



पूर्व तट रेलवे महाप्रबंधक की वार्षिक रिपोर्ट EAST COAST RAILWAY GENERAL MANAGER'S

ANNUAL REPORT
2021-22





Sri Ashwini Vaishnaw, Hon'ble Minister of Railways, Communication, Electronics & IT Govt. of India review meeting with GM/ ECoR and PHODs on 06-02-22.



Shri Suneet Sharma, Railway Board Chairman & CEO in a Review meeting with GM & PHODs on 03-10-21.



Inauguration of LHB Train with Vistadome Coaches by Sri M. Venkaiah Naidu Hon'ble Vice President of India at Visakhapatnam on 22-11-21.



Flagging Off of 18452/18453 Puri-Hatia Tapaswini Exp with Rajdhani Coaches by Sri Ashwini Vaishnaw, Hon'ble Minister of Rlys, Communication, Electronics & IT, GOI.



Parliamentary Committee meeting on Labour at Mayfair Hotel on 16-11-21



A visit of Sri Ashwini Vaishnaw, Hon'ble Minister of Rlys, Communication, Electronics & IT, GOI to SBP division.

मनोज शर्मा, आईआरएमएस
MANOJ SHARMA, IRMS



महाप्रबंधक
पूर्व तट रेलवे
भुवनेश्वर - 751017
GENERAL MANAGER
EAST COAST RAILWAY
BHUBANESWAR-751017

No.ECoR/TA/STAT/AR/2021-22

Date: 16.03.2023

सचिव
रेलवे बोर्ड
नई दिल्ली

The Secretary,
Railway Board,
New Delhi

मैं 31 मार्च 2022 को समाप्त हुए वर्ष में पूर्व
तट रेलवे, भुवनेश्वर के कार्य की वार्षिक रिपोर्ट
भेज रहा हूँ।

I forward herewith the Annual
Report on working of East Coast
Railway, Bhubaneswar for the
year ending 31st March 2022.

