024.50 Kms in Mar'23.



10.3 Highlights of the Year

- **Expenditure over S&T**

Budget Allotment for Signaling and Telecom works has increased progressively in the last five years. The total expenditure in the last five years for S&T plan head has been Rs1118.42 Cr. Thus, the average budget expenditure per annum for S&T Plan Head has been Rs 233.68 Cr. Expenditure in 2022-23 was Rs.302.73 Cr.

- **Innovations**

Northern Railway has adopted latest developments and innovations in the field of Signaling and Telecommunication to improve maintenance practices for enhanced reliability of S&T assets.

- **Dual Detection Track Circuit arrangement**

In order to improve Track circuit reliability, failure prone track circuits were identified in two divisions i.e. Delhi and Ambala of Northern Railway, where maintenance of track circuit is difficult due to water logging and other such problems. At these locations, Dual Detection Track Circuit Arrangement has been introduced to improve the reliability. This has been done by way of installing an axle counter in parallel to DC track circuit so that either can be detected when one fails, thus avoiding detention of trains.

- **Provision of Emergency Sliding Boom at LC gates:**

Gate booms are provided for closing the road for road users when train has to pass at manned Level crossing gates. In case of damage to gate boom, the emergency sliding boom arrangement provides a strong boom arrangement across the road and can be provided very quickly & easily across the road. This arrangement is steady and replaces conventional arrangement of emergency chain, which has drawbacks such as formation of sag, looseness and less reliability. The emergency sliding boom provided adjoining to track is pulled across the road on rollers and is rested on a resting post provided at the other end of the road. Moreover, this arrangement helps in reduction of trains detention as trains can be passed with normal speed in case of damage of gate boom.

Provision of emergency sliding boom arrangement have been developed & introduced first time by Northern railway and now it has been adopted all over Indian Railway . Emergency sliding boom arrangement have been provided at 1176 nos. of Level crossing gates and are being provided at other level crossing gates over Northern Railway.





- **CCTV Cameras at Stations**

To keep a vigil on reservation booking & discourage touts, CCTV cameras were installed in reservation centers at Chandigarh, Kalka, Patiala, Bathinda and Saharanpur stations on Ambala Division and New Delhi, Delhi Main, Anand Vihar, Ghaziabad, Delhi Shahdara, Lajpat Nagar, Hazrat Nizamuddin, Madipur and Noida Stations on Delhi Division. In addition, newly installed CCTV on Saharanpur, Bathinda, Patiala and Kalka and live view on internet of CCTV images have been made possible by providing BSNL broadband connections having static IP. Now monitoring any of these locations can be done on Internet by using allotted static Internet Protocol address.

CCTV cameras were installed under Integrated Security System at Moradabad, Bareilly and Haridwar on Moradabad Division and Srinagar, Badgam, Anantnag, Udhampur, Amritsar, Jalandhar City, Ludhiana, Pathankot Cantt, Bijbehara, Panjgam, Awantipura, Kakapora, Pampora and Mazhom of Firozpur Division and Kalka, Patiala and Bathinda, of Ambala Division and Lucknow, Ayodhya Cantt, Ayodhya & Varanasi of Lucknow Division & New Delhi, Delhi, Hazrat Nizamuddin, Delhi Shahdara, Ghaziabad, Anand Vihar Terminal, Tilak Bridge, Shivaji Bridge, Delhi Sarai Rohilla, Delhi Cantt of Delhi Division.

In addition to above, CCTVs have been provided under Nirbhaya Funds at Dehradun, Chandausi, Hapur, Hardoi, Roorkee, Shahjahanpur, Amroha, Rampur & Nazibabad Railway Station of Moradabad Division and Faridabad, Jind, Karnal, Faridabad Town, Ballabhgarh, Meerut City, Panipat, Gurugram, Nangloi, Adarsh Nagar, Meerut Cantt, Shakurbasti, Subzi Mandi, Sonipat, Rohtak of Delhi Division, Beas, Firozpur Cantt, Pathankot, Phagwara, Jammu Tawi, Shri Mata Vaishno Devi Katra, Jalandhar Cantt, Baramulla, Hamre, Pattan, Sadura, Qazigund, Banihal & Phillaur of Firozpur Division. Phulpur, Bhadohi, Janghai, Jaunpur, Pratapgarh, Prayag Ghat, Unnao, Rae Bareli, Barabanki, Sultanpur, Amethi, Shahganj of Lucknow Division. Jagadhri, Rajpura Jn., Sirhind Jn., Shimla, Saharanpur, Ambala Cantt of Ambala Division.

P.K. Road Railway Colony, SP Road Railway Colony Washing Line New Delhi, RPF post Gurugram, Delhi Safdarjung, IRCA Building New Delhi, Gati Shakti unit at DRM office New Delhi, Creche of Baroda House, Creche of DRM office New Delhi of Delhi Division and Loco Lobby Ludhiana of Firozpur Division under DRM power.

- **Provision of CCTV Cameras at Hospital/Health Unit:**

Northern Railway Central and Divisional Hospital & Health Unit were installed with 79 Nos. CCTV Cameras at 24 locations in Delhi Division, 100 Nos. CCTV Cameras at 12 locations in Firozpur Division, 62 Nos. CCTV Cameras at Divisional Hospital in Lucknow Division, 63 Nos. CCTV Cameras at 11 locations in Moradabad Division & 65 Nos. CCTV Cameras at 07 locations in Ambala Division.



(CCTV at Jammu Tawi station)



(CCTV at Lucknow station)



(CCTV at Lucknow station)

- **Provision of CCTV Cameras at LC Gates**

CCTV cameras provided at 19 Nos. LC Gates (247, 321, 343, 359, 359B, 19A, 415, 471, 477, 448, 51, 82, 94 & 96 of Moradabad Division and 13C, 40A, 118A, 23C & 125 Spl of Lucknow Division) to enhance safety and security.



LC - 96 of Moradabad Division

- **Baggage Scanner**

To enhance Passenger Security, X-ray Baggage machines have been installed at (Ludhiana, Jallandhar City and Amritsar & Pathankot Cantt.) in Punjab area (Sri Nagar, Badgam, Anantnag, Bijbehara, Panjgam, Awantipura, Kakapora, Pampora, Jammu Tawi, Udhampur & Rajeshwar) in J&K of Firozpur Division.

Moradabad, Bareilly & Haridwar station of Moradabad Division, Lucknow, Varanasi, Ayodhya Cantt & Ayodhya of Lucknow Division, Kalka, Patiala, Bathinda Jn., Chandigarh, Saharanpur, and Ambala Cantt. of Ambala Division. Now X-ray Baggage machines are maintained by the RPF.

- **Provision of Security Helpline Number**

A uniform 3 digit short code telephone number 182 was made operative for security helpline over Northern Railway. This is quick to dial and easy to remember number covering all landline & mobile service providers. The security helpline facility is working on divisional-centric configuration wherein call originating from anywhere within the jurisdiction of division, will automatically reach the concerned divisional security control.

For activation of this facility, two BSNL/MTNL line were terminated in each divisional security control manned by RPF personnel. All concerned telecom circles of MTNL/BSNL and service providers like Airtel, Aircel, Reliance, Vodafone, Idea, Tata Teleservices, Videocon etc. operating in Delhi, Punjab, Haryana, Himachal Pradesh, UP(East), UP(West), Rajasthan, Jammu & Kashmir telecom circles were requested to suitably programmed their switches as per divisional geography.

Now merged 182 in to RailMadad Help line 139 over Indian Railway in compliance of Railway board Instruction.

- **WI-FI at Stations over Northern Railway**

Wi-Fi is Local area network on wireless technology. It is an underling Technology of Wireless Local Area Network. Wi-Fi allows Computers & other devices of passengers to communicate over a Wireless Network. Wi-Fi has been installed at 614 stations (FZR-120, UMB-103, DLI-147, MB-122 and LKO-122) over Northern Railway. Wi-Fi is provided by the TATA trust and Railway.

- **“Voice over Internet Protocol” on UTS Network**

“Voice over Internet Protocol” telephones were tested successfully on UTS network in Ambala Division. Since UTS circuit is available on each station, this system will be helpful during Control/Block failure or TFC to provide communication between

- **Provision of IP Phone for Control Communication:**



05 No’s IP Phone has been installed in Asthal Bohar-Rewari section for control communication through Wi-Fi connectivity by providing SIM aggregator. By using this phone control communication failure will be reduced.

- **System to Access Accident sites:**

To provide Broadband Railnet/Internet to access all derailment/Accident sites, Ambala Division has innovated and developed a standard kit. Broadband internet access can be provided at all the stations through OFC network with the application of standard kit. The kit

uses E-1 interface of Railway OFC and comprises E-1 to Ethernet converter, LAN extender and E-1 modem. For Accident / Derailment in Block Section having quad cable, Broadband is extended on Disaster Management pair. This facility can also be used for videos of Derailment/ Accident site without use of bulky Satellite based VSAT system and affords greater Bandwidth and speed. Telecom Equipment of ART has been upgraded as per RDSO Letter No: STT/ WL/ARRO (Pt.) 244/Vol-II Dt. 18.06.2020 with additional following items by Delhi Division as under-



(a) Rugged Laptop



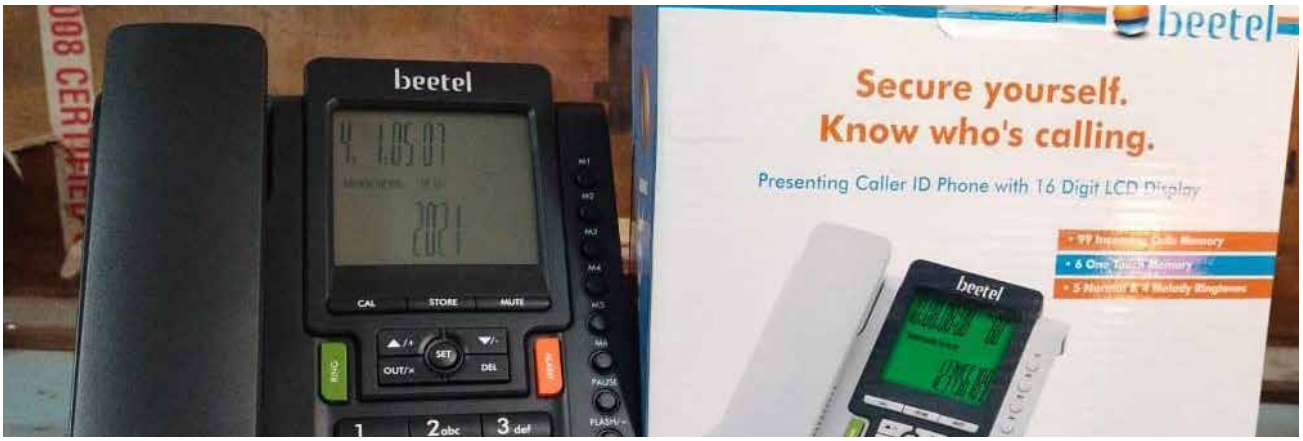
(b)Tripod Stand for Full HD Bullet type IP Color Camera



(c) Hot Spot 4G Wi-Fi Router Dongle (Data SIM Card)



(d) All in One color Laserjet Printer



(e) Fixed Cellular Telephone (4G SIM based)

➢ True Color LED Indication Boards

In order to enhance quality of passenger amenities at 'A' and 'B' class stations, display boards having capabilities of displaying information in true color and Multi languages have been introduced. Its key features include Multi Color multi lingual display apart from video-cum-train arrival departure information display. Besides, the display of such boards is easy to read and soothing to the eyes. Its benefits include low operational cost, source of additional revenue generation through advertisements. It also helps in minimizing load at enquiry counters.



On Northern Railway, True Color Train Indication LED Boards have been provided at major stations namely, New Delhi, Delhi Cantt., Kurukshetra, Ballabhgarh, Palwal, Hazrat Nizamuddin, Anand Vihar Terminal, Delhi Sarai Rohilla, Karnal, Rohtak, Delhi Main, Faridabad, Ghaziabad, Gurgaon, Meerut City, Panipat, Subzi Mandi, Shakurbasti, Sonipat, Muzaffarnagar, Meerut City, Meerut Cantt of Delhi Division and Akbarpur, Amethi, Ayodhya, Barabanki, Bhadohi, Ayodhya Cantt, Janghai, Jaunpur, Jaunpur City, Lucknow, Pratapgarh, Prayag, Raebareli, Sultanpur, Unnao, Varanasi, Shahganj, Akbarpur, Raebareli of Lucknow Division and Abohar, Ambala Cantt, Ambala City, Barnala, Bathinda, Chandigarh, Dhuri, Jagadhari, Kalka, Khanna, Nangal Dam, Patiala, Rajpura, Roop Nagar, Saharanpur, Shimla, Sirhind, Una Himachal of Ambala Division and Amritsar, Anantnag, Banihal, Baramulla, Beas, Badgam, Firozpur Cantt, Jalandhar Cantt., Jalandhar City, Jammu Tawi, Ludhiana, Pathankot, Pathankot Cantt, Qaziqund, Sri Mata Vashno Devi Katra, Udhampur of Firozpur Division & Dehradun, Hapur, Haridwar, Jawalapur, Laksar, Moradabad, Raiwala, Rishikesh, Roorkee, Bareilly, Shahjahanpur, Hardoi, Yognagri Rishikesh of Moradabad Division.





True Colour Train Display Boards at New Delhi Railway Station

On Northern Railway, Coach Guidance Boards have been provided at major stations namely, New Delhi, Delhi Cantt., Kurukshetra, Ghaziabad, Hazrat Nizamuddin, Anand Vihar Terminal, Delhi Sarai Rohilla, Karnal, Rohtak, Bahadurgarh, Faridabad, Gurgaon, Panipat, Sonipat, Delhi Main, Bahadurgarh, Meerut City of Delhi Division and Amethi, Ayodhya, Barabanki, Bhadohi, Ayodhya Cantt, Janghai, Jaunpur, Jaunpur City, Pratapgarh, Prayag, Raebareli, Unnao, Varanasi, Shahganj, Akbarpur, Lucknow, Prayag Ghat Sangam of Lucknow Division and Ambala Cantt, Bathinda, Chandigarh, Jagadhri, Kalka, Patiala, Rajpura, Saharanpur, Sirhind of Ambala Division and Amritsar, Beas, Faridkot, Gurdaspur, Jalandhar Cantt., Jalandhar City, Jammu Tawi, Ludhiana, Pathankot Cantt, Phagwara, Sri Mata Vashno Devi Katra, Udhampur of Firozpur Division & Bareilly, Dehradun, Hapur, Haridwar, Jwalapur, Laksar, Moradabad, Raiwala, Rishikesh, Roorkee, Yognagri Rishikesh of Moradabad Division.



Coach Guidance System at Hazrat Nizamuddin Railway Station

- **Video Conferencing**

In order to create interactive meeting environment during pandemic, Northern Railway has adopted latest technology by providing Video Conferencing equipments at Zonal/Divisional offices and also provided CISCO Web link platform during COVID-19 for Video Conferencing between GM and Railway Board apart from GM, CAO and DRMs of all five divisions.

During COVID-19 pandemic, arrangements for Video conference between Railway Board, GM, DRMs & PHODs and other officials from home through WebEx, Zoom & Google hangout applications have been made. All Video conferences are operated properly on Railnet/ internet from Residences/Office. Till date Northern Railway has conducted more than 150 Video conferences per month on an average.

- **Biometric Scanner Access Control System at Control Office**

In order to restrict entry of unauthorized persons in control office, Northern Railway has commissioned Biometric Scanner Access Control System at Control office DRM's office, New Delhi

- **Tele Consult Facility**



Video calling arrangement on 49" LED screen is provided at Divisional Hospital for facility to patient for getting on line Treatment.

Face to face enquiry system with Telecom facility setup at NRCH for COVID -19 OPD. Railway No.71541 MTNL No .23341970 provided to OPD doctor.

➢ **CCTV Cameras and Other Additional Telecom Facility to Monitor Isolation Coaches at Station:**

ANVT-

- 16 Nos. camera installed at ANVT station (PF no 4,5,6 & 7) networking with existing CCTV system and CCTV feed provided in COVID- 19 control room on 52" LED TV for monitoring of isolation coach.
- Railway phone & 17 Nos. FCT is provided for communication.
- 41 Nos. Wi-Fi hotspot dongle is provided for internet access for control room & patients.



Camera at Isolation coach



Camera at Platform

SSB-

- 03 Railway phone & 08 FCT provided for communication.
- 14 Nos. CCTV installed by laying of 1200 mtrs OFC from SSB station.
- 10 Nos. Wi-Fi hotspot dongle provided for internet access in control room & isolation Coaches.

DEC-

- 4 Nos. CCTV cameras are provided at PF no 4 & 5.
- 01 no. Railway phone & 2nos FCT provided for communication.
- 01 No. WI-FI hotspot dongle provided for internet access in control room & isolation coach.

DEE-

- 9 Nos. CCTV camera are provided at PF no 4 & 5.
- 02 Nos. Railway phone & 06 nos FCT provided for communication.
- 05 Nos Wi-Fi hotspot dongle provided for internet access in control room & isolation coaches.

DSJ-

- 5 Nos. CCTV cameras are provided at PF no 4 & 5.
- 04 Nos Railway phone & 04 nos FCT provided for communication.
- 04 Nos Wi-Fi hotspot dongle provided for internet access in control room & isolation coaches.