(मनोज शर्मा)
महा प्रबंधक

(Manoj Sharma)
General Manager

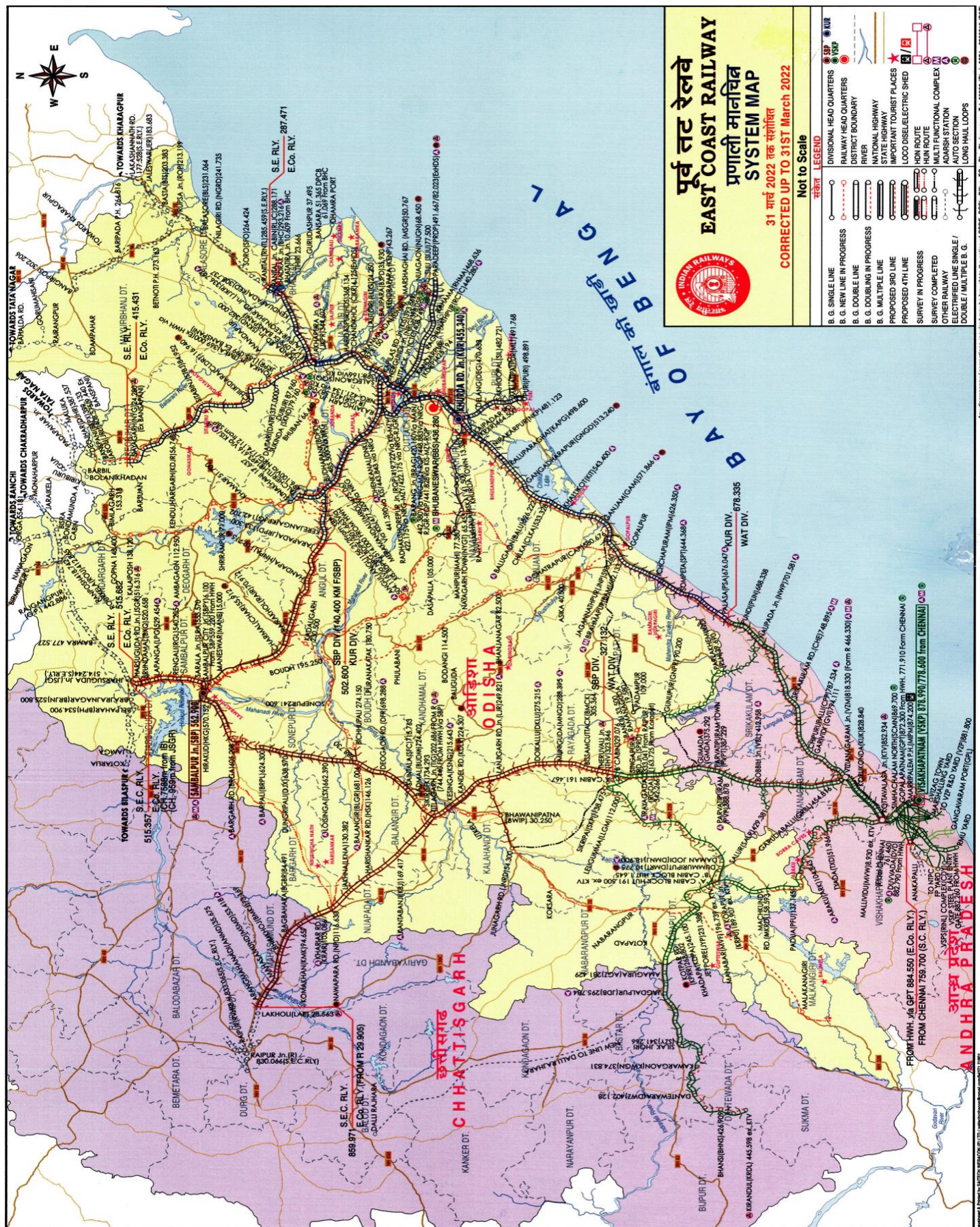
APEX MANAGEMENT

As on 31.03.2022

HEAD QUARTERS	
GENERAL MANAGER	SHRI SHARAD KUMAR SRIVASTAVA
PRINCIPAL FINANCIAL ADVISOR	SHRI R.S. MITRA
CHIEF ADMINISTRATIVE OFFICER (CONS.)	SHRI D.P. LAL
PRINCIPAL CHIEF ENGINEER	SHRI N.S. UIKEY
PRINCIPAL CHIEF PERSONNEL OFFICER	SHRI T.K. MANDAL
PRINCIPAL CHIEF MEDICAL DIRECTOR	DR. MUKANDI LAL MEENA
PRINCIPAL CHIEF MECHANICAL ENGINEER	SHRI R. RAJAGOPAL
PRINCIPAL CHIEF ELECTRICAL ENGINEER	SHRI BASUDEV PANDA
PRINCIPAL CHIEF OPERATIONS MANAGER	SHRI P. K. JENA
PRINCIPAL CHIEF COMMERCIAL MANAGER	SHRI P. K. SAHU
PRINCIPAL CHIEF MATERIAL MANAGER	SHRI P. B. NINAWA
SR. DY. GENERAL MANAGER	SHRI SANJAY MAHAPATRA
PRINCIPAL CHIEF SAFETY OFFICER	SHRI H. K. DUTTA
PRINCIPAL CHIEF SIG. & TELECOM ENGINEER	SMT. S. MANGA V.
PRINCIPAL CHIEF SECURITY COMMISSIONER	SHRI RAJA RAM
DRM/WAT	SHRI ANUP KUMAR SATPATHY
DRM/KUR	SHRI RINKESH ROY
DRM/SBP	SHRI PRADEEP KUMAR
CWM/MCS	SHRI SUVAS CHANDRA KAR

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STATISTICS AT A GLANCE FOR THE YEAR 2021-22 VIS-À-VIS 2020-21

GENERAL	UNITS	2020-21	2021-22
DIVISIONS	3	Khurda Road, Waltair, Sambalpur	
Workshops	1	Carriage Repair Workshop , Mancheswar	
Route Km(BG+NG)	KM	2801.49	2817.59
Route Km Electrified	KM	2774.91	2817.59
Passenger Carrying Train Per Day	Nos.	42.12	133.33
Goods Train Per Day	Nos.	1452.93	1285.65
PRS Centres	Nos.	144	135
Unreserved Ticketing System	Nos.	256	256
OnLine Current Reservation Counters	Nos.	2	2
Stations Including Passenger Halts	Nos.	351	352
Electric Loco Sheds	Nos.	2	2
Diesel Loco Sheds	Nos.	1	1
Level Crossing-			
Manned	Nos.	**742	729
Unmanned	Nos.	0	0
Total	Nos.	**742	729
FINANCIAL POSITION			
Capital-at-charge	Crores	**12413.47	14971.79
Gross Revenue	Crores	17472.11	19967.08
Working Expenses	Crores	8272.12	10897.26
Net Revenue	Crores	9199.99	9069.82
Operating Ratio	%	47.34	54.58
Percentage of Net Revenue to Capital-at-charge	%	**74.11	60.58
PEI	%	40.46	44.18
Operating Surplus	Crores	9226.99	10984.82
Total Originating Revenue	Crores	20446.98	24663.40
PASSENGER STATISTICS			
Passenger Originating	Millions	9.73	34.45
Passenger(System)	Millions	19.40	63.24
Passenger Kilometres	Millions	5860.30	17208.38
Average Revenue Per Passenger Km	Paise	65.59	65.94

FREIGHT STATISTICS			
Freight Tonnes Originating (Revenue)	Millions	204.90	232.13
Freight Tonnes Originating (Revenue & Non-Revenue)	Millions	204.90	232.13
Freight Tonnes (System) including Non-Revenue	Millions	301.93	323.08
Freight Tonne KM (Revenue & Non-Revenue)	Millions KM	88301.84	100346.28
Revenue from Goods Carried (Revenue)	Crores	16726.49	18338.72
Average Revenue Per Freight Tonne Km	Paise	**196.04	192.33
TRAIN STATISTICS			
Train Kilometre	Thousands	44420	57908
Total GTKM (includes Wt. of Engine & Dept.)	Millions	146214.53	176819.36
Total Engine Kilometres	Millions	141.026	150.185
Total Vehicle Kilometres	Millions	221.134	627.570
Gross Revenue Per Train Kilometre	Rs.	3933.39	3448.07
Working Expenses Per Train Kilometre	Rs.	1862.25	1881.82
Net Revenue Per Train Kilometre	Rs.	2071.14	1566.25
Number of Goods Trains	Nos.	530321	469261
NTKM (Carried) (Rev. & Non Rev.)	Crores	8830.18	10034.63
NTKM Per Engine Hour		11045	12153
Wagon-day On Line (On Zonal Holding Basis)	Crores	1.038	0.990
Wagon-day In Use (On Zonal Holding Basis)	Crores	0.970	0.956
Wagon KM Per Wagon Day			
On Line (On Zonal Holding Basis)		177.48	202.79
In Use (On Zonal Holding Basis)		189.91	210.00
Engine Hours (Goods)	Lakhs	79.95	82.57
Loaded Wagon Km	Crores	126.46	143.80
Effective wagon Holdings			
Including Surplus Empties	Crores	1.04	0.99
Excluding Surplus Empties	Crores	0.97	0.96
Wagon Turn Round			
Including Surplus Empties	Days	2.31	2.06
Excluding Surplus Empties	Days	2.16	1.99
STAFF STATISTICS			
Number of Staff as on 31st March	Thousands	48.260	47.895
Cost of Staff	Crores	4775.05	5199.89