TKD-

- 4 Nos. CCTV cameras are provided at PF no 4 & 5.
- 02 Railway phone & 03 nos FCT provided for communication.
- 03 Nos Wi-Fi hotspot dongle provided for internet access in control room & isolation coaches.
- 98" TV monitor has been provided at PF-1 New Delhi for displaying COVID-19 Special train information
- PA system provided at residence of Hon'ble MR for VIP function of Jan Sambad virtual rally and ANVT station for CRB conference with media persons regarding COVID- 19 isolation coaches of Indian Railways
- NTES & COIS connectivity has been provided at NDLS, HNZM, ANVT, GZB, KUN, KKDE, DEE, GGN, DEC, ROK, FDB & DLI station.

➢ **Provision of Thermal Scanning Cameras at Station**

09 Nos. Thermal Scanning cameras with P.C workstation have been provided at New Delhi -05 Delhi Main-02 and Anand Vihar Terminal-02 stations of Delhi Division to facilitate the capture of pictures of incoming passenger along with body temperature and in case body temperature is higher than normal, the system will raise an audible alarm. This has helped in monitoring of CORONA affected patients and fast entry of Shramik /Passenger in station & also ensure proper social distancing among rail users.





➢ **Provision of Nodal Control Room**

In view of the outbreak of COVID-19, Nodal control Room for Indian Railway started by

providing necessary facilities of Voice /Data i.e., Railway Phone No. 030-36064, MTNL Phone No. 011-23387896, Mobile -9717630506 and Railnet, internet connection at Baroda House, New Delhi.

- **Provision of Audio Clip For Covid-19**

For awareness of Rail commutators Audio clip regarding precautions to be taken to spread Covid-19 has been incorporated in all stations announcement systems and are being played regularly.

- **Provision of Video Conference**

Arrangements for connection of CRB Video conference, GM Video conference with DRMs & PHODs and other local VC like DRM to Branch officers, PHODs to other zonal PHODs & Divisional officers from home through WebEx, Zoom & Google hangout applications have been made. All Video conferences are operated properly on Railnet /internet from Residences.





Glimpses of Video Conferencing among various officers

In COVID situations, the extensive use of video conferencing is being made among officers and the facility is widely appreciated.

- **E-Office Implementation**

E-Office implementation has been done in S&T HQ office, Baroda House, New Delhi, STTC/ Ghaziabad, S&T workshop/Ghaziabad, Divisional office Firozpur, Ambala, Delhi, Moradabad and Lucknow. This has facilitated the staff to work from home.



- **Provision of Digital Museum**

Digital Museum installed at National Rail Museum Chanakyapuri, New Delhi, Delhi Main, Kalka and Shimla Railway Stations for display of History of Railway progress, Heritage sites of Indian Railways, Ek Bharat Shresth Bharat, Swadeshi Movement, Yoga, Plastic ban, Safety measures for COVID-19 and other VVIP contents.

➢ Communication Setup in Special Train

Communication setup complete with two Satellite docking system, FCT-21 Nos., Dongle-10 Nos., Walkie Talkie sets -15 Nos., Cordless Phone-5 Nos, Call Bell-5 Nos has been provided in President Special Train for visit of Hon'ble President of India from DSJ to Allahabad and Lucknow to Ayodhya and back from Ayodhya on 25.06.2021 & 29-08-2021 respectively by Delhi Division.

In addition to this FCT phones provided at 19 stations from Lucknow to Ayodhya to strengthen the communication. Audio/Video arrangement provided at Ayodhya Station.





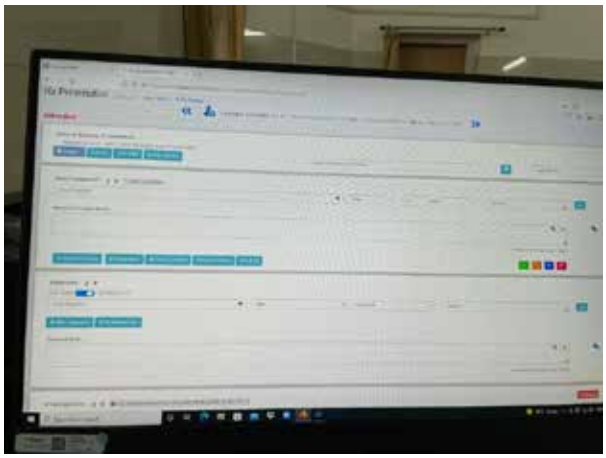


➢ Hospital Management Information System (HMIS)

The HMIS is an integrated clinical information system with the basic objective of improved hospital administration and patient healthcare. This aims to ensure an improved experience for hospital administration and patients.

HMIS is another important step in the country's journey towards digital transformation which will have a positive impact on the lives of Railway men, pensioners and their families.

HMIS has been implemented at Northern Railway Central Hospital New Delhi, Divisional Hospital of all divisions and 21 health units of Delhi Division, 09 health units of Moradabad Division.



Northern Railway Central Hospital New Delhi

➢ Maintenance Work Load- ZISTUS

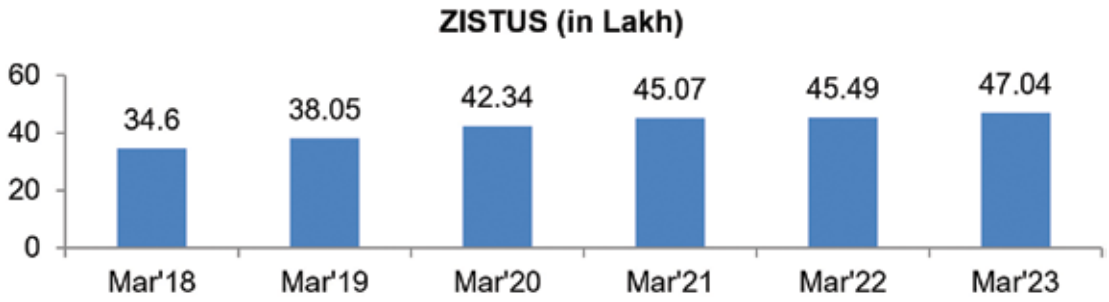
Total S&T workload of a zone is expressed in terms of **Zonal integrated S&T units (ZISTU)** and it consists of following major items of the work:

Zonal work load in ZISTUS D=A+B+C

- This factor refers to equated workload for the maintenance of Signalling Equipment on the zone and is expressed in Zonal Equated Signal units (ZESUs).

- This factor refers to equated workload for the maintenance of Telecommunication equipment on the zone and is expressed in terms of Zonal Equated Telecom units (ZETUs).
- This factor refers to equated workload for the maintenance of Signal & Telecommunication workshops on the zone and is expressed in terms of Zonal Equated Workshop units.

With the changing profile of Signalling and Telecom assets, there has been significant increase in ZISTUs of Northern Railway over the past five years. ZISTUS of NR have risen from 47.04 lakh to 34.6 lakh in last 5 years i.e., a rise of 35.9 % in workload during last five years.



➢ **Telecom Equipments installed at WAR room, Railway Board**

All Audio and video equipments, Railnet connectivity with protection path, Railway/MTNL phones, CISCO V.C. system and uninterrupted power supply arrangement of Telecom equipments have been provided in WAR room of Railway Board by Northern Railway.





➢ **Telecom Equipments installed at MOSR-J room, Railway Board**

98” TV along with Railnet connectivity, PA system (including: Conference controller, delegate unit, speaker, wireless controller, chairman unit etc.), 2 KVA and 5 KVA UPS have been installed at MOSR-J office in Railway Board. Also, integration of CISCO Codec (VC) with PAE system has been done by Northern Railway.





- **Upgradation of NGN Network: -**

11 Nos. of NGN PRI links have been shifted to upgraded network of Railtel i.e., 06 Nos (DRM-02 Nos, Baroda House-02 Nos and Railway Board-02 Nos) of Delhi Division, 03 nos. of Lucknow Division, 01 no. of Moradabad Division and 01 no. of Ambala Division.

- **Commissioning of SIP based Telephone Exchange: -**



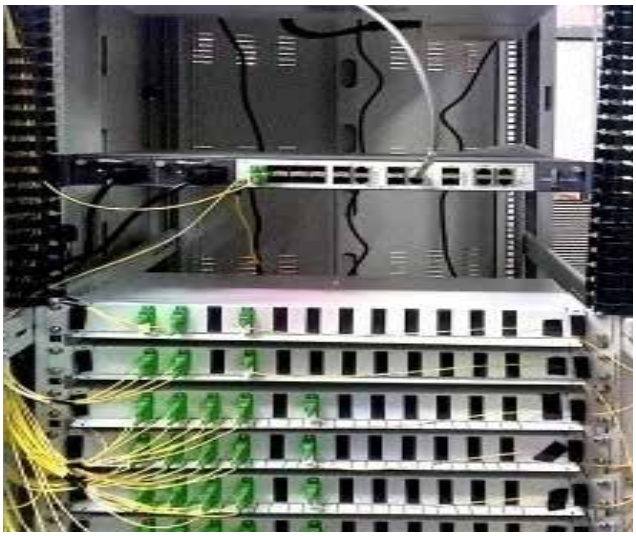


03 Nos. of IP based telephone Exchange have been commissioned at DRM office New Delhi of Delhi Division and Chandausi, Hardoi of Moradabad Division





➢ **Provision of Fibre based GPON Technology**



Fibre based GPON Technology (Fibre to The Home (FTTH)) has been provided in Homes/ Bungalows at S.P Marg Railway officer's colony for high-speed internet.

➢ **Implementation of IPv6**

IPv6 has been implemented at Rail Bhawan, Baroda House and 05 divisions.

➢ **Surrendering of V-SAT (Very-Small Aperture Terminal) locations**

A very-small-aperture terminal is a two-way satellite ground station with a dish antenna that is smaller than 3.8 meters. The majority of VSAT antennas range from 75 cm to 1.2 m. Bit rates, in most cases, range from 4 Kbit/s up to 16 Mbit/s.

50 Nos. of V-SAT have been surrendered viz:-

- Lucknow Division-18 nos (Gopalganj, Bhadri, Khagalpur/Atrampur, Ram Chaura Road, Barabanki, Kheta Sarai Jaunpur, Mihrawan, Shahganj, Iffco Phulpur, Gauriganj, Sonic, Mohanlal Ganj, Amausi, Vyas Nagar, Vyas Nagar 2, Tanda, Unchahar, Ayodhya).
- Moradabad Division -09 nos (Kafurpur, Garhmuktesar, Bhanthara, Aonla, Bulandshahr, Harthala, Bijnor, Gumthal, Babrala).
- Delhi Division – 3 nos (Gohana, Jind, Gurgaon).
- Ambala Division -11 nos (Dhuri, Bhatinda Cantt, Nabha, Quila Raipur, Ahmadgarh, Rampuraphul, Doraha, Barnala/Shekha, Bhuchchu, Chawapail, Lehra Mohabbat)
- Firozpur Division -9 nos (Kangra, Sulah, Banga, Khasa, Nawanshahar, Jalalabad, Sultanpur Lodhi, Kathua, Taran Taran).

➢ **Dismantling of redundant 7GHz Antennas**

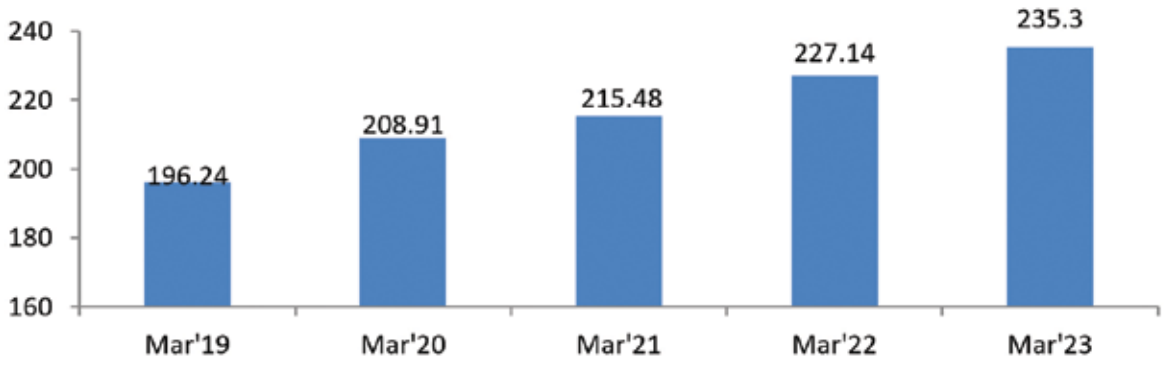
164 Nos. of Antennas removed from 62 locations over Northern Railway viz:-

- Delhi Division- 52 Nos. of Antennas removed from 23 locations.
- Ambala Division-25 Nos. of Antennas removed from 08 locations.
- Firozpur Division- 50 Nos. of Antennas removed from 17 locations.
- Moradabad Division- 29 Nos. of Antennas removed from 09 locations.
- Lucknow Division-08 Nos. of Antennas removed from 05 locations

➢ Automatic Block Signalling

Automatic Block Signalling have been provided in 235.3 RKMs block section over Northern Railways to enhance Safety, faster and flexible train operations by reducing dependence on human interference.

Automatic Block Signalling (in RKM)



➢ Block Proving Axle Counter (BPAC)



Block proving Axle Counters are provided in advance of up & down Home signals and in advance of Last Stop Signals of the station to monitor the status of the Block Section. Block proving axle counters are used for clearance of Block pertaining to that Block Section. To avoid detentions to trains and ensure safe working of trains, Axle counters are used for complete arrival of trains and closing of Block Sections automatically.

BPAC has been provided over 660 block sections in Northern Railways.

➢ Colour Light Signals



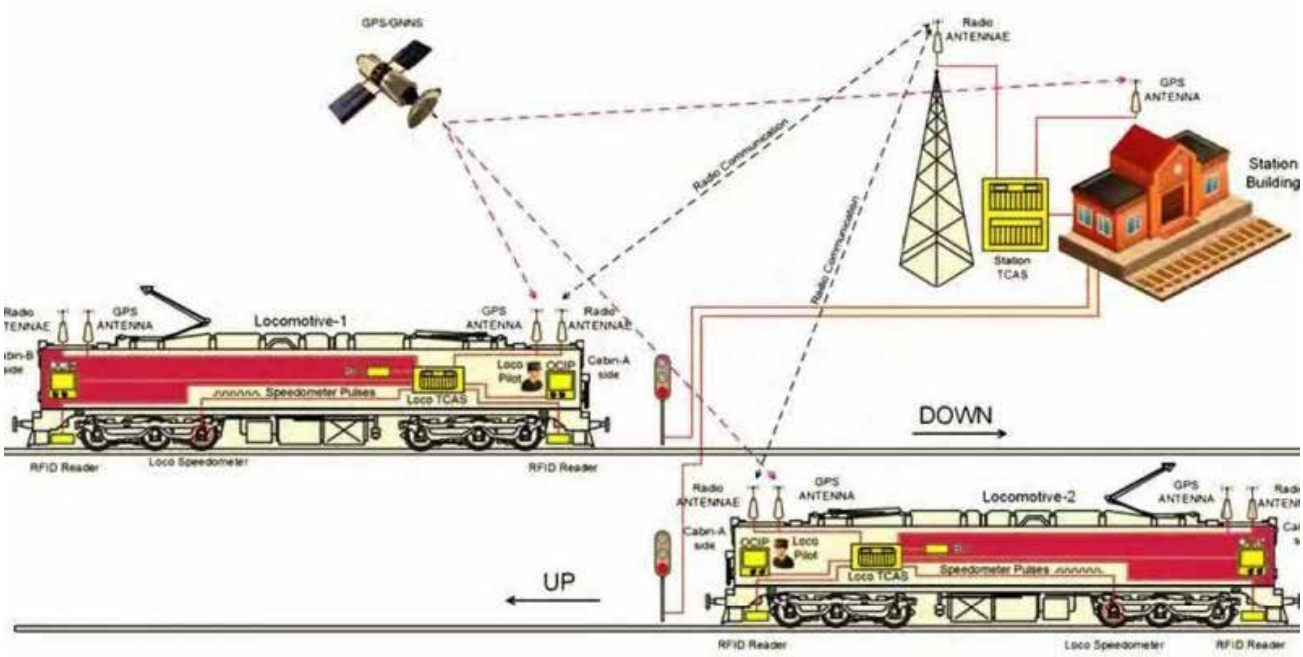
Colour Light Signals has been provided all over Northern Railway except Narrow Guage.

All Colour light signals is LED.

➢ Kavach

The KAVACH is an indigenously developed Automatic Train Protection (ATP) system by RDSO.

Kavach is a form of Train Collision Avoidance System (TCAS). Kavach work has been sanctioned over 1710km in Northern Railways to avoid accident of trains and ensure safe working of trains.



- **Centralized Traffic Control system (CTC)**

Centralized Traffic Control system caters for centralized control & supervision of train operation.

CTC work has been sanctioned over 477 RKMs in Northern Railways.



भंडार
STORE







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

Chapter XI

11.1 Organization of Stores Department

11.1.1 Head Quarter Office

For carrying out Materials Management functions and scrap disposal, HQ Office of Stores Department. is located at Baroda House, New Delhi. It is headed by Principal Chief Materials Manager who is assisted by various Chief Materials Managers, Dy.Chief Materials Managers, Senior Materials Managers and Assisment. Materials Managers.

11.1.2 Stores Depots

For receipt, inspection, stocking and distribution of materials, there are 24 Stores Depots on this Railway. The depots at ASR, JUDW, SSB, AMV/LKO and CB are headed by Dy. Chief Materials Managers and others by SMMs/AMMs. Except General Stores Depot Shakurbasti, depots are either located adjacent to Railway Workshops or are attached to Diesel/ Electric Loco/ EMU Car Sheds.

11.1.3 Divisional units

A Stores Officer of the rank of JA/SG Grade is posted in each Division. Main functions of Sr. Divisional Material Managers are efficient distribution of stores including Stationery and Forms, purchase of materials to meet demands of Divisional Consignee, co-ordination with main depots and divisional indenters, disposal of scrap through auction.

11.2.4 Printing Press

A General Printing Press is located at Shakurbasti which is responsible for supply of Stationery and Forms, money value items as well as PRS /UTS tickets to entire Northern Railway. Recently it has been entrusted to supply money value items (including PRS/UTS tickets) to NER, NCR & NWR.

11.2 Highlights of the year

11.2.1 Stores Transactions

A. Details of stores balances (with fuel) for normal maintenance and operation as well as works

(Fig. in Crores of Rs.)

		Normal Maintenance & Operation		Works		Total	
		2021-22	2022-23	2021-22	2022-23	2021-22	2022-23
1.	Opening balance at the beginning of Year:-						
a)	Physical balance without adjustment	442	229	3	3	445	232
b)	Adjustment 7100	79	231	0	0	79	231
c)	Total balance as per appropriation account under 7160	387	159	3	3	390	162
d)	Book keeping adjustment relating to 7171-7190	-55	-70	0	0	-55	-70
e)	**Total balance under 7100**	**466**	**390**	**3**	**3**	**469**	**393**
2)	Receipts during the year	3259	4101	0	0	3259	4101
3)	Issue during the year	3335	3905	0	0	3335	3905
4)	Closing balance at the end of the year						
a)	Physical balance without adjustment	229	425	3	3	232	428
b)	Adjustment 7100	231	23	0	0	231	23
c)	Total balance as per appropriation account under 7160	159	358	3	3	162	361
d)	Book keeping adjustment relating to 7171 –7190	-70	-67	0	0	-70	-67
	TOTAL BALANCE UNDER 7100	**390**	**381**	**3**	**3**	**393**	**384**

B. Breakup of Stores Balances

(Fig. in Crores of Rs)

Opening balance at the beginning of year 2022-2023					Transaction of the physical stock during year 2022-23		Closing balance at the end of year March' 2022-23				
Physical Balance w/o Adjustment	Adjust-ment 7170-7150	Total balance as per appropriation a/c	Balance Under 7110-7150	Total 7100	Receipts	Issue	Physical Balance w/o adjustment 7160	Adjustment 7100	Balance Under 7110-7150	Total balance as per appr. a/c	Total balance under 7100
232	-70	162	231	393	4102	3904	428	-67	361	23	384

11.3 Inventory Control:

11.3.1 Following steps are taken to control Inventories:-

i. All the items stocked in depots are divided in 'A', 'B' and 'C' categories based on value of annual-usage. Items which contribute 70% of the annual usage value are categorized as 'A', 20% of the annual usage value are categorized as 'B' & balance as 'C' category items.

ii. Intensive review is carried out for 'A' and 'B' category items to restrict the consumption and procurement to have minimum inventory level. Phased delivery is also arranged to keep the inventory at minimum level.

iii. Demands for Non-stock items are consolidated by HODs of consuming departments and annual procurements are arranged once a year for Non-stock items.

iv. Surplus, over stock and inactive items are reviewed regularly. Their disposal on Railway is arranged by issuing to depots, other Zonal Railways or by scrapping them due to spares becoming obsolete.

11.4 Modules implemented

11.4.1 E-Procurement implementation:

As a part of overall reforms process, Indian Railways decided to adopt and implement E-Procurement system for deriving mutual benefits to the Railways as well as the participating Industry. The EGP (E-Governance Project) application has been integrated with latest digital security features to demonstrate and ensure highest level of security, confidentiality and trust between the buyer and the seller. The system has been developed by CRIS and is fully operational.

During 2022-23 total 21748 numbers of e-tenders were uploaded on Northern Railway E-Procurement System (IREPS) and 22327 numbers of P.O's were placed .

11.4.2 Implementation of E-Auction.

In a major IT initiative, Stores department of Northern Railway launched on 06.03.2012 the e-auction module developed by CRIS for sale of scrap material through Electronic Auction. Shakurbasti Stores depot of N.Rly was assigned to conduct e-Auction of scrap material through the website www.ireps.gov.in, developed by Centre for Railway Information Systems (CRIS). The system allows bidding in a transparent and fair manner through internet. Presently electronic payments have been facilitated through State Bank of India. The application has been integrated with SBI in a unique manner allowing bidders to leverage the funds available in their account by lien management system for online participation. During financial year 2022-23, 3870 lots worth Rs.58632 lakhs has been auctioned using e-auction module.

11.4.3 Modules conceptualized and under implementation

A. Integrated Materials Management System (IMMS)

This is a common platform developed by CRIS for the users of IMMS across IR. E-procurement system has been made operational in all Depots and Divisions of NR. **Depot /Division Purchase** of MMS stands implemented on 29 units of NR. **Contract Tracking Module** of IMMS is working and NR has settled 20488 numbers of Direct Acceptance cases and 597 Tender Committee cases through this module during financial year 2022-23 (01-04-2022 to 31.03.2023). **Purchase module** was released by CRIS for implementation on 17.08.2016. Indenter module has also been implemented in Northern Railway. IMMS has also been implemented in all Divisional Hospitals and all health unit of NR.

In implementation of User Depot Module (UDM), Northern Railway has completed the process of on-boarding of all the consignees. Among Indian Railway, Northern Railway is highest in transaction level i.e Rs.9357.90 crores in year 2022-23.

B. Vendor Interface Management System (VIMS):

This Projected was sanctioned by Railway Board and it has been implemented by CRIS. The functionalities like Online Bill submission by Vendors, Online facility for submission of TDC/EMD, Online submission of modification request by Vendors, online real-time delivery of Digitally signed Contracts, LOAs, R/Notes, Receipted Challans to vendors and other stake holders, Online tracking of bills for payment, Online web queries, Mobile application vendor interface, Online submission of negotiated offers, online counter offer replies by vendors, integration with RITES Inspection Portal to facilitate information sharing among Railway User, Vendors & RITES etc. have already been implemented. Activities of integration of RDSO Inspection Certificate & Despatch Memo (DM) with IREPS/IMMS has also been completed.

A new module for Trade Group-wise registration of vendors has been developed as per Railway Board's instructions and same has been deployed on production for test users. After completion of testing for test users, same will be opened for all Railways users.

Functionality for updating vendor's profile details and related documents by registered vendors deployed on production server for test vendors only. The same functionality is being tested and subsequently it will be opened on production server to all vendors.

C. Enterprise resource planning (ERP) based integrated MMIS for Indian Railway:

This project was also implemented by CRIS. Towards preparation of ERP implementation for IR, all the Zonal Railway's individual MMIS have been switched over to IMMS application (developed by CRIS). HQ Purchase Module & Depot Module has also been rolled out in NR as well as all Zonal Railways of IR.

IMMS rolled-out in Zonal Railways in phases i.e Two Railways in (NR & ER) and thereafter remaining Zonal Railways in March'2017. Subsequently, all PUs on boarded in Sept'2019.

11.5 Other Statistics

A. Value of Railway equipment and stores ordered for the year 2022-23.

(Fig. in Crores of Rs.)

Through Ministry of Supply	Through Railway Board	Direct purchase made by Railway	Total
-	1643.43	2186.24	3829.67

B. Purchases made for the year 2022-23.

(Fig. in Crores of Rs.)

Value of store direct purchased imported	Value of imported stores purchased in India	Value of stores purchased from public sector under takings	Khadi purchases	Value of stores purchased from cottage and small scale industries	Value of stores purchased manufactured in India from other industries	Total
0	13.40	1717.17	0.06	833.37	1265.67	3829.67

C. No. of orders placed during the year 2022-23.

Requisitions placed on other Railways		No. of Purchase Orders issued		No. of cases where 100% payment made against Proforma Invoice.		Total No. of indents on DGS&D & Central Purchase Agencies	
No.	Item	No.	Item	No.	Item	No.	Item
1628	1628	22327	6132	-	-	-	-

D. Statement of Foreign Exchange released and utilized during the year 2022-23.

Total amount of foreign exchange released by Railway Board & FA & CAO/GM of N.Rly. during the year 2022-23.

(Fig. in Crores of Rs.)

Foreign Exchange released by Rly Bd.				Foreign Exchange released by FA&CAO/ GM of N.Rly.			
For ALCO DSL spares	For Elect. spares	For other items	Total	For ALCO DSL spares	For Elect. spares	For other items	Grand Total
-	-	-	-	-	-	-	12.15

11.6 Supply Position of Steel Item

(Fig. in MTs)

S.N.	Items	Qty. indented during 2022-23 (including back log of last year)		Stock as on 1.4.22	Receipt during the year	Issues during the year	Stock as on 31.3.23
		Plant	Stockyard				
1.	Pig Iron	431.074	-	28.98	264.459	284.334	9.105
2.	Bars, Rounds and structures	1391.798	-	1801.834	907.883	1127.465	1582.252
3.	Plates	3865.624	242.148	198.017	2894.188	2846.595	245.61
4.	Sheets	2364.483	-	1327.193	1812.111	2442.102	697.202
5.	Spl. Steel (other than Spring Steel)	-	-	-	-	-	-
6.	Spring Steel	-	-	-	-	-	-

11.7 Supply of Uniforms During 2022-23.

	Summer	Winter
No. of Garments demanded	-	-
No. of Garments supplied	-	-

11.8 Stores Depots

A. Availability of items.

(As on 01.04.23)

Depot Complex	Purchase Items			Shop Manufactured Items		
	Total No. of items stocked	No. of items available	Percentage availability	Total No. of items stocked	No. of items available	Percentage Availability
AMV/LKO	3346	3269	97.69	23	23	**100**
JUDW Depot	3268	3237	99	37	37	**100**
Ptg.Press/ SSB	883	876	99.20	-	-	**-**
SSB Depot	6637	5940	89.49	22	22	**100**
ASR Depot.	3743	3680	96.31	7	7	**100**

B. Total Transactions for the year 2022-23. (Receipts & Issues).

Depot/ Complex	No. of Total transactions		No. of average transaction per month		No. of Class III staff involved in recording transactions	Average No. of transactions per month/ person
	Receipt	Issues	Receipt	Issues		
AMV / LKO	11404	32497	950.33	2708.08	59	62.01
JUDW Depot.	12693	42626	1057.9	3553	48	96.03
Ptg. Press/ SSB	318	6859	25	571	10	596
SSB Depot.	13729	29017	1144.08	2418.08	63	56.54
ASR Depot.	3793	11461	316.80	955	28	252

C. Unit Cost of Receipt for year 2022-23.

Depot/ Complex	Expenditure on staff engaged in receipt and inspection work (Rs. in lakhs)	No. of staff for clerical and supervision work	Approximate value of stores received (Rs. in lakhs)	Cost of receipt, inspection for every Rs.100/- worth of stores	Receipt notes granted per clerk per month
AMV/LKO	132.82	19	30913	0.43	50.02
JUDW Depot.	1.55	18	545.36	0.28	490
Ptg. Press/ SSB	23	02	1141	2.01	26
SSB Depot	179.22	17	26054.94	165.293	385.07
ASR Depot.	89.81	10	5695	12.15	170

D. Unit Cost of issues for Year 2022-23.

Depot/ Complex	Expenditure on staff engaged in issue and Inspection work	No. of staff for clerical and supervision work	Approximate value of stores received (Rs. in lakhs)	Cost of receipt, inspection for every Rs.100/- worth of stores	Receipt notes granted per clerk per month
AMV/AMV-LKO	412.37	56	31491	1.31	48.36
JUDW Depot	2.78	32	547.72	0.50	111
Ptg.Press/ SSB	120	10	1204	9.96	136
SSB Depot	353.20	36	21775.99	68.32	802.37
ASR Depot	203	21	5869	22.74	278

E. Inactive, Overstock and Surplus Stores.

(Fig. in Crores of Rs.)

Position as on	Inactive		Surplus		Overstock	
	No. of Items	Value	No. of Items	Value	No. of Items	Value
31.03.19	1070	227.71	786	213.67	3540	2669.22

31.03.20	1054	310.38	684	126.92	3420	1758.38
31.03.21	1976	430.136	933	443.913	2281	787.775
31.03.22	967	169.713	351	43.2681	2168	350.569
31.03.23	2001	415.84	676	451.495	3086	738.217

F. Details of Accounts & Departmental Stock Verification 2022-23.

Depot/ Complex	Percentage of items verified with no discrepancy	No. of items verified with discrepancy	Break-up of No. of Items with discrepancy	
			Up to limit of Rs.1000/-	Above the limit of Rs.1000/-
AMV/LKO	100	NIL	NIL	NIL
JUDW Depot	100	NIL	NIL	NIL
Ptg.Press/SSB	100	NIL	NIL	NIL
SSB Depot	100	NIL	NIL	NIL
ASR Depot	100	NIL	NIL	NIL

G. Loss and Gain revealed in Departmental & Accounts verification for 2022-23.

Depot/ Complex	Loss (Rs.)	Gain (Rs.)	Net Gain (Rs.)	Net Loss (Rs)
AMV/LKO	NIL	NIL	NIL	NIL
JUDW Depot	NIL	NIL	NIL	NIL
Ptg.Press/SSB	NIL	NIL	NIL	NIL
SSB Depot	NIL	NIL	NIL	NIL
ASR Depot	NIL	NIL	NIL	NIL
Total	NIL	NIL	NIL	NIL

H. Losses due to theft, misappropriation and fire etc.

Year	Loss due to theft and mis-appropriation etc.		Loss due to fire	
2015-16	No. of cases	Value (in)	No. of cases	Value Involved in
2015-16	NIL	NIL	NIL	NIL
2016-17	NIL	NIL	NIL	NIL

2017-18	NIL	NIL	NIL	NIL
2018-19	NIL	NIL	NIL	NIL
2019-20	NIL	NIL	NIL	NIL
2020-21	NIL	NIL	NIL	NIL
2021-22	NIL	NIL	NIL	NIL
2022-23	NIL	NIL	NIL	NIL

11.9 Disposal of Scrap

(Fig. in Crores of Rs.)

Year	Target (Cr.)	Achieved (Cr.Rs)
2017-18	275	312.86
2018-19	345	427.95
2019-20	450	421.48
2020-21	420	445.72
2021-22	370	624.36
2022-23	460	675.35

A. Arising and Disposal of Scrap in 2022-23.

Description	Opening balance as on 01.04.22	Arising	Total (2+3)	Disposal	Closing Balance as on 31.03.23	Value of disposal (Fig.in Crores Rs)
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Ferrous: (MT)						
a) Rail	0	65264	65264	65264	0	282.64
b) Others P.Way + forfeited	0	9659	9659	9659	0	40.12
c) Other Ferrous	0	29826	29826	29789	37	128.32
2) Non Ferrous	0	1783	1783	1783	0	46.22
Rolling Stock						

a) Wagon (FWUs)	0	216	216	216	0	10.38
b) Coaches	0	182	182	182	0	12.73
c) Loco	0	18	18	18	0	2.23
d) Others Misc	0	7165	7165	7135	30	41.87
RWF	0	11650	11650	11650	0	36.72
Others	0	21990	21990	21990	0	52.31
PSC Sleepers	0	196145	196145	196145	0	10.16
Abandoned Structures	0	32	32	32	0	11.65

B. Details of Ferrous, Non-Ferrous and Misc. Scrap for 2022- 23.

(Fig. in Crores of Rs)

Category	Balance as on 01.04.22		Receipt during the year		Disposal for Rly use		Disposal / Sold to others		Closing Balance 31.3.23	
	Qty. in MT	Value	Qty. in MT	Value	Qty. in MT	Value	Qty. in MT	Value	Qty. in MT	Value
P.Way	0	0	9659	40.12	-	-	9659	40.12	0	0
Rail	0	0	65264	28264			65264	28264	0	0
Other than P.Way										
Ferrous Scrap	0	0	29826	128.48	-	-	29789	128.52	37	0.16
Non-Ferrous			1783	46.22	-	-	1783	46.22	0	0

C. Disposal of condemned Rolling Stock for 2022-23

Figures in FWU(Four Wheeler Unit)

(Fig. in Corers of Rs.)

Category	Balance as on 01.04.22	Receipt during 2022-23	Disposal for Rly use		Disposal /Sold to others		Closing Balance 31.3.23
			Qty	Value	Qty.	Value	
Coach	0	182		-	182	12.73	0
Wagon	0	216	-	-	216	10.38	0

Locos	0	18	-	-	18	2.23	0
Others	0	7165	-	-	7.35	41.87	0

11.10 Performance of Printing Press

A. Production of Presses: The production of various items printed and manufactured in Railway Presses is under:-

S. N.	Work Done for	General Printing Press/Shakurbasti				Card tickets Dispatched by T&P Press LKO
		Impressions in DFCs	Forms	M.V. Books	Total	
	1	2	3	4	5	6
1.	N. Railway 2017-18	4.08	469.66	31.96	501.62	113.80
2.	Other Railway 2017-18	0.79	96.46	0	96.46	245.52
3.	N. Railway 2018-19	3.67	468.67	10.92	479.59	38.82
4.	Other Railway 2018-19	0.03	155.07	0	155.07	40.79
5.	N. Railway 2019-20	-	-	-	-	-
6.	Other Railway 2019-20	-	-	-	-	-
7	N. Railway 2020-21	-	-	-	-	-
8	Other Railway 2020-21	-	-	-	-	-
9	N. Railway 2021-22	-	-	-	-	-
10	Other Railway 2021-22	-	-	-	-	-
11	N. Railway 2022-23	-	-	-	-	-
12	Other Railway 2022-23	-	-	-	-	-

B. Production statement showing value of the work done by Rly. Press.

(Fig. in Thousands)

S. N.	Work Done for	General Printing Press/Shakurbasti				Card Tickets Despatched by T&P Press LKO
		General Printing	Forms B	M.V. Books C	Total (A+B+C)	
	1	A	3	4	5	6
1.	N. Railway 2017-18	10820	90885	43491	145196	6670
2.	Other Railways 2017-18	2095	18666	0	20761	14391

3.	N. Railway 2018-19	10219	95228	15603	121050	2731
4.	Other Railway 2018-19	84	31508	0	31592	2869
5.	N. Railway 2019-20	-	-	-	-	-
6.	Other Railway 2019-20	-	-	-	-	-
7.	N. Railway2020-21	-	-	-	-	-
8	Other Railway 2020-21	-	-	-	-	-
9	N. Railway 2020-21	-	-	-	-	-
10	Other Railway 2020-21	-	-	-	-	-
11	N. Railway 2022-23	-	-	-	-	-
12	Other Railway 2022-23	-	-	-	-	-

Work done for others shown above is the work done for Foreign Railways, Railway Recruitment Boards.