**- Revised figs.

REVIEW PROSPECTS

East Coast Railway – one of the blue-chip zones of Indian Railways has been functioning from 01.04.2003 with its Head Quarters at Bhubaneswar, the Capital city of the state Odisha. It comprises of three Divisions namely Khurda Road, Sambalpur and Waltair. The geographical jurisdiction of the railway on the coastal belt in the eastern part of the country with 2817.59 route kms is however extended in 31 districts over three states Odisha, Andhra Pradesh and Chhattisgarh. These regions along with coastal line are rich in minerals and other natural resources and are on the threshold of an Industrial upsurge. East Coast Railway is poised to take the lead role in meeting the increased transport demand of the region which is coming up with several mineral based industries, mega steel plants and chemical & fertilizer plants. Ambitious plans are on the cards to augment and increase rail capacity to major ports like Paradeep, Visakhapatnam, Dhamra, Gangavaram & Gopalpur by enhancing their cargo handling facilities. Like the previous year, this year also East Coast Railway has marched on its glorious path in the financial sector by contributing an operating surplus of ₹10984.82 Crores and registering an operating ratio of 54.58 %. Among seventeen zonal railways, ECoR has bagged **1strank** in terms of **Freight loading and Originating Gross Revenue**.

Main business hubs and terminals on ECoR are: -

Divisions/ Hubs	Khurda Road	Sambalpur	Waltair
Sidings	Talcher – Coal Mines, Thermal power House (TTPS & NTPC), Global Coal & Mining (P) Ltd. Paradeep – Port, IOCL, HPCL, PPL, IFFCO, Gypsum Sdg/PRPL, IOCL Pet Coke Siding (IPCP) Dhamra– Port, Sukinda Road. – NINL,JSL, MISL(MESCO) Jakhapura- Tata Steel Ltd. (TSLJ), Budhapank – NALCO, GMR Kamalanga Energy Ltd. Meramandali – Tata Steel BSL Ltd. Ghantikalnidhipur –Aarati Steels Ltd. Charbatia – IMFASdg, Nayagarh- Iron ore Sdg, Porjanpur – Iron Ore Sdg. Baudpur – M/s FACOR Byree- Dalmia Cement (Bharat) Ltd. Haridaspur-M/s RAMCO Cement Ltd. Chhatrapur-Gopalpur Port (Ph-I) Paradeep-M/s PPT-BOT Project (Ph-I), PEQCTPL (PEQP) Kerejanga -Jindal Steel & Power Ltd.	Bargarh Road – ACC Ltd., FCI Lapanga – Aditya Aluminium, Bhushan Power & Steel Ltd. Brundamal – Vedanta Alumina Ambodala – Vedanta Alumina Theruvali- IMFA (IMFT) Sambalpur-HIWS Badmal- OFB Rengali- Shyam Metalics & Energy Ltd.	Vizag Port – IOC, HP, Coromondal Fertiliser, Godavari Fertiliser, Nalco, Vizag Sea Port Pvt. Ltd. Gangavaram - Port, Vishakhapatnam– Vishakhapatnam Steel Plant Sdg, Mallividu Steel Exchange India Ltd., Kirandul – NMDC, Bacheli – NMDC Damanjodi – NALCO Tikiri – Utkal Aluminium International Ltd. Amagura- NMDC Singapuram Road- J.K. Paper Ltd. Suku- NADR, Duvvada- NTPC(STDV) Pendurthi-APWP Garividi- FACOR (FMP)
Terminals	NTPC/Talcher, GCBS/Paradeep, IOC/Paradeep, Sukinda Rd- JSL, KUR- HPCL, IOC, FCI DPCL/Dhamra. Paradeep – PICP (PFT), Chhatrapur- IREL (PFT)	FCI/Bargarh, Bhushan Steel Plant/Lapanga, Vedanta Aluminum/ Ambodala,FCI/Sambalpur, AryanIspatPvt. Ltd/ Lapanga (PFT)	Vizag Port, Vishkhapatnam new GC/VSKP, Visakhapatnam Steel Plant/ VSKP, Nalco/DMNJ, Jaggayyapalem- CONCOR (PFT)

ECoR is also rich in tourist places like famous Sun Temple at Konark and at Arasavelli, LaxmiNarasimha Temple at Simhachalam, Samaleswari Temple at Sambalpur and Chilka Lake, Chitrakoot waterfalls, Araku tribal Village, Lingaraj Temple of Lord Siva, Jain Temples at Khandagiri, Udaigiri, Buddhist Temple at Dhauli, Nandankanan Zoo etc. The holy place of Lord Jagannath at Puri attracts devotees round the year.

Action Plan Performance

Sl.No.	ITEM	Units	2020-21	2021-22
1.	a) Operating Ratio b) Operating Surplus	% Rs. in Crore	47.34 9226.99	54.58 10984.82
2.	a) Electric Loco Utilisation (TB) (on all services) b) Diesel Loco Utilisation (TB) (on all services)	Eng. KM / Day Eng. KM / Day	383 412	388 458
3.	a) Wagon Turn Round (including surplus empties) b) Wagon KM/wagon-day (in use) c) NTKM/Wagon-day (on line) (8w)	Days	2.31 190 8509	2.06 210 10138
4.	Originating Freight Loading (Rev.)	Million Tonne	204.90	232.13
5.	a) Originating Passenger Revenue b) Originating Goods Revenue including other goods Revenue	Rs. in Crore Rs. in Crore	439.37 19835.58	1162.18 23184.83
6.	Coaching Punctuality (Mail/Exp.)	%	95.82	89.23
7.	Safety – Total No. of Accidents	Nos.	01	04
8.	Asset Reliability a) Rail Fractures b) Weld Failures c) Diesel Loco Failures (OR) d) Electric Loco Failures(OR) e) Wagon Detachments f) Coach Detachments g) OHE Failures h) Signal Failures (OR)	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	30 04 41 120 60 02 25 952	26 11 39 108 28 02 132 1325
9.	Fuel consumption (Ownership basis) a) Passenger b) Goods	Ltrs./000GTKM Ltrs./000GTKM	3.57 1.71	3.63 1.74
10.	Electric consumption (Ownership basis) a) Passenger b) Goods	Kwh/000GTKM Kwh/000GTKM	18.82 4.93	18.35 5.55
11.	Scrap Disposal	Rs. In Crore	273.49	313.74

State-wise & Division-wise Route Km for the Zone as on 31.03.2022

State	Division			
	KUR	SBP	WAT	Total
Odisha	916.17	666.57	420.651	2003.391
Chhattishgarh	0	72.895	169.936	242.831
Andhra Pradesh	55.51	0	515.857	571.367
Total	971.680	739.465	1106.444	2817.589

FINANCIAL PERFORMANCE

The year ended with an operating surplus of ₹10984.82 crores against the target of ₹11800.05 crores. The operating ratio of this Railway for the year 2021-22 is 54.58% against the target 52.45%.