C. Paper Consumption during the year.

Year	For General Printing of Books and Forms	Sty. Demands of Stations and offices	Demands of other Railway	Total M/Ts
2019-20	314	Nil	Nil	314.00
2020-21	33.035	Nil	Nil	33.035
2021-22	10.608	Nil	Nil	10.608
2022-23	60.00	Nil	Nil	60.00

11.11 Yearly Performance of Stores Department in Key Areas

S.N.	Item	2020-21	2021-22	2022-23
1	Scrap Disposal (Crores Rs.)	445.72	624.36	675.35
	Inventory Management			
2.	Closing Balance (Crores Rs)	148.85	230.42	380.22
3.	Total issues during the year (Crores Rs)	873.81	919.00	1169.45
4.	Inventory Turnover Ratio (Closing balance as % age of total issues during the year)	W/o 17.03% With Fuel 13.25%	W/o 25.44% With Fuel 7.17%	W/o 22.19%
5.	Coverage of demand 4 months before start of CP	98.5%	97.8%	98.1%
6	Compliance % age of Purchasable items.			
a)	Workshop	99.00	84.95	95.24
b)	Imprest stores	98.67	89.25	96.67
c)	Non-imprest stores	99.58	88.09	93.72

7.	Compliance % age of Shop Manufactured items	98.59	96.64	98.07
a)	Workshop	98.08	84.89	95.77
b)	Imprest Stores	98.44	88.09	93.72
c)	Non-imprest stores			
8.	Purchase items out of stock	1.00%	15.05%	4.76
9.	Manufactured items out of stock	1.41%	3.36%	1.93
10.	Inactive items	6.03%	16.88%	13.56%
11.	Efficiency of clearance of printed card tickets demand	-	-	-
	(avg. days of outstanding load in a month)	-	-	-
12	Supply of fabricated uniforms	-	-	-
a)	Winter	-	-	-
b)	Summer			

संरक्षा
SAFETY







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

CHAPTER – XII

12.1 About the Department

The Safety organization at Headquarters is headed by Pr. Chief Safety Officer who is assisted by Dy. CSO/S&T, Dy. CSO/Mech, Dy. CSO/Elect and Dy. CSO/Engg. In addition, two Traffic Inspectors/Safety, CLI/Mech, SSE/C&W, SSE/Signal, JE/Sig, SSE/Engg and CLI /Elect are working in the Safety Department. at Headquarters Office.

After bifurcation of Safety Organization between Safety and Operating branch, the work of traffic safety rests with the latter. While the issues pertaining to Safety are being dealt with by the respective departments, the Safety branch is required to conduct inspections of the activity centers of all departments and point out shortcomings and deficiencies as noticed during inspections for remedial action by the concerned departments, Pr.CSO coordinates with Commissioner of Railway Safety and reports to the General Manager.

Sr. Divisional Safety Officers, J.A. Grade officers are available in each Division. The team of Safety counselors drawn from Traffic, Loco, C&W, Engg. and S&T departments are deployed with the Sr. DSOs to strengthen the Safety Organization at the Divisional level.

12.2 Highlights of the year

12.2.1 Accident

Accident - Overall position during the year 2022-2023:

Accident - Overall position during the year 2022-2023:

In all, **06 Nos. of Consequential train accidents** have taken place. The Statement showing category-wise train accidents which occurred during **last 15 years is placed at Annexure 'A'**

The position in respect of category-wise **train accidents during last 5 years is as under –**

S. No	Category of Accidents	2018-19	2019-20	2020-21	2021-22	2022-23
Consequential Train Accidents						
1	**Collision**	0	0	0	0	1

2	**Derailment –**					
i)	At Station	7	5	1	1	4
ii)	Mid-Section	3	1	0	0	1
	Total	**10**	**6**	**1**	**1**	**5**

3	**Level Crossing –**					
i)	Manned Level Crossing	0	0	0	0	0
ii)	Unmanned LC	0	0	0	0	0
	Total	**0**	**0**	**0**	**0**	**0**
4	**Fire in train**	**0**	**3**	**2**	**2**	**0**
5	**Miscellaneous**	**0**	**0**	**0**	**0**	**0**
	Grand Total	**10**	**9**	**3**	**3**	**6**

12.2.2 Indicative Accidents

1	**Averted collisions**	0	0	0	0	0
2	**Breach of Block rules**	0	0	0	0	0
3	**Signal Passing at Danger**	0	0	0	0	0
	Total	**0**	**0**	**0**	**0**	**0**

Annexure 'A'

Statement showing Consequential Train Accidents (Type-wise) during the last 15 years

S. No	Category	08-09	09-10	10-11	11-12	12-13	13-14
1	**Collision**	03	1	1	0	0	0
2	**Derailment**	11	8	12	7	5	8
3	**Level Crossing**	6	16	9	14	15	7
4	**Fire in train**	0	0	0	0	0	1
5	**Misc**	1	0	1	1	0	0
6	**Total**	**21**	**25**	**23**	**22**	**20**	**16**
INDICATIVE ACCIDENTS							
7	**Averted Collision**	0	0	0	0	0	0
8	**Breach of Block rules**	0	0	0	0	0	0
9	**Signal Passing at danger**	0	0	0	0	0	0
10	**Total**	0	0	0	0	0	0
11	**Grand Total**	**21**	**25**	**23**	**22**	**20**	**16**

S. No	Category	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23
1	**Collision**	0	1	0	0	0	0	0	0	1
2	**Derailment**	8	9	10	10	10	6	1	3	5
3	**Level Crossing**	11	10	4	5	0	0	0	1	0
4	**Fire in train**	1	0	0	1	0	3	2	1	0
5	**Misc.**	0	0	0	0	0	0	0	0	0
6	**Total**	**20**	**20**	**14**	**16**	**10**	**9**	**3**	**5**	**6**

INDICATIVE ACCIDENTS										
7	**Averted Collision**		0	0	0	0	0	0	0	0
8	**Breach of Block rules**		0	0	0	0	0	0	0	0
9	**Signal Passing at danger**		0	0	0	0	0	0	0	0
10	**Total**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
11	**Grand Total**	**20**	**20**	**14**	**16**	**10**	**9**	**3**	**5**	**6**

12.2.3 Yearly Performance of Safety Department

S. No	Items	2018-19	2019-20	2020-21	2021-22	2022-23
1	**Trend of Accidents**	10	9	3	5	6
2	**Accident per million train kms**	0.07	0.04	0.06	0.05	0.05
3	**Collision**	0	0	0	0	1
4	**Derailments –**					
i)	At Station	7	5	1	2	4
ii)	Mid-Section	3	1	0	1	1
5	**Level Crossing –**					
i)	Manned LC	0	0	0	1	0
ii)	Un-Manned LC	0	0	0	0	0
6	**Fire in Train**	0	3	2	1	0
7	**Miscellaneous**	0	0	0	0	

	Casualty	K G M	K G M	K G M	K G M	K G M
1	Railway Staff	NIL	NIL	NIL	NIL	NIL
2	Passenger	7 4 32	NIL	NIL	NIL	NIL
3	Other	NIL	NIL	NIL	5 1 0	0 1 3

12.2.4 Main Causes:

1	Mech	2	2	0	0	0
2	Engg	3	1	1	1	2
3	Elect	0	0	0	1	0
4	Traffic	0	0	0	0	1
5	S&T	1	1	0	0	0
6	Combination of staff	0	2	0	1	2
7	FORS	0	2	2	1	0
8	Incidental	0	0	0	1	1
9	Other causes	4	1	0	0	0
10	Safety Drives launched	177	109	28	28	14
11	Total staff refreshed	10451	12531	13584	14015	15572
12	Total Safety Inspectionsconducted	10805	9597	4941	6005	6379

Legend: K – Killed G – Grievous Injury M – Minor Injury

12.3 Events Organized during the year

12.3.1 Safety Camps

Staff of Safety categories attends Safety Camps, which is a continuous process.

12.3.2 Refresher Courses

The following staffs have been given refresher courses training during the year 2022-23-:

S. No	Category of staff	Number
1	SM/ASM	833
2	Guard	688
3	Driver	3567
4	Switchman/Cabinman/Leverman	83
5	Pointsman	1344

12.3.3 Safety Literature

During the year under review 0 Nos. of Safety Posters / Pamphlets were issued by the Safety Organization of Northern Railway, Headquarters Office and by the Divisions.

12.3.4 Audio Visual Activities

S. No.	Activities	Number
1	Safety Seminars (Attended by different categories of staff)	167
2	Safety Meetings (Attended by different categories of staff)	4706
3	Nukkad Natak	58
4	Shunting Mela	86

A large number of news items on the Hazards of Level Crossing accidents and travelling on the roof of the trains were given in the following News Papers to warn the road users/ passengers to desist from the same -

Hindi: Dainik Jagran, Aaj, Dahej Daman, Punjab Kesri, Nav Bharat Times, Swatantra Bharat, Amar Ujala, Rajasthan Patrika, Nav Jiwan, Amrit Perbhat.

English: The Tribune, The Times of India, National Herald, Workers Herald

Punjabi: Patriot Jagbani, Ajit and The Tribune

12.3.5 Safety Checks

The following Safety checks had been made by Officers /Inspectors during 2022 – 2023:

1	Ambush Checks	190
2	Level Crossing Inspections	1356
3	Inspections by Safety Officers/Supervisors	6379

4	Inspections by other department officers	30645
5	Road users Counseled	3918
6	Staff Counseled	154914

12.4 Measures were Taken to Improve Safety

12.4.1 For Reducing Collision and Derailments -

1. Every case of accident occurring on this Railway as well as on other Zonal Railways is thoroughly analyzed to arrive at its cause and based upon the conclusion -
    - Suitable safety drives are being launched.
    - Necessary Safety Circulars are issued immediately after accidents for educating the staff concerned.
2. Monitoring, regular counseling, personalized on job counseling of train passing staff, through regular inspections by Officers and inspectors are being done.
3. Regular counseling and monitoring of drivers by nominated Loco inspectors.
4. Ambush checks in lobbies to ensure Breathalyzer test of LPs/ALPs during ‘Signing ON’/ ‘Signing OFF’.
5. Super checks of maintenance of Rakes and Brake power testing.
6. Surprise Night inspection for checking alertness of train passing staff and to avoid short cut methods during Failure of signals and interlocking gears.
7. Personal counseling of ASMs/SMs/Section Controllers by Officers and Supervisors regarding special Precautions to be taken while using VHF set for obtaining line clear
8. Close monitoring of train crews and train passing staff during foggy weather.
9. SAG officers are deputing to conduct night Foot Plate Inspection during foggy weather.
10. Whistling board are provided before level crossing and drivers are instructed to whistle continuously in approaching level crossing.
11. Implementation of Nine Hours duty for running staff.
12. Categorization of train passing and running staff.
13. Intensive training at initial stage and during refresher courses.
14. Surprise checks to check the following:
    - Brake power test & check on observance of rules for reception/dispatch of trains.

- Observance of rules for double locking of relay rooms /cabin basements.

12.4.2 For Reducing accidents at Level Crossings -

1. Publicity through various media and cinema slides etc. is being given to educate the road users for precautions to be taken while passing over a level crossing gate.
2. Teams of Safety counselors and Officers are being deputed to conduct surprise incognito checks by travelling in 2nd or 3rd coach next to engine to check drivers whistling on W/L board while approaching the level crossing gate.
3. Inspections especially Night inspection have been intensified to check alertness of gateman.
4. Safety drives are being launched to check the condition of roads, provision of W/L board, speed breakers, Warning boards etc. at Level Crossing Gates.
5. Drives have also been undertaken alongwith state Governments for educating the public in use of Level Crossing Gates.
6. Proposal of RUB and ROB is also under process in the vulnerable areas.
7. Ambush checks by RPF officials to challan erring road users.
8. Close interaction with State Govt. for coordination in enforcement of Laws at LCs.
9. Interlocking of Manned Level Crossing Gates.

12.4.3 For Reducing Fire in Trains -

1. Fire extinguishers are available in the AC Coaches, Locomotives and with Guards.
2. Training in firefighting to all concerning staff of Commercial, Mechanical and Operating.
3. Safety Drives are being launched from time to time to check unauthorized carriage of explosives/ inflammable articles etc. by passengers on trains.
4. Informing public through different Media regarding dangers of carrying inflammable articles and requesting them not to do so.
5. A multi-tier protection is provided for all coaches by ensuring HRC fuses/MCBs of suitable ratings.
6. On all AC coaches, over-heat protection has been provided to ensure cut-off of heater at specified temperature if the blower does not function.
7. Fuse Distribution Board (FDB) covers have been modified on all non-AC coaches as per RDSO instructions to prevent tampering by miscreants.
8. Fire Suppression System in Power Cars and Pantry Cars are being provided.
9. VESDA are being provided in AC Coaches.

12.5 Special Initiatives Taken

12.5.1 Preventive approach to Safety:

a) SMS based daily monitoring system introduced – In this system unusual incidents reported by the LPs on the regular basis are monitored and SMSs are sent to GM by DRMs. The follow-up action is pursued and is informed to the LPs. During this year 1920 unusual have been reported. This system is proving very useful.

b) Data Loggers – Extensive use of Data Loggers is being done for both safety and maintenance related activities. The following exception reports are generated in the division-

- Signal incidences regarding unusual track, point and signal power supply occurrences.
- Signal Passing at Danger
- Wrong operation of buttons, Block instruments, KTs or Crank handles
- Engineering occurrences like loose packing of points, friction in point, movement etc.
- Over speeding of train in the station area.
- Status of the point after receiving the train.

c) Case studies in the safety training centers and in the divisions and the sheds.

12.5.2 Staff motivation:

a) Monthly safety awards at the General Manager level – Safety Awards are distributed by the General Manager in a special program organized in the HQs office. The Railway men are awarded with Merit Certificate, Medal and Cash who contribute towards Safety by their timely action. During 2022-23, the Safety Award has been awarded to 66 Nos. of Railway Men.

b) Similar action by the divisions – Similar Safety Award is given at Divisional level also.

c) Wide publicity – It has been spread in the field of Safety through various Media etc. during the year 2022-23.

SMS	Posters / Pamphlets
7.5 Crore	24890

12.5.3 Thrust on audits/ inspections:

All bi-monthly Intra Railway Safety Audits have been adhered to during the year 2022 (Calendar) as per prescribed frequency –

SMS	Posters / Pamphlets
7.5 Crore	24890

12.5.4 Alertness of staff and readiness for managing accidents:

Mock Drills have been carried out in each Division as per prescribed frequency.

12.5.5 Staff Trainings:

	PME	Refresher course	Safety Camps
Done	6186	15572	7318

Safety Counseling & Activities

Counselling of road users and on duty Gateman.




Counselling of road users and on duty Gateman in LKO-RBL Section bet. MLJ-KKAH at LC no. 196-C/2T in East Yard/MLJ.




Counselling & distribution of Pamphlets for awareness of road users Safety at Level Crossing LC 179/Spl. between RMNR-CDRL.




Counselling & distribution of Pamphlets for awareness of road users Safety at Level Crossing during ILCAD at LC 188/C between APG – BKKS.

संख्यिकी
STATISTICAL







महाप्रबंधक की वार्षिक वर्णनात्मक रिपोर्ट 2022- 2023

General Manager's Annual Narrative Report 2022-2023

CHAPTER XIII

13.1 About the Department

The importance of Statistics in modern civilised life is great. Statistics are means to and should therefore be presented in a form, which could be understood by technical and non-technical officers who may have to formulate policies on it. Statistics facilitate the study of economic trend on the railway and enable the railways to make the most appropriate use of their assets.

No social or economic policy can be solved without help of statistical data compiled in a systematic manner. Statistics are the eyes of the administration. No administration can give advice unless it had adequate statistical data before him.

In these days personal relationship between the employer and the employee, supervision is possible only by the medium of statistical data presented before the management.

Statistics enlarges individual expenditure, without proper statistics most of our ideas are very vague. It is only by continuous study of facts relating to the past and the present that reliable estimates can be obtained for the future.