Passenger Business

ECoR is serving for non-suburban traffic only. Originating number of Passengers during the year 2021-22 is 34.45 million compared to 9.73 million in 2020-21, registering an increase of 254 %. However, number of Passengers carried during 2021-22 is 63.24 million compared to 19.40 million in 2020-21. Passenger Kilometres, which is the product of number of Passengers carried and average distance travelled is 17208.38 million during 2021-22, compared to 5860.30 million in the previous year. The abnormal variation in traffic trend is due to COVID19 situation during 2020-21. During 2021-22 the originating Passenger revenue was ₹1162.19 Crores and apportioned passenger Revenue was ₹ 1134.76 Crores.

PASSENGER AMENITY

A. Khurda Road Division:

- ✦ Hon'ble Minister of Railways, Electronics and Communication & Information Technology Shri Ashwini Vaishnaw laid the foundation Stone for development of the Second Entry and Circulating area of Cuttack Railway Station on 07.01.2022. The development works for 2nd Entry will have facilities like Parking for Two/Three/Four Wheelers, Pickup and Drop point, Parking for Ambulance, VIP vehicles etc. including a Wider Approach Road, also flagged off the Puri-Hatia-Puri Tapaswini Express with Rajdhani like Coaches on 06.01.2022.
- ✦ Moving towards one more passenger amenity, “**Quick Watering System**” installed at Khurda road Railway station, with which a 24 coach train can be filled in less than five minutes and thus reducing train detention period and water wastage.
- ✦ Toilets for divyang friendly passengers were provided at 5 stations (Bhadrak, Tomka, Salegaon, Budhapank, Bhubaneswar).
- ✦ First class & second class waiting hall at 4 stations (Tomka, Patia P.H, Birpurushottampur, Palasa) were improved.
- ✦ The circulating area of Newgaramadhpur, Kerajang, Kaluparaghat, Humma, Jhadupudi, Golanthra Road stations was improved by providing approach road, chequerred tile surface, concrete surface etc.
- ✦ Additional platform shelters were provided at 3 stations (Jhadupudi, PatiaP.H,Puri)
- ✦ Ramp at entry of station (Palasa) was provided during the year.

B. Sambalpur Division:

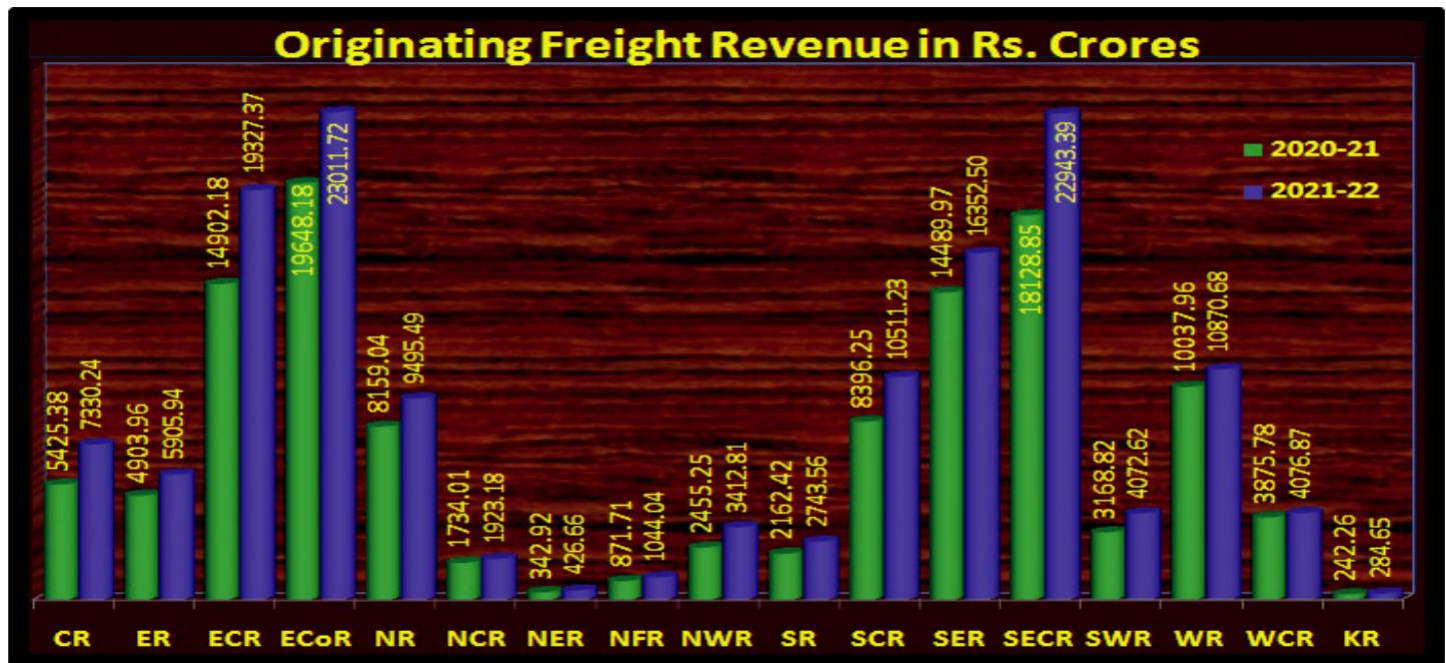
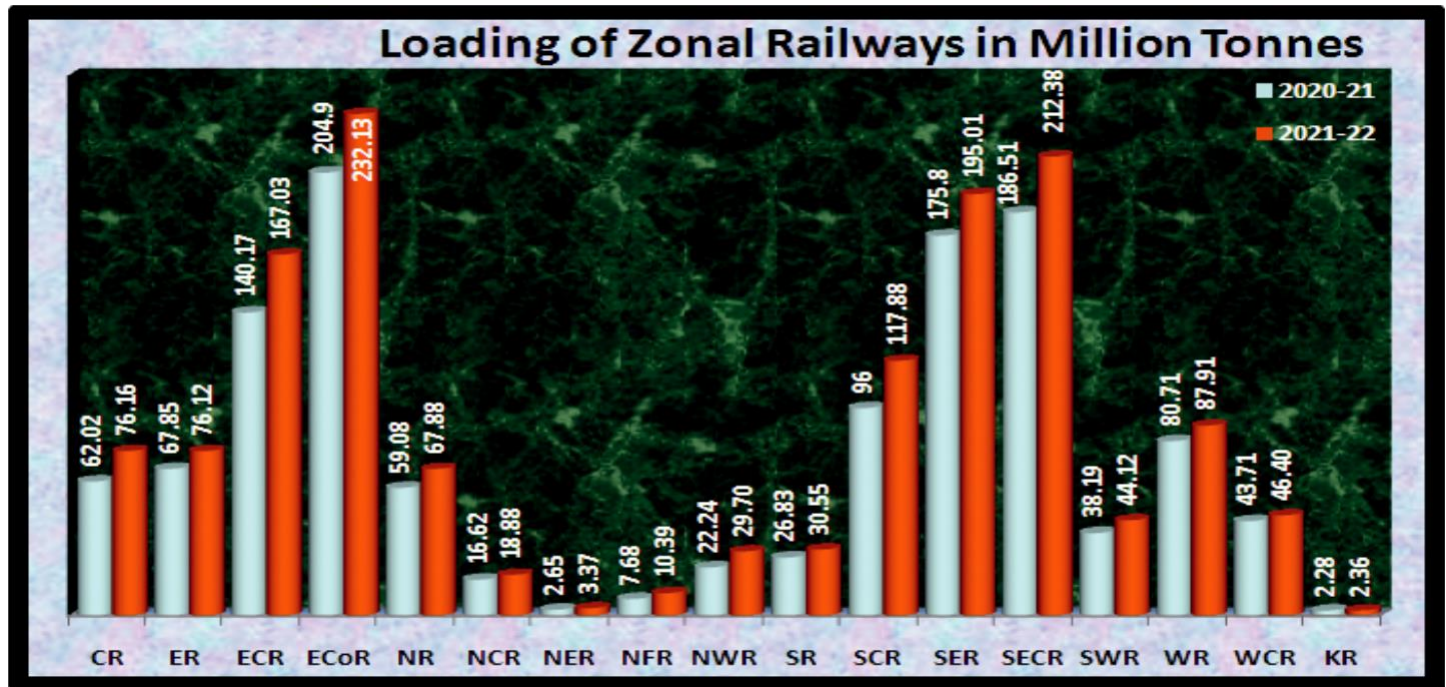
- ✦ Additional PF sheds have been provided at CHAR(PF-2), JUJA(PF-1), BLGR stations and additional FOB has been provided at CHAR station.
- ✦ Improvement to circulating area at KBJ, BWIP, JUJA, HKG, BRPL, LSX, BLGR, LSX, BUDM stations have been done. Total 44 Nos additional benches on PFs have been provided at ANMD, BMKJ, BLSN, KMK, & DFR stations.
- ✦ Divyang friendly toilets have been provided at JUJA, GBQ, ATS stations and improvement to waiting halls have been done at KBJ, BWIP, BRGA, KSNG, BRPL,HKG,BLGR& DFR stations.
- ✦ Toilets in circulating area through CSR fund have been provided at RAIR, MANE, SBP, DFR, BONA, JUJA, SSN, RGL, KBJ & KRAR stations.
- ✦ Raising of PF surface done at JUJA (PF-1), ANMD, BLSN, ARN, KMK, BMKJ, MRBL,RNBT stations. Concreting of PF surface done at ARN (PF-1 & 2), KMK (PF-1,2& 3), MRBL(PF-1 & 2), BLSN(PF-1), BMKJ(PF-2 & 3) stations.
- ✦ Ramp at entrance of SFK, TIG, DOBH, BRGA, BLGR & BUDM stations have been provided. Standard Tactile guide/ pathway to platform have been provided at KRAR, ARN(PF-2) stations.

C. Waltair Division:

- ✦ Additional platform shelters are provided at 3 stations (DIR, KDPA and CJS).
- ✦ Foot over bridge is provided at 01 station (GIZ). Two stainless steel FOBs were provided at NWP station.
- ✦ 141 additional benches are provided this FY. (DUSI-09, KBM-10, TIU-10, CJS-13, KPRR-33, AGB-13, DIR-33, JYP-7, KDPA-13).
- ✦ Improvement of waiting rooms is done at 03 stations viz. VZM, JDB, LKMR.
- ✦ Rising of PF surface done at 04 stations viz. KBM, NML, SPRD & DB.

The originating revenue loading was 232.13 million tonnes in 2021-22 compared to 204.9 million tonnes in the previous year. The transport output in terms of originating revenue net tonne Kms (NTKMs) was 11355.05 crores in 2021-22 compared to 9606.43 crores in 2020-21. Revenue from freight traffic was ₹ 23012.33 crores, up by ₹3364.77 crores (i.e. +17.13 %) from the previous year.

Among seventeen zonal railways, ECoR has bagged **1st rank in terms of freight loading and 1st rank in freight revenue also.**



N.B: Freight Revenue excluding Other Goods Revenue.