13.2 Statistical Data at a Glance

क्रम सं S.No.	विवरण	Particulars	ईकाई/Unit	2021-22	2022-23
संयंत्र एवं उपकरण Plant & Equipment					
1	ब्याज देय पुंजी	Capital -at-charge	करोड़/Crore	165946.04	202319.48
2	कुल निवेश	Total Investment	करोड़/Crore	44752.92	51162.91
3	**मार्ग लम्बाई** बिजलीकृत	**Route Length** Electrified	कि.मी./KM	6125.26	6648.69
	कुल	Total	कि.मी./KM	7331	7362.99
4	**चालु रेल पथ लम्बाई** बिजलीकृत	**Running Track Length** Electrified	कि.मी./KM	9050	9775
	कुल	Total	कि.मी./KM	10256	10489
5	स्टेशनो की संख्या	Number of stations	संख्या/ Number	802	790

6	**रेल इंजिन** भाप	**Locomotives** Steam	संख्या/ Number	0	0
	डीजल हाइड्रोलिक सहित	Diesel Including Hyd.	संख्या/ Number	513	891
	बिजलीकृत	Electrified	संख्या/ Number	965	1162
7	**कोचिंग वाहन** (चोपहियों में) यात्री कोचिंग वाहन	**Coaching Vehicles** (in 4wh) Passenger Coaching Vehicles	ईकाई/Unit	7034	7329
	अन्य कोचिंग वाहन	Other Coaching vehicles	ईकाई/Unit	262	262
8	ई.एम.यू. मोटर कोच	**Electrical Multiple** Unit Motor Coach	ईकाई/Unit	0	0
	अनुयान कोच	Trailer Coach	ईकाई/Unit	0	0
9	**एम.ई.एम.यू. मोटर** कोच	**Main line Electrical Multiple Unit** Motor Coach	ईकाई/Unit	237	234
	अनुयान कोच	Trailer Coach	ईकाई/Unit	627	602
10	**डी.ई.एम.यू. मोटर** कोच	**Diesel Electric Multiple Unit** Motor Coach	ईकाई/Unit	118	123
	अनुयान कोच	Trailer Coach	ईकाई/Unit	340	342
11	रेल कार	Rail Car		4	4
12	माल डिब्बे ब्रेकवान सहित	Wagons incl. brake vans	ईकाई/Unit	19183	19834
परिचालन OPERATING					
1	**यात्री गाड़ी** गाडी कि.मी.	**Passenger Train** Train Kilometers	मिलियन/ Million	56	68
	वाहन कि.मी.	Vehicle Kilometers (in 4wh)	मिलियन/ Million	2059	2475
2	**मालगाड़ी** गाड़ी कि.मी.	**Goods Train** Train Kilometers	मिलियन/ Million	40	45
	माल डिब्बे कि.मी. ब्रेकवान सहित	Wagons Kilometers	मिलियन/ Million	1901	2183

यातायात की मात्रा Volume of Traffic					
1	**यात्री (राजस्व)** प्रारम्भिक यात्री	**Passenger (Revenue)** Passenger Originating	मिलियन/ Million	190.62	369.87
	यात्री कि.मी.	Passenger Kilometers	मिलियन/ Million	56406	93350.76
2	**माल (राजस्व)** प्रारम्भिक टन	**Goods(Revenue)** Tonnes Originating	मिलियन/ Million	67.87	65.04
	प्रारम्भिक निवल टन कि.मी.	Originating N.T.K.M.	मिलियन/ Million	77531	65203
रोजगार एव मजदुरी EMPLOYMENT & WAGES					
1	नियमित कर्मचारी	Regular Employees	हजार/ Thousand	134.07	131.32
2	नियमित कर्मचारियो का वेतन	Wage bill of regular employees	करोड़/Crore	10272	11043.43
3	नियमित कर्मचारियो का औसत वार्षिक वेतन	Av. Annual wage per regular employee	हजार/ Thousand	114.89	130.39
वित्तीय परिणाम Financial Results					
1	राजस्व	Revenue	करोड़/Crore	8823.98	-9638.43
2	व्यय	Expenses	करोड़/Crore	17439.42	19990.26
3	शुद्ध राजस्व	Net Revenue	करोड़/Crore	8823.98	-9638.43
4	पुंजी पर लाभ दर	Rate of return on capital	प्रतिशत/ percent	2.61	-15.79
5	पुंजी पर लाभांश	Dividend on Capital	करोड़/Crore	0	0
6	परिचालन अनुपात	Operating Ratio	प्रतिशत/ percent	147.94	118.38

13.3 Gauge-Wise Breakup of Route & Track Kms as on 31st. March,2023

आमान GAUGE	मार्ग कि.मी. / ROUTE KMs.			रेलपथ कि.मी. / TRACK KMS	
	इकहरी लाइन	दोहरीलाइन	कुल	साइडिंग रहित	साइडिंग सहित
	Single Line	Double Line	Total	Excl. Siding	Incl. Siding
बड़ीलाइन Broad Gauge	3975.82	3126.33	7102.15	10228.47	13422.63
छोटी लाइन Narrow Gauge	260.85	0.00	260.85	260.85	320.31
कुल / Total	**4236.67**	**3126.33**	**7363.00**	**10489.32**	**13742.94**

13.4 Volume of Traffic handled & Transportation Out-Put

यात्री सेवा / Passenger Service					
विवरण / Particulars	इकाई/Unit	2021-22	2022-23	%बढ़त / घटत %age Inc/Decr	पिछले वर्ष से Over Last Year
प्रारम्भिक यात्री / Passenger Originating					
बड़ीलाइन Broad Gauge	मिलियन Million	189.89	368.91	94.28	179.02
कुल छोटी लाइन सहित Total Incl. Narrow Gauge	मिलियन Million	190.62	369.87	94.04	179.25
यात्री कि.मी. / Passenger Kms					
बड़ीलाइन Broad Gauge	मिलियन Million	56364	93295.09	65.52	36931.09
कुल छोटी लाइन सहित Total Incl. Narrow Gauge	मिलियन Million	56405	93350.76	65.50	36945.76

यात्रीगाड़ी कि.मी./Passenger Train Kms					
बड़ीलाइन Broad Gauge	हजार Thousand	56245	68502	21.79	12257.00
कुल छोटी लाइन सहित Total Incl. Narrow Gauge	हजार Thousand	56882	69184	21.63	12302.00
वाहन कि.मी. / Vehicle Kilometers (in 4wh)					
बड़ीलाइन Broad Gauge	मिलियन Million	1910	2277	19.21	367.00
कुल छोटी लाइन सहित Total Incl. Narrow Gauge	मिलियन Million	1919	2287	19.18	368.00

13.5 Volume of Traffic handled & Transportation Out-Put

विवरण / Particulars	**ईकाई / Unit**	**2021-22**	**2022-23**	**पिछले वर्ष से प्रतिशत बढ़त / घटत %age Inc./ Dec. Over Last Year**
प्रारम्भिक टन Tonnes Originating				
बड़ी लाईन Broad Gauge	हजार/ Thousand	67880	65030	-4.20
कुल छोटी लाईन सहित Total Incl.Narrow Gauge	हजार/ Thousand	67880	65030	-4.20
निवल टन कि.मी. Net Tonne KMS				
बड़ी लाईन Broad Gauge	मिलियन/ Million	77574	65458	-15.62
कुल छोटी लाईन सहित Total Incl.Narrow Gauge	मिलियन/ Million	77574	65458	-15.62
माल गाडी कि.मी. Goods Train Km				
बड़ी लाईन Broad Gauge	हजार/ Thousand	40882	45776	11.97
कुल छोटी लाईन सहित Total Incl.Narrow Gauge	हजार/ Thousand	40882	45776	11.97

माल डिब्बा कि.मी. Wagon Kms				
बड़ी लाईन **Broad Gauge**	मिलियन/ Million	1901	2183	14.83
कुल छोटी लाईन सहित **Total Incl.Narrow Gauge**	मिलियन/ Million	1901	2183	14.83

13.6 Plan Head Loading Performance (Including Non-Revenue)

क्रम संख्या	**विवरण / Particulars**	**प्रारम्भिक टन Tonnes Org.**		**ढोये गये एन.टी.के.एम. / Carried NTKM**	
S.No.		**हजार (Thousand)**		**हजार (Thousand)**	
		2021-22	**2022-23**	**2021-22**	**2022-23**
1	**कोयला/Coal**				
	रेलवे के लिये कोयला / Coal for Railway use	0	0	0	0
	इस्पात कारखाने के लिये कोयला / Coal for Steel Plants	0	0	0	0
	अन्य उपयोग के लिये / Coal for other users	33	147	23663889	34211259
	कुल कोयला/ Total Coal	33	147	23663889	34211259
2	**इस्पात कारखाने के लिये कच्चा माल कोयले को छोडकर** **Raw Material for Steel Plant Other than Coal**	0	0	69	5476
3	**इस्पात कारखाने से पुर्ण उत्पाद** **Finished products from Steel Plant**	0	0	2453140	3135954

4	**निर्यात के लिये For Export**				
	लोह अवस्क / Iron Ore	0	0	46551	122538
	मैग्नीज अवस्क / Mangenese Ore	0	0	0	0
5	**सीमेंट/ Cement**	2788	3068	4195095	4761124
	अनाज/Foodgrains	35190	31187	20162508	18230776
	उर्वरक/Fertilizers	7229	7932	3670875	3864697
	खनिज तेल/Mineral Oils	5313	4243	2452988	2400596
	अन्य माल/Other Goods	17315	18470	8557708	10799045
	कुल राजस्व लदान/ Total Revenue Loading	67868	65047	65202823	77531465
	कुल गैर राजस्व लदान/ Total non-revenue Loading	182	232	15013	22844
6	**कुल राजस्व एव गैर राजस्व लदान** **Total Revenue and Non-Revenue Loading**	68050	65279	65217836	77554309

13.7 Average Speed of Goods Train

S. No.	वितरण / Particulars	2021-22	2022-23
1	सीधी माल /Through Goods	34.4	24.61
2	सभी माल / All Goods	34.4	24.61

13.8 Passenger Train Kilometres (P+M) in Thousand

S. No.	वितरण / Particulars	2021-22	2022-23
1	डीजल विधुत / Diesel Electric	26824	23838
2	डीजल हाइड्रोलिक / Diesel Hydraulic	0	0
3	विधुत / Electric	29421	44664
4	कुल / Total	56245	68502

13.9 Goods Train Kilometres (G+M) in Thousand

S. No.	वितरण / Particulars	2021-22	2022-23
1	डीजल विधुत / Diesel Electric	12568	10289
2	डीजल हाइड्रोलिक / Diesel Hydraulic	0	0
3	विधुत / Electric	28314	35487
4	कुल/Total	40882	45776

13.10 Wagon Kilometres (G+M) in Thousand

S. No.	वितरण / Particulars	2021-22	2022-23
1	डीजल विधुत / Diesel Electric	546114	440226
2	डीजल हाइड्रोलिक/ Diesel Hydraulic	0	0
3	विधुत/Electric	1355063	1743161
4	कुल/Total	1901177	2183387

13.11 Total Shunting Engine KM's for the year 2022-23 (in Thousand)

	भाप	डीजलविधुत	डीजल/ हाइड्रोलिक	विधुत	कुल
लाईन/ Gauge	Steam	DSL-ELE	DSL/HYD.	Electric	Total
बी.जी./ B.G.	0	4221	0	5049	9270
एन.जी./N.G.	0	0	203	0	203

13.12 Engine Utilization (Territorial Basis)

क्रम संख्या S.No	विवरण / Particulars	आंकडे हजार मे / Figure In Thousand		%बढ़त / घटत पिछले वर्ष से %age Increase/ Decrease Over Last Year
		2021-22	2022-23	
1	**इंजन कि.मी. शंटिग सहित (विभागीय को छोड़ कर) Engine Kms. Incl. Shtg. (Excl. Deptt.)**			
	यात्री और मिश्रित अंश / Pass. & Prop. of Mixed			
	बड़ी लाईन/BROAD GAUGE			
	डीजल विधुत/Diesel Electric	34433	35050	1.79
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0.00
	विधुत/Electric	35602	59075	65.93
	कुल/Total	70035	94125	34.40
	छोटी लाईन/NARROW GAUGE			
	डीजल हाइड्रोलिक/Diesel Hydraulic	859	885	3.03
	कुल/Total	859	885	3.03
	माल और मिश्रित अंश /Goods & Prop. of Mixed			
	बड़ी लाईन/BROAD GAUGE			
	डीजल विधुत/Diesel Electric	26171	19627	-25.00
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0.00
	विधुत/Electric	44271	49421	11.63
	कुल/Total	70442	69048	-1.98
	छोटी लाईन/NARROW GAUGE			
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0
	कुल/Total	0	0	0

2	**कुल इंजन कि.मी. विभागीय सहित / Total Engine Kms (Including Deptt.)**			
	बड़ी लाईन/BROAD GAUGE			
	डीजल विधुत/Diesel Electric	60727	54947	-9.52
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0.00
	विधुत/Electric	80019	109014	36.24
	कुल/Total	140746	163962	16.49
	छोटी लाईन/NARROW GAUGE			
	डीजल हाइड्रोलिक/Diesel Hydraulic	956	928	-2.93
	कुल/Total	956	928	-2.93
3	**इंजन कि.मी. प्रतिदिन प्रत्येक इंजन प्रयोग मे / Engine Kms per day per Engine in use**			
	सवारी सेवा/ Passenger Service			
	बड़ी लाईन/BROAD GAUGE			
	डीजल विधुत/Diesel Electric	1141.0	754.0	-33.92
	विधुत/Electric	1234.0	824.0	-33.23
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0
	छोटी लाईन/NARROW GAUGE			
	डीजल हाइड्रोलिक/Diesel Hydraulic	77	71	-7.79
	माल सेवा/ Goods Service			
	बड़ी लाईन/BROAD GAUGE			
	डीजल विधुत/Diesel Electric	382.0	295.0	-22.77
	विधुत/Electric	442.0	391.0	-11.54
	डीजल हाइड्रोलिक/Diesel Hydraulic	0	0	0

13.13 Input & Output Ratio

क्रम संख्या S.No.	विवरण / Particulars	बडी लाईन/BROAD GAUGE		
		2021-22	2022-23	%बढत / घटत पिछले वर्ष से %age Increase/ Decrease Over Last Year
इन पुट / IN PUT				
1	2.5 स्टीम लोको के बराबर एक मुख्य लाइन डी/इलेक्ट्रिक लोको को लेकर भाप लोको के संदर्भ में माल इंजन की संख्या No. of goods engine equated in terms of steam locos by taking one main line D/Electric loco equivalent to 2.5 steam locos	428	428	0.00
2	मालडिब्बा रखना / Wagon Holding	23997	19834	-17.35
आउट पुट / Out Put				
1	सकल टन कि. मी. (क्षेत्रीय) इंजिन का वजन एंवम विभागीय सहित (लाख मे) (माल) G.T.K.M. (Territorial) Incl. Weight of Engine & Deptt. (In lakh)	1217011	1404755	15.43
2	निवल टन कि. मी. (आवंटन) (लाख मे N.T.K.M. (Allotment) (In lakh) (Goods)	1397321	1718385	22.98
3	औसत प्रतिदिन लदान (राजस्व और गैर राजस्व) Av.daily wagons loading (Revenue & Non-Revenue)	3807	3642	-4.33
4	औसत प्रतिदिन लदे हुए प्राप्त Av.daily loaded wagons Receipt	2736	3246	18.64

5	कुल लदान एवम लदे हुए प्राप्त (औसत प्रतिदिन) Total of Loading & Loaded wagons Receipts(Av. Daily)	6543	6888	5.27
6	माल डिब्बा कि.मी.प्रति मालडिब्बा प्रतिदिन (लाईन पर) Wagon Kms Per Wagon Day(On Line)	216	243	12.50

13.14 NUMBER AND COST OF STAFF AS ON 31.03.2023\

GROUP	कर्मचारियों की संख्या (हजार में) Number of Staff (in Thousand)		कर्मचारियों की लागत (करोड़ में) Cost of Staff (in Crore)	
	2021-22	2022-23	2021-22	2022-23
चालू लाईन/Open Line				
समूह ए/Group A	0.97	0.90	273.12	289.34
समूह बी/Group B	0.50	0.53	115.29	126.02
समूह सी/Group C	130.58	128.05	14695.15	16430.03
समूह डी/Group D	0.00	0.00	0.00	0.00
कुल Total	**132.05**	**129.48**	**15083.56**	**16845.39**
निर्माण/ Construction				
समूह ए/Group A	0.13	0.12	40.83	43.76
समूह बी/Group B	0.10	0.10	25.35	27.42
समूह सी/Group C	1.79	1.62	254.22	254.32
समूह डी/Group D	0.00	0.00	0.00	0.00
कुल Total	**2.02**	**1.84**	**320.40**	**325.50**
GRAND TOTAL/ कुल योग	**134.07**	**131.32**	**15403.96**	**17170.89**
NOTE:-Group 'D' Staff is Included in Group C in 2022-23				

DENSITY STATEMENT FOR THE YEAR 2022-23 (BG)