Division-wise Performance (Originating Basis):

Division	Item	Unit	2020-21	2021-22	% Varn.
KUR	No. of Passengers	Million	5.09	17.46	243.03
	Freight Loading	Million Tonnes	131.37	152.46	16.05
	Passenger Revenue	Rs. in Crores	262.67	625.66	138.19
	Goods Revenue	Rs. In Crores	11278.34	14015.39	24.27
SBP	No. of Passengers	Million	1.36	4.33	218.70
	Freight Loading	Million Tonnes	12.36	12.79	3.48
	Passenger Revenue	Rs. in Crores	37.40	115.63	209.19
	Goods Revenue	Rs. in Crores	1096.98	1087.67	-0.85
WAT	No. of Passengers	Million	3.28	12.65	286.12
	Freight Loading	Million Tonnes	61.17	66.87	9.32
	Passenger Revenue	Rs. in Crores	139.30	420.89	202.16
	Goods Revenue	Rs. in Crores	7272.86	7908.64	8.74
ECoR	No. of Passengers	Million	9.73	34.45	254.15
	Freight Loading	Million Tonnes	204.90	232.13	13.29
	Passenger Revenue	Rs. in Crores	439.37	1162.19	164.51
	Goods Revenue	Rs. in Crores	19648.18	23011.72	17.12

NB: - **Goods Revenue (excl.GST& excl. advance freight) is excluding Other goods Revenue & Passenger Revenue is excluding Other coaching Revenue.

ENGINEERING AND CONSTRUCTION WORKS:

- 364.95 kms of track renewals CTR units were carried out in East Coast Railway.
- As on 01.04.2021, there were 742 level crossings (Manned LC=742 & Unmanned LC=0) on ECoR. 15 manned level crossings were eliminated & 85 nos. of manned LCs were upgraded from lower to higher class.
- There are 39 important bridges, 985 major bridges and 11,280 minor bridges i.e. total 12,304 bridges on ECoR as on 31.03.2022. In the year 2021-22, 100 bridges were rehabilitated /rebuilt.
- The existing level crossings are being replaced with Road Over/ Road Under Bridges in a phased manner. 01 nos of ROB have been commissioned during 2021-22.
- To replace the existing manned/unmanned level crossings, Limited Height Subways are being constructed on Railway's cost. 12 nos such LHSs have been completed in 2021-22. Further 96 no. of Limited Height Subways (LHSs) sanction available which are at different stages of planning and execution.

Project Execution:

- New Line :Mahipur- Nuagaon electrified section 13.05 Km. in Khurda Road - Bolangir section was commissioned on 25.03.2022
- Doubling Projects: Sections Commissioned- 75.305 Km.
- Works completed and ready for NI works/ CRS inspection. (106.54 Km.)
- Longer loop at Handapa station in SBP division & Electrification of Talcher - NTPC Kaniha siding completed for 31.09 km during the year.
- Break through achieved in 840m long tunnel in Talcher-Bimalagarh new line project on 26.11.2021.
- Drones are being used for surveying works.

System Improvement-

Khurda Road Division:

- Conversion of 39 nos of stone slab bridges into RCC Box in NRG-TLHR & KUR-PSA sections.
- 11 FOBs on platforms are constructed during the year against annual target of 10 stations.
- 3 additional platform sheds are constructed. Improvement to circulating area of 6 stations is done.
- Improvement to Waiting Halls of 3 stations is done.
- An airport style modular toilet is constructed and completed at Bhubaneswar station
- 185 Nos of additional benches are constructed on platforms at various stations.

- 13 Nos of platforms have been raised to High Level at 10 stations during the year.
- 6 stations are provided with Passenger Lift during the year.
- Ramp at entrance of station building at Palasa is done for Divyangjan passengers.
- Concreting of platform surface on 16 platforms (at 10 stations) is done during the year.

Waltair Division:-

- Escalators provided on platform No. 4/5 of Visakhapatnam railway station. Twin escalator on Platform No.8 of VSKP near Gate No.4 opened for public usage.
- Retiring room and dormitory inaugurated at Jagdalpur.
- Prepaid AC waiting lounge Inaugurated at Vizianagaram
- India's first stainless steel foot-over-bridge at Naupada Railway station.
- Construction of Ramp to facilitate transportation of Liquid Medical Oxygen (LMO) is done at VSPS.
- Replacement of Roller Rocker bearings is done in place of Elastomeric bearing for Br.No.1433 UP.
- Permanent closure of Manned Level crossing No ML 438 in lieu of ROB, ML 431, 451, 452, 454, 464, 467 and 482 in lieu of Limited height subways has been done.
- Bridge rebuilding/rehabilitation of 27 Nos. of bridges completed during 2021-22.
- 31nos Major bridge approaches have been strengthened in 8 Nos. in PSA-VSKP section, 4 Nos. SPRD-VZM section, 2 Nos. KRPU-SPRD section and 17 Nos. in KTV-KRDL section.
- Provision of concrete PF surface has been done at 4 stations viz Nellimarla, Tilaru, Kotabommali&Naupada.
- Provision of Additional PF sheds at 3 stations i.e.Dhanpur, Khadapa, Charamulakusumi
- Circulating area has been improved at 3 stations i.e. Visakhapatnam, Bobilli, Lakshmipur Road.
- 4 Stations viz, Jagdalpur, Araku, Chipurupalli, Damanjodi have been developed as Adarsh stations.
- Ramp at entrance of station building has been provided at Bobbili.
- Standard Tectile flooring on Platform has been provided at Jagdalpur.
- Toilets in circulating area through CSR funds have been completed at 14 on KR line and on KK line through CSR funds of MCL.
- 1st time in the history of WAT division, an amount of Rs.86.48 Crores earnings from land resources has been achieved against the target of Rs.40 Cores.
- Upgradation of existing RPF Barrack at Vizianagaram has been done.
- The Sagar Rail Vihar Park has been developed in about 2178Sqm in Visakhapatnam.
- 20 Nos. of Track Maintainer Restrooms provided in PSA-VSKP main line section.
- Improvements to The Vana Vihar Railway Park at Marripalem Railway Colony have been done.