DELHI DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Double line (Electrified)																						
1	TKJ	--	NDLS	101	3	89.4	89.4	1646	1646	0.01	1.6	0.33	36	0	1190	1190	8	1938	225279	225279	225287	227217
2	SBB	--	DSA	102	7	49.1	49.1	785	785	11.5	20.4	574	1081	26173	29989	56163	39142	53854	85509	85509	124652	139363
3	DSA	--	DLI	103	6	57.3	57.3	890	890	11.4	19.9	568	1062	24388	29053	53442	38820	52467	54286	54286	93106	106753
4	NDLS	--	DLI	104	4	8.7	8.7	108	108	0.0	0.0	0.00	0.00	0	0	0	0	0	4865	4865	4865	4865
5	PWL	--	TKD	105	40	73.7	73.7	1410	1410	53.4	28.5	2279	993	102155	35614	137769	185852	102391	94704	94704	280556	197096
6	DKZ	--	SSB	111	8	24.3	24.3	377	377	8.3	11.0	488	755	23166	14867	38033	34106	37019	23797	23797	57903	60816
7	NDLS	--	SZM	121	3	29.2	29.2	529	529	0.3	0.3	5	5	309	0	309	439	848	53245	53245	53684	54093
8	DLI	--	SZM	122	3	14.5	14.5	266	266	5.8	8.7	430	284	18983	11956	30939	28777	18695	16975	16975	45752	35669
9	SZM	--	PNP	123	86	44.4	44.4	792	792	21.1	25.1	748	909	42842	30039	72881	73596	61908	83493	83493	157089	145402
10	PNP	--	KKDE	124	67	40.7	40.7	753	753	14.1	13.7	653	574	33587	24351	57938	63618	61221	79555	79555	143173	140776
11	KKDE	--	UMB	125	42	40.1	40.1	729	729	13.3	14.2	618	539	32848	21105	53953	89940	71647	50167	50167	140107	121814
12	PTNR	--	NDAZ	126	8	0.1	0.1	3	3	5.3	23.1	572	941	5922	41827	47749	24081	49157	177	177	24258	49334
13	GZB	--	CPYZ	150	4	8.0	8.0	134	134	18.3	19.7	784	2227	45850	80534	126385	62612	40805	8662	8662	71275	49468
14	GZB	--	SBB	151	7	113.8	113.8	2081	2081	35.3	31.1	1815	1885	88091	73606	161696	165486	150831	171247	171247	336733	322078
15	SBB	--	ANVT	152	6	49.0	49.0	929	929	0.00	0.02	0.00	0.91	0	0	0	0	30	62373	62373	62373	62403
16	SBB	--	NZM	153	17	10.5	10.5	169	169	23.9	23.5	1192	973	59835	49858	109693	233776	210081	10947	10947	244723	221028
17	TKD	--	NZM	154	10	69.2	69.2	1312	1312	9.1	11.9	493	159	18819	23850	42669	60849	73799	149688	149688	210537	223487
18	SBB	--	TKJ	155	15	34.8	34.8	617	617	0.00	0.02	0.00	0.91	0	0	0	0	30	80746	80746	80746	80776
19	PTNR	--	SSB	156	8	2.6	2.6	46	46	10.3	19.9	419	1541	26642	66117	92759	35582	30595	3210	3210	38792	33806
20	TKD	--	OKA	161	6	59.8	59.8	1177	1177	1.9	6.9	26	266	990	9398	10389	1510	14642	80624	80624	82134	95265
21	OKA	--	PTNR	162	20	1.5	1.5	31	31	1.6	14.7	3	2205	276	91344	91620	6507	17122	2153	2153	8660	19274
22	NZM	--	PTNR	181	19	2.8	2.8	50	50	14.8	13.1	493	446	31161	27098	58259	41514	37169	3475	3475	44989	40644
23	PTNR	--	DBSI	182	3	4.6	4.6	87	87	0.00	0.2	1.00	13	0	175	175	26	489	6051	6051	6077	6540
24	DBSI	--	DKZ	183	3	18.3	18.3	294	294	0.01	0.2	1.46	13	0	183	183	35	502	19525	19525	19560	20027
25	DLI	--	DKZ	184	3	10.8	10.8	153	153	11.3	12.4	564	799	25912	17843	43755	14693	34928	14865	14865	29558	49793
26	NDLS	--	DKZ	185	3	18.9	18.9	305	305	0.01	0.1	0.48	4.75	0	109	109	12	228	38918	38918	38930	39146
27	NZM	--	TKJ	186	5	48.1	48.1	871	871	0.01	1.6	0.33	35	0	1190	1190	8	1909	110116	110116	110124	112025
28	SSB	--	ROK	112	60	20.6	20.6	340	340	33.0	39.5	1691	1700	43479	50989	94468	84474	73364	22983	22983	107457	96347
29	GZB	--	MTC	133	47	22.4	22.4	367	367	2.0	4.3	201	150	8578	4058	12636	13347	7663	45044	45044	58391	52707
30	MTC	--	SRE	134	114	20.9	20.9	352	352	5.8	2.9	389	269	19465	3055	22520	28299	5583	31388	31388	59688	36971
31	DLI	--	GHH	163	41	30.4	30.4	526	526	21.0	22.5	4934	1222	46249	45687	91936	101318	100251	47841	47841	149158	148091
32	GHH	--	RE	164	42	29.1	29.1	523	523	4.2	6.4	384	783	18284	48244	66528	26075	64690	43831	36526	69906	101216
33	ROK	--	JIND	113	57	16.3	16.3	270	270	21.7	23.0	980	954	56862	29046	85908	66108	69524	23464	23464	89572	92988
34	JIND	--	NRW	114	34	14.6	14.6	250	250	20.5	21.0	954	942	54516	25868	80384	75626	46380	22875	22875	98501	69255
35	NRW	--	JHL	115	38	13.4	13.4	237	237	18.6	9.4	885	2316	51940	60874	112814	29503	19468	16649	16649	46152	36116
36	JHL	--	BTI	116	98	10.8	10.8	192	192	12.3	18.6	599	888	37572	21805	59377	50726	41550	13448	13448	64174	54998
37	DSA	--	SMQL	131	88	9.9	9.9	135	135	2.7	3.5	1.16	1.87	5	22	27	88	70	16401	16401	16488	16471
38	SMQL	--	SRE	132	71	6.9	6.9	96	96	1.6	0.7	0.07	0.00	0	0	0	17	143	11888	11888	11905	12031
39	GHH	--	FN	166	12	1.4	1.4	11	11	3.9	3.9	162	161	3826	5237	9063	8638	10032	733	733	9371	10765
40	GHH	--	PTNR	173	33	26.5	26.5	510	510	2.4	5.1	99	261	5304	16935	22239	7179	21887	35566	35566	42745	57453
Single Line (Electrified)																						
41	KKDE	--	NRW	141	87	1.5	1.5	17	17	1.5	2.8	29	86	614	4422	5035	1324	6444	1265	1265	2590	7709
42	PNP	--	JIND	142	70	3.0	3.0	32	32	6.2	7.4	298	303	15436	10740	26176	21771	17314	2197	2197	23967	19511
43	ROK	--	PNP	143	72	0.9	0.9	12	12	4.7	2.8	205	128	11933	2914	14848	16036	5704	860	860	16896	6564
44	RE	--	ROK	165	82	3.6	3.6	39	39	0.1	6.1	157	29	9741	12500	22241	12867	18065	2757	2757	15624	20823
45	TPZ	--	LRJ	136	50	5.9	5.9	79	79	0.5	1.8	13	227	43	1973	2016	360	7370	5723	5723	6084	13093

DENSITY STATEMENT FOR THE YEAR 2022-23 (BG)

FIROZPUR DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Double line (Electrified)																						
1	SNL	--	LDH	211	15	49.3	49.3	904	904	20.0	19.5	786	684	22894	28469	51363	41675	44565	62539	62539	104214	107104
2	LDH	--	PHR	212	13	53.1	53.1	939	939	12.3	12.6	524	447	18048	16100	34148	30596	26732	91557	91557	122153	118289
3	PHR	--	PGW	213	22	48.9	48.9	907	907	9.9	9.7	410	331	16182	10696	26878	26237	18603	97834	97834	124071	116437
4	PGW	--	JRC	214	16	48.1	48.1	895	895	10.1	9.3	400	356	15552	9820	25371	25375	18082	93390	93390	118765	111472
5	JRC	--	JUC	215	5	38.3	38.3	602	602	5.6	5.4	502	659	23207	12721	35928	35474	23559	79794	79794	115268	103354
6	JUC	--	BEAS	216	36	27.0	27.0	461	461	4.0	4.4	167	185	7105	5070	12175	32961	28123	80444	80444	113405	108567
7	BEAS	--	ASR	217	43	28.6	28.6	475	475	2.1	2.3	72	73	2022	2827	4849	3801	4614	131576	131576	135377	136190
8	JRC	--	SCPD	221	3	19.8	19.8	407	407	3.8	1.3	560	29	3487	1113	4600	1754	1479	28239	28239	29993	29718
9	JUC	--	SCPD	222	3	2.8	2.8	32	32	1.5	2.5	51	214	1960	210	2170	3890	5656	3289	3289	7178	8944
10	SCPD	--	PTKC	223	109	22.6	22.6	440	440	5.2	5.9	171	211	8202	2871	11073	19904	11847	30621	30621	50525	42468
11	PTKC	--	PTK	224	4	3.7	3.7	47	47	0.1	0.2	2	5	27	8	34	99	155	3299	3299	3399	3455
12	PTKC	--	BHRL	226	3	21.8	21.8	427	427	4.9	4.9	162	179	7926	1985	9911	12769	6237	29551	29551	42320	35789
13	PTK	--	BHRL	225	3	7.6	7.6	106	106	0.03	0.02	0.2	0.3	11	2	13	15	11	11030	11030	11045	11040
14	BHRL	--	JAT	227	98	23.9	23.9	468	468	4.9	5.3	159	194	7761	1903	9664	12528	6515	32348	32348	44876	38863
Single Line (Electrified)																						
15	BAHL	-	BRML	229	136	9.5	9.5	76	76	0.0	0.0	0	0	0	0	0	0	0	4857	4857	4857	4857
16	UHP	--	SVDK	237	26	8.9	8.9	177	177	0.0	0.0	0	0	0	0	0	0	0	12324	12324	12324	12324
17	JAT	-	UP	228	53	12.2	12.2	226	226	1.4	1.4	39	53	1618	823	2441	2559	2076	15605	15605	18164	17681
18	PHR	--	NRO	261	32	7.4	7.4	46	46	0.8	1.2	30	43	34	2580	2614	715	3588	3101	3101	3816	6689
19	NRO	--	LNK	262	32	4.1	4.1	33	33	0.5	0.9	17	34	9	1672	1680	402	2456	2279	2279	2681	4735
20	NRO	--	JUC	263	31	3.2	3.2	13	13	0.0	0.1	2	3	66	11	77	105	81	822	822	928	904
21	VKA	--	BTA	269	31	2.9	2.9	19	19	0.2	0.2	11	5	177	85	262	503	210	1191	1191	1694	1402
22	ASR	--	VKA	268	8	7.7	7.7	89	89	0.4	0.2	27	10	1200	29	1229	3681	782	6133	6133	9815	6915
23	BTA	--	PTK	270	68	1.9	1.9	13	13	0.7	1.1	22	41	833	622	1454	1367	1671	1054	1054	2421	2725
24	BTA	--	QDN	271	19	0.9	0.9	6	6	0.0	0.0	0	0	0	0	0	0	0	361	361	361	361
25	BEAS	--	TTO	274	49	1.7	1.7	13	13	1.1	2.7	21	59	951	2077	3028	1465	3337	851	851	2316	4188
26	KEMK	--	ASR	275	77	4.0	4.0	24	24	0.7	1.6	6	14	238	335	574	374	693	1535	1535	1909	2229
Single Line (Electrified)																						
27	BTI	--	KKP	231	42	16.7	16.7	205	205	2.9	4.7	109	170	5550	7675	13225	8277	11834	14827	14827	23104	26661
28	KKP	--	FKA	232	80	4.6	4.6	42	42	1.4	1.9	26	43	591	2289	2880	1226	3338	2866	2866	4092	6204
29	KKP	--	FZR	233	45	11.9	11.9	149	149	2.2	3.4	86	136	4351	1430	5781	6511	4783	10870	10870	17380	15653
30	FZR	--	FKA	234	88	5.5	5.5	44	44	1.5	1.4	29	19	161	1045	1206	856	1507	3072	3072	3928	4579
31	ABS	--	FKA	235	43	1.0	1.0	13	13	0.0	0.0	0	0	0	0	0	0	0	913	913	913	913
32	LDH	--	FZR	241	124	7.7	7.7	90	90	5.6	4.8	139	114	514	6541	7055	6484	12130	9667	9667	16151	21797
33	JUC	--	LNK	251	52	8.2	8.2	86	86	4.2	2.6	153	88	233	4323	4556	8054	13174	8358	8358	16412	21532
34	LNK	--	FZR	252	66	7.5	7.5	76	76	3.2	2.4	129	85	172	4088	4259	6045	10548	9421	9421	15466	19968
35	HSX	--	JRC	264	38	6.0	6.0	37	37	0.9	0.9	24	23	537	493	1031	1166	1118	2546	2546	3712	3664
36	NSS	--	RHU	265	7	0.2	0.2	1	1	0.0	0.0	0	0	0	0	0	0	0	353	353	353	353
37	JJJ	--	NSS	266	31	0.2	0.2	0	0	0.0	0.0	0	0	0	0	0	0	0	331	331	331	331
38	NSS	--	PGW	267	36	0.1	0.1	1	1	0.4	0.4	12	12	591	119	710	885	401	35	35	921	436
39	VKA	--	DBNK	272	45	3.1	3.1	18	18	0.0	0.3	0	10	0	316	316	0	544	1176	1176	1176	1720
40	ASR	--	ATT	273	25	1.2	1.2	7	7	0.5	0.5	13	12	147	647	793	453	947	469	469	922	1416
41	FZR	--	HSW	276	6	6.3	6.3	61	61	0.0	0.0	0	0	0	0	0	0	0	4267	4267	4267	4267

DENSITY STATEMENT FOR THE YEAR 2022-23 (BG)

LUCKNOW DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Double line (Electrified)																						
1	ON	--	CNB	317	17	42.3	42.3	690	690	10.0	11.9	745	761	5114	44823	49937	88439	85751	72081	72081	160520	157832
2	LKO	--	ON	318	54	31.7	31.7	575	575	14.9	14.2	724	804	3363	42597	45960	42575	61040	79802	79802	122376	140842
3	MGS	--	BSB	301	17	21.6	21.6	419	419	30.7	28.3	1746	1874	116391	13427	129817	154766	86356	46599	46599	201364	132954
4	BSB	--	ZBD	302	51	21.0	21.0	400	400	24.2	23.2	1533	1512	100928	13088	114015	134656	83497	27880	27880	162537	111377
5	UTR	--	LKO	305	12	28.6	28.6	512	512	23.4	15.9	473	350	27089	6375	33463	75634	35415	71466	71466	147100	106881
6	ALD	--	PRG	321	7	16.0	16.0	240	240	3.8	1.9	529	215	30449	6435	36884	42020	11811	17173	17173	59193	28984
7	RBL	--	UTR	372	66	14.7	14.7	301	301	4.8	3.4	283	226	16890	6425	23315	23214	11484	31844	31844	55058	43329
8	BBK	--	ML	353	16	33.8	33.8	751	751	20.1	11.4	1285	495	9238	28769	38007	40806	41044	95235	95235	136041	136279
9	ML	-	LKO	354	12	33.7	33.7	668	668	14.4	9.5	1241	413	9208	24311	33519	39666	34539	92911	92911	132577	127450
10	ZBD	--	SLN	303	92	13.1	13.1	240	240	21.3	11.4	1148	1131	73990	14330	88320	99176	39412	16392	16392	115567	55804
11	SLN	--	UTR	304	127	12.6	12.6	246	246	21.2	21.8	1122	1116	70020	16231	86250	94678	41263	16751	16751	111430	58014
12	UTR	--	AMG by pass	370	17	DATA NOT AVAILABLE						0	0	0	0	0	0	0	0	0	0	0
Single Line (Electrified)																						
13	DMW	--	ON	316	81	6.1	6.1	51	51	1.1	1.1	41	43	701	2621	3322	2138	3644	3968	3968	6105	7612
14	PFM	--	JNH	311	47	11.4	11.4	134	134	5.8	3.6	622	102	38262	4395	42657	52474	6820	9837	9837	62311	16657
15	JNH	--	ZBD	312	48	6.3	6.3	20	20	0.4	2.3	17	38	1038	827	1865	4348	3562	4000	4000	8348	7562
16	ZBD	--	JNU	313	7	9.8	9.8	222	222	0.0	1.7	0	12	0	700	700	0	1008	16100	16100	16100	17108
17	PFM	--	UCR	314	72	7.7	7.7	126	126	3.6	7.6	84	499	5329	4550	9879	7167	15925	8923	8923	16090	24848
18	UCR	--	DMW	315	31	8.1	8.1	100	100	1.0	0.5	27	25	512	1570	2082	1579	2157	7301	7301	8879	9457
19	PRG	--	PFM	322	6	15.1	15.1	305	305	0.0	0.01	0.0	0.1	0	4	4	0	6	40000	40000	40000	40007
20	PFM	--	PBH	331	47	4.9	4.9	41	41	0.8	0.4	43	16	2749	357	3106	7397	1533	4781	4781	12178	6314
21	PBH	--	CIL	332	4	11.5	11.5	252	252	7.5	5.7	349	519	17996	7476	25472	25851	17543	17991	17991	43841	35533
22	CIL	--	SLN	333	36	2.9	2.9	24	24	0.6	1.2	22	51	1022	321	1343	1562	1620	1895	1895	3457	3514
23	SLN	--	FD	334	58	2.6	2.6	21	21	1.1	1.5	52	72	3176	160	3337	4389	1909	1668	1668	6057	3577
24	ZBD	--	SHG	341	39	10.8	10.8	198	198	5.9	4.5	385	410	24634	2285	26918	33136	22402	13866	13866	47003	36268
25	SNG	--	ABP	342	44	10.7	10.7	217	217	5.7	6.7	314	342	20292	2438	22730	37860	19460	15065	15065	52925	34526
26	ABP	--	FD	343	61	13.4	13.4	169	169	5.0	2.8	62	66	1447	3687	5134	5854	10413	27151	27151	33005	37563
27	ABP	--	TD	351	17	0.0	0.0	0	0	5.2	5.2	423	424	29085	0	29085	31728	9003	0	0	31728	9003
28	FD	--	BBK	352	100	11.3	11.3	197	197	0.2	1.5	8	46	91	2385	2476	1162	13966	34685	34685	35847	48651
29	BSB	--	JNH	361	75	15.4	15.4	285	285	8.5	12.7	455	671	29043	7971	37014	39230	34677	29927	29927	69157	64604
30	JNH	--	PBH	362	53	10.7	10.7	180	180	4.1	6.5	214	339	13779	2642	16421	18490	10264	12720	12720	31210	22984
31	CIL	--	RBL	371	91	12.8	12.8	216	216	4.5	3.5	308	213	15454	3424	18878	22313	8227	22888	22888	45201	31115
32	DMW	--	DYP	381	25	3.7	3.7	13	13	0.0	0.0	0	0	0	0	0	0	0	1296	1296	1296	1296
33	DYP	--	RBL	382	6	10.6	10.6	109	109	0.6	0.7	37	30	2316	598	2914	3177	1339	8158	8158	11335	9497
34	DYP	--	UCR	383	22	6.7	6.7	109	109	1.0	0.1	32	2	1395	108	1504	2161	165	7942	7942	10104	8107
35	PRG	--	PYG	391	2	11.0	11.0	127	127	0.0	0.0	0	0	0	0	0	0	0	9363	9363	9363	9363

DENSITY STATEMENT FOR THE YEAR 2022-23 (BG)

MORADABAD DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Double line (Electrified)																						
1	MB	--	NBD	401	98	17.6	17.6	405	405	25.6	13.4	1334	1120	37476	30750	68227	68509	56177	28122	28122	96630	84299
2	NBD	--	MZM	402	12	19.5	19.5	420	420	20.6	14.7	1338	1171	37350	32582	69933	68439	58554	29421	29421	97861	87975
3	MZM	--	LRJ	403	30	22.0	22.0	406	406	20.6	14.6	1336	1169	37183	32417	69600	68206	58322	28086	28086	96292	86408
4	LRJ	--	SRE	404	53	23.5	23.5	433	433	21.1	15.3	1341	1176	37233	32489	69721	68347	58552	30004	30004	98351	88555
5	LKO	--	BLM	411	69	35.0	35.0	682	682	35.7	27.6	1788	2820	99810	51808	151618	139616	114958	47460	47460	187077	162418
6	BLM	--	ROSA	412	88	38.2	38.2	717	717	26.4	14.5	1540	235	82456	2681	85136	116965	39867	50077	50077	167042	89944
7	ROSA	--	SPN	413	8	36.4	36.4	785	785	29.0	19.8	1958	1647	72291	58034	130326	117565	96179	55024	55024	172589	151204
8	SPN	--	BE	414	70	37.9	37.9	754	754	28.4	25.9	2021	1693	71998	59238	131236	118904	98427	52427	52427	171331	150853
9	BE	--	MB	415	91	35.6	35.6	797	797	27.7	24.9	1613	1433	64060	46539	110599	100909	119290	55583	55583	156492	174872
10	HPU	--	GZB	423	37	29.1	29.1	591	591	10.4	10.3	686	590	35567	33877	69443	50882	71696	56492	56492	107375	128188
11	MB	--	GJL	421	53	31.9	31.9	557	557	14.7	13.3	692	590	37598	31491	69089	79639	66838	50551	50551	130190	117389
12	GJL	--	HPU	422	51	30.4	30.4	571	571	8.1	7.0	708	592	37459	33125	70584	69273	65727	39550	39550	108823	105277
13	LRJ	--	HW	461	28	20.6	20.6	332	332	1.1	0.7	27	17	1021	294	1316	1747	761	42402	42402	44149	43163
Single Line (Electrified)																						
14	KRJ	--	HPU	441	63	5.7	5.7	81	81	6.4	8.6	310	414	17172	1705	18877	24039	11244	5228	5228	29268	16472
15	HPU	--	MTC	442	30	4.9	4.9	60	60	6.2	0.3	284	12	15373	418	15791	21713	692	4426	4426	26140	5118
16	RJK	--	MB	432	25	9.8	9.8	86	86	2.9	1.2	123	48	6971	2519	9490	10015	3726	6534	6534	16549	10260
17	CH	--	BE	472	70	7.3	7.3	48	48	16.0	5.7	556	170	18999	7700	26699	32470	11967	3921	3921	36390	15887
18	CH	--	RJK	431	19	8.0	8.0	84	84	8.4	4.1	815	171	26000	9454	35453	45729	13677	6262	6262	51991	19939
19	SHTS	--	RJK	433	23	0.8	0.8	2	2	0.0	0.0	0	0	0	0	0	0	0	157	157	157	157
20	ON	--	BLM	451	100	2.5	2.5	14	14	1.0	1.7	32	68	1995	3280	5275	2813	4992	2307	2307	5120	7298
21	BLM	--	SCC	452	60	0.9	0.9	0	0	0.5	0.1	17	2	842	2	844	1254	94	112	112	1366	206
22	HGJ	--	CH	471	78	7.5	7.5	20	20	4.2	1.8	157	53	6719	646	7365	10615	1981	2175	2175	12790	4155
23	NBD	--	KTW	481	24	3.7	3.7	20	20	0.0	0.0	0	0	0	0	0	0	0	1702	1702	1702	1702
24	NBD	--	GJL	482	106	3.6	3.6	29	29	0.8	0.8	7	7	70	391	460	475	1124	4307	4307	4782	5431
25	DDN	--	LRJ	476	6	11.3	11.3	187	187	0.0	0.0	0	0	0	0	0	0	0	13230	13230	13230	13230
Single Line (Non Electrified)																						
26	SCC	--	SPN	453	88	3.4	3.4	53	53	16.0	13.7	616	524	2224	31409	33633	17471	44129	3762	3762	21234	47892
27	HW	--	RWL	462	11	21.3	21.3	299	299	0.4	0.8	14	24	721	700	1421	1067	1352	21554	21554	22621	22907
28	RWL	--	DDN	463	40	13.2	13.2	207	207	0.0	0.1	0	3	22	0	22	31	95	22102	22102	22133	22198
29	RWL	--	VRH	464	6	9.4	9.4	118	118	0.4	0.7	13	21	700	700	1399	1033	1272	8641	8641	9674	9913
30	VRH	--	RKSH	465	6	5.1	5.1	32	32	0.4	0.3	13	7	700	0	700	1033	191	2642	2642	3674	2832
31	VRH	--	YNRK	466	6	1.0	1.0	19	19	0.4	0.3	13	7	700	0	700	1033	191	1326	1326	2359	1516

DENSITY STATEMENT FOR THE YEAR 2022-23 (BG)

AMBALA DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Double line (Electrified)																						
1	SRE	--	UMB	501	82	29.0	29.0	506	506	35.9	27.9	923	805	24916	21750	46667	69453	60232	79830	79830	149283	140063
2	UMB	--	RPJ	502	28	55.0	55.0	942	942	32.7	25.0	1590	1251	51209	45478	96686	114794	111796	77280	77280	192073	189076
3	RPJ	--	SIR	503	25	50.2	50.2	902	902	28.3	16.5	1613	1018	52301	33737	86039	125930	120648	61273	61273	187203	181921
4	SIR	--	SNL	504	48	43.4	43.4	817	817	17.0	17.2	695	729	21360	30141	51500	75593	82039	101602	101602	177195	183641
Single Line (Electrified)																						
5	UMB	--	KLK	531	70	15.2	15.2	290	290	3.3	2.7	57	54	1875	1158	3033	4606	3716	35176	35176	39782	38892
6	SIR	--	NLDM	532	104	3.6	3.6	39	39	7.5	7.0	192	159	7409	2863	10272	11875	6493	2085	2085	13961	8578
7	NLDM	--	UNA	533	17	2.0	2.0	15	15	0.01	0.01	0.26	0.26	114	108	222	169	164	1608	1608	1777	1771
8	CHD	-	MRND	534	45	1.8	1.8	33	33	1.3	2.3	19	25	231	866	1096	829	1128	3477	3477	4307	4605
9	HSR	--	JHL	511	82	7.8	7.8	77	77	1.4	4.5	60	184	3630	9045	12675	4938	13343	5788	5788	10726	19132
10	DUI	--	LDH	513	61	11.3	11.3	132	132	5.8	5.8	188	212	9788	5851	15639	13744	10437	9712	9712	23456	20150
11	UHL	-	AMB	535	43	5.2	5.2	69	69	0.0	0.0	0	0	0	0	0	0	0	4939	4939	4939	4939
12	DUI	--	BTI	522	96	11.0	11.0	81	81	10.6	3.2	333	92	9255	4710	13965	17187	6927	5951	5951	23139	12878
13	JHL	--	DUI	512	67	12.8	12.8	145	145	5.6	9.5	221	323	12806	13428	26234	17491	20641	10736	10736	28227	31377
14	RPJ	--	DUI	521	78	6.3	6.3	87	87	11.7	5.0	557	178	10903	10023	20926	23843	14282	2133	2133	25976	16415
15	UHL-		DLPC	537	43	5.2	5.2	69	69	0.01	0.01	0.17	0.17	14	0	14	77	7	4939	4939	5016	4946
Single Line (Non Electrified)																						
16	MRND		LDH	536	72	1.0	1.0	15	15	0.9	3.4	30	70	710	3389	4099	1407	5157	1072	1072	2478	6229
17	BTI	--	SGNR	523	127	11.0	11.0	149	149	1.9	2.8	28	49	291	1984	2274	5166	3197	17203	17203	22369	20400
18	BTIC		KZW	524	5	1.0	1.0	17	17	0.00	0.00	0.0	0.0	0	0	0	0	0	1196	1196	1196	1196

DENSITY STATEMENT FOR THE YEAR 2022-23 (NARROW GAUGE)

FIROZPUR DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Single line (Non-Electrified)																						
1	PTK	--	JMKR	701	83	2.4	2.4	39	39	0	0	0	0	0	0	0	0	0	350	350	350	350
2	JMKR	--	BKKPL	702	59	2.2	2.2	34	34	0	0	0	0	0	0	0	0	0	310	310	310	310
3	BJKPL	--	JDNX	703	22	0.7	0.7	7	7	0	0	0	0	0	0	0	0	0	78	78	78	78
					164																	

AMBALA DIVISION						AVERAGE DAILY NUMBER OF								NTKM / Route Kms			Gross Tonne Kms Per Route Kms Per Day					
				Sec.	Route	PassTrainsRun		P.C.V's Run		Goods Trains Run		Wagons Run		Per Day			Goods'		Passenger		Goods'+Passeger	
S.No.	Sections			No.	Kms.	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN
Single line (Non-Electrified)																						
1	KLK	--	SML	801	96	6.1	6.1	80	80	0	0	0	0	0	0	0	0	0	774	774	774	774

रेलवे सांख्यिकी में उपयोग की जाने वाली सामान्य शर्तों की शब्दावली

1. **पूंजी परिव्यय-** संबंधित अवधि के दौरान ठोस मूर्त-परिसंपत्ती को बढाने की द्रष्टि से किया गया पूंजी खर्च।

2. **पारगामी यातायात-** ऐसा सभी यातायात जो रिपोर्ट भेजने वाली रेलवे पर अथवा आमान के जिस खंड की विवरणी तैयार की जा रही है उस पर न तो शुरू होता हैं और न ही वहां खत्म होता है।

3. **घनत्व –** रेल-मार्ग पर किन्हीं दो स्थानों के बीच होने वाले यातायात का परिमाण। यह प्रति चालू रेलपथ किलोमीटर या मार्ग किलोमीटर यात्री किलोमीटरों अथवा शुद्ध टन किलोमीटरों और गाडी किलोमीटरों मे व्यक्त किया जाता है।

4. **इंजन किलोमीटर -** इंजन द्वारा अपनी शक्ति से तय की गई एक किलोमीटर की दूरी ही इंजन किलोमीटर है।

5. **रेलवे की निधि –** वे मुख्य प्रमुख शीर्षक जिनके तहत रेलवे के लिए निधि प्राप्त की जाती हैं निम्नलिखित है -

क) मूल्य ह्रास रिजर्व निधि – यह निधि नई संपत्तियों की लागत पर पूंजी लगाने और पुरानी संपत्तियों को बदलने एवं जब आवश्यक हो किसी संशोधित विशिष्टि की लागत सहित ऐसी नई संपत्तियों को लेने के लिए नियत की गई है। यह निधि 1 अप्रैल, 1924 से शुरू की गई थी।

ख) पेंशन निधि – यह निधि पेंशन के भुगतान, परिवार पेंशन और मृत्यु एवम् सेवानिवृति उपदान पर होने वाले खर्चो को पूरा करने के लिए तैयार की गई है। यह निधि 1 अप्रैल 1964 से लागू होने के लिए तैयार की गई थी।

ग) पूंजी निधि - 1992-93 में तैयार की गई थी, इस निधि का उपयोग ठेका भाड़ा प्रभार के मुख्य तत्व का भुगतान करने के साथ-साथ पूंजी प्रवर्ति वाले कार्यों पर पूँजी बाटने के लिए किया जाता है।

घ) विकास निधि – यह निधि रेल परिवहन, कर्मचारी कल्याण, किसी विशेष वित्तीय सीमा के अतिरिक्त अलाभकारी परिचालन संशोधन वर्क्स एवम् सुरक्षा कार्यों के उपयोगकर्ताओं के लिए सुख-सुविधाओं पर होने वाले खर्चो को पूरा करने के लिए तैयार की गई है । यह निधि 1 अप्रैल 1950 से लागू होने के लिए तैयार की गई थी।

ड) कर्ज चुकौती निधि - 2013-14 में कर्ज चुकौती निधि जेआईसीए, विश्व बैंक से लोन के संबंध में भावी कर्ज चुकौती करारों को मुहैया कराने एवम् वेतन आयोग के भावी निष्पदान के एकमात्र उद्देश्य के साथ तैयार की गई थी। यह निधि लोक लेखा के ब्याज वाले सेक्शन मे तैयार की गई थी। पूंजी निधि और विकास निधि की अनिवार्य आवश्यकताओं को पूरा करने के बाद, इस निधि का विनियोजन 'शुद्ध राजस्व आय' से किया गया है।

च) रेल सुरक्षा निधि - रेल सुरक्षा निधि 01.04.2001 से लागू होने के लिए तैयार की गई है। यह निधि मानव-रहित लेवल क्रोसिंग मे सुधार से संबंधित कार्यों एवम् व्यस्त लेवल क्रोसिंग पर पुल के ऊपर/नीचे सडक के निर्माण पर पूंजी लगाने के लिए तैयार की गई है। बहराल, विलंबित अन्य अवसंरचना से संबंधित खर्चे भी इस निधि से व्यय किये जाने के लिए अनुमत किये गए है। यह निधि मुख्य रूप से केंद्र सड़क निधि से केंद्र सरकार को निधि के हस्तांतरण द्वारा वित्त प्रबंधित की जाती है। इसके अलावा, रेलवे राजस्व आय से भी राशि विनियोजित की जा सकती है।

छ) राष्ट्रीय रेल संरक्षा कोष - 2017-18 में तैयार किया गया था, यह रेल कार्य से संबंधित सुरक्षा पर किए जाने वाले पूँजी खर्च को पूरा करने के लिए समर्पित निधि है जिसमे समयबद्ध प्रणाली मे रेल

संपत्ति का नवीनीकरण और प्रतिस्थापन शामिल है। यह निधि रेलवे के आंतरिक स्त्रोतों के अलावा, सामान्य राजकोष द्वारा मुहैया कराए जाने वाले बजट सहायता से भी वित्त प्रबंधित की जा सकती है।

6. सकल टन किलोमीटर (इंजन के वजन को छोड़कर) – कार्य-माप का यूनिट जो माल सहित एक टन वजन वाले वाहन/वैगन, जिसमें यूनिट का वजन शामिल नहीं है, द्वारा तय की गई एक किलोमीटर दूरी के बराबर है।

7. सकल टन किलोमीटर (इंजन के वजन सहित) - कार्य-माप का यूनिट जो वाहन, माल और मोटिव यूनिट के वजन सहित 1 टन वजन द्वारा एक किलोमीटर तय की गई दूरी के बराबर है।

8. किलोमीटर दुरी-

क) मार्ग किलोमीटर दुरी - रेलवे के, जिसमें उसकी चालित लाइनें भी शामिल हैं, अपने प्रत्येक आमान की दूरी जिसे इकहरी लाइन माना गया है।

ख) चालू रेलपथ किलोमीटर दुरी - मार्ग किलोमीटर और बहुसंख्यक रेलपथों की अतिरिक्त दूरी अर्थात् दुहरे, तिहरे, आदि रेलपथों को दो या तीन अथवा अधिक रेलपथ माना जायेगा किंतु इसमें साइडिंग, यार्ड और स्टेशन पर क्रॉसिंग का रेल-पथ शामिल नहीं होगा।

ग) कुल रेलपथ किलोमीटर दुरी – एक रेलवे के प्रत्येक आमान की दूरी जिसमें दुहरे, तिहरे, आदि रेलपथों के साथ ही साइडिंगो, यार्डो और स्टेशन पर क्रॉसिंग के रेल-पथ के कारण इसकी चालित लाइनें जिन्हें इकहरी लाइन एवं अतरिक्त दुरी के रूप मे माना गया है।