Sambalpur Division:-

- Deep screening of plain track by BCM of 84.446 km is done.
- CTR of 42.875 TKM is done.
- 22 nos. of Bridge Rebuilding have been done during 2021-22.
- Through Weld Renewal (TWR) –27.247 Tkm with 4184 Nos. of FB welding by MFB plant was done.
- Deep screening of Turnouts -167 nos. were done.
- Ballast supply for 158117 cum & Insertion of 181224 cum was done.
- USFD scanning of Rail and welds – 6657.162km was done.
- Glued joints - 60 nos. of defective Glued joints have been replaced.
- Wayside lubricators have been installed at 03 nos. of curve.
- 79 nos. renewal of Ordinary/ overriding switches with thick Web Switches at different yards have been done for enhancement of safety.
- SEJ Replacement - 64 sets of ordinary SEJ by improved SEJ in LWR track.
- Tree Plantation – 86873 trees have been planted.
- Roof Top Rain Water Harvesting-02 nos. (at DETS / SBP & RV-II/2/1-6/SBP) .
- Water level Monitoring have been provided at Bridge Nos. 299, 406 & 588.

- CMS Renewal of 183 nos. of worn out CMS Xing & through turnout sleeper renewal 6 sets have been done.
- 37 km Toe load measurement of Track has been done during this period.
- OMS -2000 recording for 4508 kms was done & peaks are being attended regularly.
- 6670 nos. of visual inspection & greasing of Fish plate joints at yards & Major/Important bridges to control Rail Fractures.

MECHANICAL DEPARTMENT

- Supply of linens is gradually being started.
- Out of 54 Rakes, at present 52 Rakes/39 Trains are running on HOG. 37nos LSLRDs are running in place of one Power Car in 37 nos HOG Rakes. Thus generating capacity for commercial earning in addition to fuel savings and reduction in noise pollution & Power Car requirement during 2021-22.
- HOG Fuel savings: All LHB AC Coaches, LHB Non-AC Coaches and Power cars have been modified to work on HOG system. The fuel savings due to running of trains on HOG system is Rs. 64.26 Crore in 2020-21 and Rs. 112.74 Crore in 2021-22.
- 11KV/750 volt transformers have been installed at Coaching maintenance depot, Puri, Bhubaneswar for testing of HOG rakes. This has resulted fuel savings to the tune of Rs. 2.25 Crores during 2021-22 in testing of rakes. At VSKP depot it will be commissioned very shortly.

Innovations:

- One wire drum constructed to keep cable of plasma cutter in SPARME/TIG.
- Motorized Ladder of Tool Van was modified and fitted in tool van of SPARME/TIG for easy movement of man and materials.
- One model for connecting BP & FP air hose with Angle cock has been made by C&W/TIG and kept in Model Room of Crew Lobby/TIG.
- Quick Watering System arrangement has been commissioned at KUR station.
- OBHS control room has been started at Coaching Depot PURI with round the clock working .
- Railway Heritage Loco at BNR Hotel/ Puri is rehabilitated.
- Total 126 Nos. of Double Diamond have been formed, examined and issued BPC.
- Total 04 Nos. of in-motion weighbridges installed in this year.
- A "Movable gadget for detecting Roof leakage" has been fabricated at Coaching Depot, VSKP to detect the exact location of leakage in coaches.
- Material Recovery Facility (MRF) has been commissioned at Sambalpur
- FOIS integration of EIMWB of MAIL siding has been made .

DLS (Diesel Loco Shed)/ VSKP

- DLS/VSKP has earned ₹4.48 crores this financial year which is the highest ever earning of DLS VSKP during a financial year by carrying out different PSU loco works.
- Augmentation Work for homing 100 HHP Locos is completed.
- A Toy Train has been fabricated at DLS/VSKP consisting the replica of Steam Engine along with a Coach to use at Kalinga Rail Museum, Bhubaneswar.
- DLS has developed the 12V LED light to utilize in electrical loco during engine room & under gear inspection, repair & rectification works. Due to use of magnet, it can be fixed anywhere in the loco as desired by the maintenance staff. It is a simple and good innovation by DLS.
- During the second wave of Covid-19, DLS has taken up a life-saving project by in-house designing of humidifier, oxygen regulator when flow meter, regulator, humidifier were not readily available in the market.
- Two nos. 65T EOT Cranes were installed and commissioned for lifting of Electric Locos for replacement/ coil springs, Traction Motors etc. 25T/15T EOT cranes were commissioned in Light repair bay for lifting of spares.
- 1st Electric Loco (Loco no. 33257) directly commissioned at DLS/VSKP on 31.08.21 and was inaugurated by DRM/ WAT.
- DLS has commissioned 72 electric locos which is the highest ever in history of DLS.

EnHM- MAJOR WORKS DONE:

- Installation of Bio-toilet has been completed in all coaches of ECoR trains up to Mar'22. During April-2021 to March-2022, 24 nos Bio-toilet (Tank) were installed in 09 nos Coaches over ECoR.

- OBHS facility has been introduced in all eligible trains of ECoR till Mar'22.
- During the financial year 2021-22, total 7255 nos of cleanliness Drives have been conducted.
- Installation of Sewerage Treatment Plant (STP), Rain Water Harvesting (RWH) are done successfully.
- Water Audit, Energy Audit, Consent to Operate (CTO), IMS-Integrated Management System are completed successfully in many locations.
- Steps have been taken for Solid Waste Management and Air Pollution Control Measures in various stations & locations.
- Installation of Solar Plant & CCTV for monitoring Cleanliness are done in some locations successfully.