घ) समीकृत रेलपथ किलोमीटर – रेलपथ की किलोमीटर दुरी जिसे यातायात के घनत्व, ढाल, भूमि की बनावट, संरेखण (वक्र), वर्षा और रेल पथ के जोड़ तथा अभिन्यासो (लेआउट) के कारकों को महत्व देते हुए एक मानक यूनिट मे समीकृत किया गया हो।

ड) माध्य किलोमीटर दुरी - मार्ग किलोमीटर की परिभाषा के अनुसार मालूम की गई रेलवे की लम्बाई, जिसमे संबंधित अवधि के दौरान किलोमीटर दुरी में होने वाले परिवर्तनों के लिए छूट है। इस प्रकार किसी वर्ष मे तय की जाने वाली माध्य किलोमीटर दुरी, जिसमें उस वर्ष के दौरान कोई वृद्धि/समापन किया गया हो, नीचे दिए अनुसार होगी : -

i) वर्ष के शुरुआत में रेल-मार्ग की किलोमीटर दुरी (धन/ऋण);

ii) (ऐसे दिनों की संख्या जब वर्ष के दौरान नया खंड/बंद होने वाला खंड इस्तेमाल में रहा) को (नए खंड अथवा बंद किए गए खंड की लंबाई) से गुणा करके और उसे (वर्ष में दिनों की संख्या) भाग दिया जाता है ।

9. शुद्ध राजस्व : सकल अर्जन और संचालन व्यय एवं अन्य विविध शुद्ध व्ययों के बीच का अंतर ।

10. शुद्ध टन किलोमीटर : माल यातायात के माप का यूनिट जो एक टन माल (जिसमें किसी भी किस्म की पैकिंग का वजन शामिल है किंतु परिवहन के लिए इस्तेमाल किए गए वाहन का वजन शामिल नहीं है) की 1 किलोमीटर ढुलाई का द्योतक है ।

11. व्यवसाय अनुपात: व्यवसाय अनुपात कोचों की ढुलाई क्षमता की उपयोगिता का अनुपात है। यह उच्च एवं निम्न वर्ग समायोजन के लिए अलग से निर्धारित किया जाता है। इस सूचकांक की प्रति कोच औसत ढुलाई क्षमता के साथ तुलना की जाती है और यह कोचों में कम भीड अथवा ज्यादा भीड को निर्दिष्ट करेगा ।

12. परिचालन अनुमात: संचालन व्यय (जिसमें उचंत शामिल नहीं है लेकिन पेंशन निधि एवं मूल्यहास आरक्षित निधि में विनियोजित रकम शामिल है) का सकल अर्जन से अनुपात।

13. ढोए गए यात्री: का आशय है होम लाइन के प्रत्येक आमान पर शुरू होने वाले यात्रियों की संख्या और किसी अन्य रेलवे से अथवा होम लाइन के किसी भिन्न भिन्न लाइन से आमान पर आने वाले यात्रियों की संख्या, एवं उस आमान से गुजरने वाले यात्रियों की संख्या।

14. यात्री किलोमीटर: यात्री यातायात को मापने का यूनिट जो एक यात्री की 1 किलोमीटर ढुलाई के बराबर है ।

15. चल स्टॉक: खींचने और परिवहन के काम आने वाले सभी रेल वाहन, जिसमें चल क्रेन भी शामिल है ।

16. सीट किलोमीटर: यात्री वाहन की वहन क्षमता को मापने का यूनिट, जो कि सवारी डिब्बे अथवा मोटर वाहन में उपलब्ध एक सीट की 1 किलोमीटर गमन दूरी के बराबर है ।

17. ढोया गया टन भार: यह होम लाइन के प्रत्येक आमान पर प्रारंभ होने वाले माल यातायात की मात्रा तथा दूसरी रेलों के आमानों अथवा होम लाइन की विभिन्न आमानों से प्राप्त माल यातायात की मात्रा और उस रेलवे/आमानों से गुजरने वाले माल की मात्रा का द्योतक है।

18. प्रारंभिक टन: इसमें प्रत्येक आमान पर प्रारंभ होने वाले समस्त यातायात के टन शामिल है, चाहे वह उसी आमान पर समाप्त होता है चाहे स्वक्षेत्रीय लाइन के किसी दूसरे आमान पर अथवा किसी दूसरी रेलवे पर।

19. समापक टन: इसमें एक आमान पर समाप्त होने वाले समस्त यातायात के टन शामिल है, चाहे वे स्वक्षेत्रीय लाइन से प्रारंभ हुए हो अथवा अन्य रेलों से ।

20. गाडी इंजन घंटे: इसके अंतर्गत उतने घंटे दिखाए जाएंगे, जितने घंटे कि इंजन गाडियों में लगे रहे, प्रत्येक मामले में इन घंटों की गणना इंजन के साथ रवाना होने के समय से उस स्टेशन पर पहुंचने के समय तक की जाएगी जिस स्टेशन पर कि गाडी के साथ ही इंजन की यात्रा भी ख़त्म हो जाती है।

21. मालडिब्बे का लदान आवर्तन: किसी मालडिब्बे के दो क्रमिक लदानों के बीच की समय का अंतराल ।

22. संचालन व्यय: यातायात के लिए खोली गई लाइनों के प्रशासन, परिचालन, अनुरक्षण और मरम्मत के संबंध में किया गया खर्च। इसमें प्रतिस्थापना और नवीकरण की लागत पूरी करने के लिए पेंशन निधि में विनियोजन और मुल्यहास आरक्षित निधि में किया गया अंशदान भी शामिल है ।

(क) सकल संचालन व्यय: किसी लेखा अवधि में उचित व्यय, वस्तुतः चुकाया गया हो अथवा नहीं।

(ख) सामान्य संचालन व्यय: मुल्यहास आरक्षित निधि एवं पेंशन निधि के विनियोजन को छोडकर, मुख्य शीर्ष के अंतर्गत बुक किए गए व्यय ।

GLOSSARY OF COMMON TERMS USED IN RAILWAY STATISTICS

1. **Capital Outlay–** Expenditure of capital nature incurred during the period with the object of increasing concrete assets of a material character.

2. **Cross traffic –** All traffic which neither originates nor terminates on the reporting Railway or on the same section of a gauge for which the return is being prepared.

3. **Density –** The volume of traffic moving between any two points on the Railway system. It is expressed in terms of passenger kilometers or net tonne kilometres and train kilometres per running track kilometer or route kilometer.

4. **Engine Kilometre –** is the movement of an engine, under its own power, over a distance of one kilometer.

5. **Funds of Railways –** The principal heads under which the funds of Railway are furnished are-

a) **Depreciation Reserve Fund –** The fund intended to finance the cost of new assets and replacements of old assets as and when needed including the cost of any improved features that such new assets may have. This fund was instituted from 1st April, 1924.

b) **Pension Fund –** The fund created to meet the expenses on payment of pension, family pension and death-cum-retirement gratuity. This fund created w.e.f. 1st April, 1964.

c) **Capital Fund –** Created in 1992-93, this fund is used to part finance the works of capital nature including payment of principle component of lease hire charges.

d) **Development Fund –** The fund created to meet the expenditure on amenities for the users of Railway transport, staff welfare, un-remunerative operating improvements works beyond certain financial limits and safety works. This fund was created w.e.f. 1st April, 1950.

e) **Debt Service Fund –** was created in 2013-14 with the sole purpose of providing for future debt service obligations in respect of loans from JICA, World Bank and for future implementation of Pay Commissions. This Fund has been created in the interest bearing section of Public Account. Appropriation to this Fund is made from the 'Net Revenue', after meeting the mandatory requirements of Capital Fund and Development Fund.

f) **Railway Safety Fund –** has been created with effect from 01.04.2001. This Fund was created for financing works relating to conversion of unmanned level crossings and for construction of road over/under bridges at busy level crossings. However, of late other infrastructure related expenditure have also been allowed to be incurred from this fund. The Fund is financed mainly through transfer of funds by the Central Government from the Central Road Fund. Apart from this, amounts can also be appropriated out of Railway revenues.

g) **Rashtriya Rail Sanraksha Kosh –** Created in 2017-18, this is a dedicated fund for meeting capital expenditure on safety related Railway works including renewal and replacement of Railway assets in a time bound manner. The fund is to be financed from budgetary support provided by the General exchequer besides the internal resources of the Railway.

6. **Gross Tonne Kilometer (excluding weight of engine) –** Unit of measure of work which corresponds to the movement over a distance of one kilometer of one tonne of vehicle/ wagon and contents excluding the weight of the motive unit.

7. **Gross Tonne Kilometer (including weight of engine) –** Unit of measure of work which corresponds to the movement over a distance of one kilometer of one tonne of vehicle/ wagon and contents including the weight of the motive unit.

8. **Kilometrage-**

a) **Route Kilometrage –** The distance of each gauge owned by a Railway including its worked lines treated as a single line.

b) **Running track kilometrage –** Route kilometrage plus extra distance of multiple tracks i.e. double, treble, etc., treated as two, three or more tracks but shall exclude the track in sidings, yards and crossings at stations.

c) **Total track kilometrage –** Distance of each gauge owned by a Railway including its worked lines treated as single line and the extra distance due to double, treble, etc. tracks, as also the length of sidings, yards and crossing at stations.

d) **Equated track kilometrage –** Kilometrage of track equated to a standard unit by giving weightage for factors of traffic density, gradient, formation of soil, alignment (curves), rainfall and track connections and layouts.

e) **Mean kilometrage –** The length of the Railway track, calculated according to the definition of route kilometrage, allowing for changes in the kilometrage during the period covered. Thus, the mean kilometrage worked during a year which has had an addition/closing during the year, will be as follows:-

i) Route kilometrage at the commencement of a year (plus/minus);

ii) (Number of days the new section/section closed was in use during the year) multiplied by (the length of the new section/section closed) and divided by (the number of days in the year).

9. **Net Revenue –** The difference between Gross earnings and the Working Expenses and other Net Miscellaneous Expenditure.

10. **Net tonne kilometer –** Unit of measure of goods traffic which represents the transport of one tonne of goods (including the weight of any packing, but excluding the weight of the vehicle used for transport) over a distance of one kilometer.

11. **Occupation ratio –** is the ratio utilizing carrying capacity of the coaches. This is worked out separately for upper and lower class accommodation. This index is compared with the

average carrying capacity per coach and would denote under-crowding or over-crowding in the coaches.

12. **Operating Ratio –** The ratio of Working Expenses (excluding Suspense but including Appropriation to Depreciation Reserve Fund and Pension Fund) to Gross Earnings.

13. **Passenger carried –** refers to the number of passengers originating on each gauge of the home line, as well as the number of passengers received on the gauge from other Railway, or from a different gauge of home line and also those crossing the gauge.

14. **Passenger kilometer –** Unit of measure of passenger traffic corresponding to the conveyance of a passenger over a distance of one kilometer.

15. **Rolling Stock –** All Railway tractive and transport vehicles, including travelling cranes.

16. **Seat Kilometre –** Unit of measure of the carrying capacity of a passenger vehicle which is equivalent to the movement of one seat available in a coach or motor vehicle over a distance of one kilometer.

17. **Tonnes Carried –** This represents the quantum of goods originating on each gauge of the home line, as well as the quantum of goods received on the gauge from other Railways or from different gauges of the home line and also those crossing the Railway/gauge.

18. **Tonne Originating –** includes tonnes of all traffic originating on each gauge, whether it terminates on the gauge itself or on some other gauge of the home line, or on other Railways.

19. **Tonnes Terminating –** includes tonnes of all the traffic terminating on the gauge whether they originated on the home line or on other Railways.

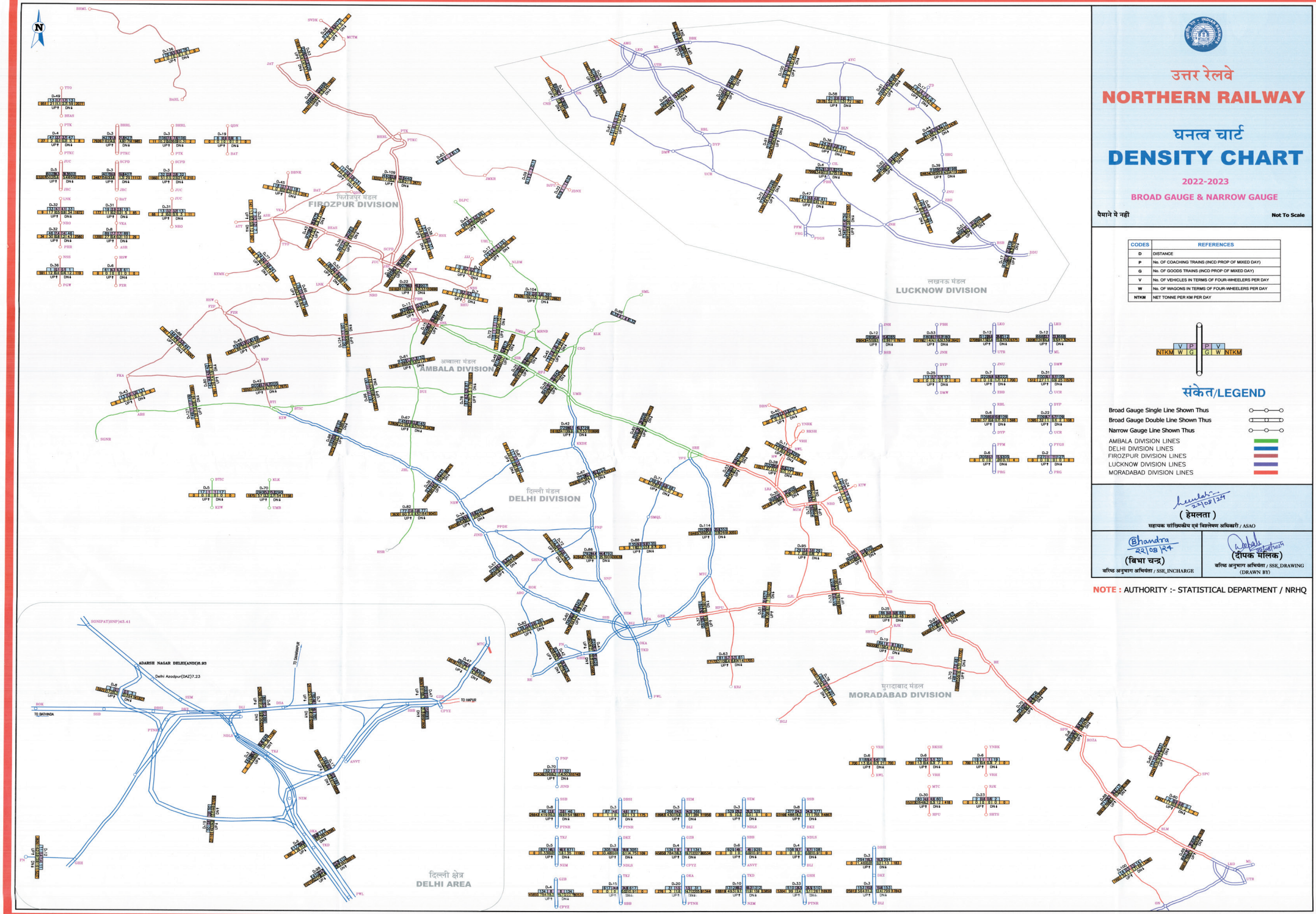
20. **Train Engine Hours –** are to show the hours during which engines are employed on trains, counting in each case from the time the engine starts with the train, until it reaches the station at which the engine terminates its run with the train.

21. **Turn Round of a Wagon –** The interval of time between two successive loadings of a wagon.

22. **Working expenses –** Expenditure incurred in connection with the administration, operation, maintenance and repairs of lines opened for traffic. This also includes Appropriation to Pension Fund and the contribution made to the Depreciation Reserve Fund to meet the cost of replacements and renewals.

a) **Gross Working expenses –** True expenses in an accounting period whether or not actually disbursed.

b) **Ordinary working expenses –** Expenses booked under final heads, excluding Appropriation to Depreciation Reserve Fund and Pension Fund.



उत्तर रेलवे

NORTHERN RAILWAY

घनत्व चार्ट

DENSITY CHART

2022-2023

BROAD GAUGE & NARROW GAUGE

पैमाने मे नहीं — Not To Scale

CODES	REFERENCES
D	DISTANCE
P	No. OF COACHING TRAINS (INCD PROP OF MIXED DAY)
G	No. OF GOODS TRAINS (INCD PROP OF MIXED DAY)
V	No. OF VEHICLES IN TERMS OF FOUR-WHEELERS PER DAY
W	No. OF WAGONS IN TERMS OF FOUR-WHEELERS PER DAY
NTKM	NET TONNE PER KM PER DAY

V P P V
NTKM W G G W NTKM

संकेत/LEGEND

Broad Gauge Single Line Shown Thus

Broad Gauge Double Line Shown Thus

Narrow Gauge Line Shown Thus

AMBALA DIVISION LINES

DELHI DIVISION LINES

FIROZPUR DIVISION LINES

LUCKNOW DIVISION LINES

MORADABAD DIVISION LINES

(हेमलता)
सहायक सांख्यिकीय एवं विश्लेषण अधिकारी / ASAO

(विभा चन्द्र)
वरिष्ठ अनुभाग अभियंता / SSE_INCHARGE

(दीपक मलिक)
वरिष्ठ अनुभाग अभियंता / SSE_DRAWING
(DRAWN BY)

NOTE : AUTHORITY :- STATISTICAL DEPARTMENT / NRHQ