ELECTRICAL DEPARTMENT

- 15 rakes (11Trains) have been converted to HOG during 2021-22
- 41.12 lakhs units of green energy have been generated over ECoR by solar roof top plants and Rs.1.58 Crores has been saved by use of Solar energy during 2021-22.
- 100% LED light fittings have been provided at all Stations, Service buildings and Railway Quarters over ECoR.

Achievements

- Operation of RCD at BBS has been closed w.e.f. 23.04.2021.
- In order to run high speed trains (130 KMPH), 33 Nos. of LPs of KUR-division have been passed the aptitude test & are ready to run high speed trains.
- The Speedometer data of 662 Nos. of electric/ diesel trains have been downloaded & analyzed in KUR division.
- In order to control SPAD cases 597 running staff families were counseled by the CLIs and 18566 Nos. of switching off of Mobile phones of LP/ALPs was done during singing On to singing OFF in KUR division.
- 675.96 kWp Rooftop Solar plants at Rail Sadan (100.32 kWp), ANGL Loco Shed (274.95 kWp), CTC (165.59 kWp), IPM (95.4 kWp) and Sompeta (39.7 kWp) have been commissioned.
- Electrical Safety Week was observed in SBP Division from 01.05.2021 to 07.05.2021. During this week, an awareness campaign was undertaken in which banners, stickers and posters depicting electrical safety slogans were displayed at various railway stations, railway colonies and service buildings. Supervisors and staff took a pledge on "No Short-cut, never bypass any safety device" for achieving Zero electrical accident. On 07.05.2021, a webinar was conducted to emphasize the importance of Electrical Safety week and also special emphasis on CEA regulation-2010.
- "National Energy Conservation Week" was observed from 8th December to 14th Dec' 21
- 75.08KWp On-grid Rooftop Solar plant have been commissioned at Sambalpur Railway station.
- 7817 Nos. trees have been cut and 92470 Nos. tree branches were pruned in electrified sections of WAT division.
- As per latest Railway Board's guidelines the process for the collection of maintenance charges for 13 private siding is under progress and so far an amount of Rs. 2,02,26,008.- has been collected from five private siding owners in WAT division.
- Total scrap disposal of 15.37 MT ferrous and 23.93 MT non ferrous items, which has worth of Rs. 1,30,40,230/- disposed during the year 2021-22 in WAT division.
- OHE modification works were carried out in connection with raising of track speed to 130 KMPH in Main line involving alignment of 30 curves and adjustment of OHE stagger at 171 locations of WAT division.

ELS/VSKP :

- During this year, the electric loco holding at ELS/VSKP has reached to 370 with lowest manpower ratio 1.75.
- 59 nos 3-phase Locos were commissioned till date and another 05 locomotives are waiting for commissioning and 01 locos are allotted to ELS/VSKP.
- During the year, ELS/VSKP has achieved best ever (lowest) Unscheduled liftings 37 per 100 Locos of against previous best of 44 (2020-21).
- Scrap disposal in 2021-22 is to the tune of Rs. 46.66 crores which is 46.21 % more than previous year.
- ELS/VSKP has provided 'Hotel Load Converter' in 7 nos WAP7 locos by modifying the both power and control circuit

SIGNAL AND TELECOMMUNICATION

Signalling & Telecommunication is playing the role of catalyst in rapid growth of Indian Railways. Signalling over East Coast Railway is being modernised continuously by introducing new technologies. Telecommunication infrastructures have been continuously upgraded for efficient operation of trains and serving public.

Achievements

Electronic Interlocking/ Panel Interlocking Systems have been commissioned at 16 stations.

- Visakhapatnam Port Trust (VPT) - R&D yard of Waltair (WAT) division is commissioned with EI (MEDHA MAKE) on 07.02.2022.

75 sets of HASSDAC have been commissioned for block working which will ensure reliability in safe running of trains and will avoid accidents due to human error.

Data Loggers/ RTUs have been commissioned at 15 stations/ Locations.

- Fire Detection & Alarm Systems have been commissioned at 08 stations during the year.
- "Provision of Double Distant Signals between BALU-PSA section of KUR division and Ex. PSA-CPP section in main line of WAT division" gets completed and the entire 'B' route on ECoR between Bhadrak-Duvvada section is fit for 130 Kmph from signalling side.

The work of Double Distant signaling in the section Kaluparaghat (KAPG) - Chipurupalli (CPP) got commissioned within a record span of less than 12 months.

- 6 (Six) nos. of Intermediate Block Signalling (IBS) have been commissioned.

The single line IBS between Angul (ANGL) and Talcher Road (TLHD) was commissioned and it is the 2nd IB of East Coast Railway in single line section.

- Doubling has been commissioned in 06 sections (66 RKms).

CCTV under Nirbhaya fund has been commissioned at Titlagarh, Balangir, Koraput & Jagdalpur stations.

- Cummulatively VSS have been provided at 15 locations over East Coast Railway. This is addition to ISS provided at 4 locations. Kalinga Rail Museum has been facilitated with Audio reinforcement system, large format video display system, CCTV surveillance system, Wi-Fi system, Displaying of vintage S&T items & Counter communication system.
- IPIS integration with NTES has been done at 11 stations over ECoR.

CCTV have been installed at Weigh bridge locations of Lapanga, Kandel Road and Crew Lobby of Sambalpur division, DRM Camp office of Waltair Division and Kalinga Rail Museum at Mancheswar of Zonal HQ.

- FOIS is commissioned at Lingaraj Siding (Talcher), CC office/Keonjhar of Khurda Road Division and MGMT(VSPS)
- IMWB location of Waltair Division.

MATERIAL MANAGEMENT:

Achievements:-

- Implementation of e-RA in Procurement.
- Complete Digitalization of Procurement Process.
- Record Breaking Performance in Scrap Disposal.
- Ease of Doing Business: Auto EMD refund, Digital Submission and payment of supplier's Bills.
- Full implementation of Public Procurement Policies (MII, MSE).
- 100% implementation of working on e-office platform.
- Implementation of User Depot Module (UDM).

Innovations: -

- At Mancheswar (MCS) workshop direct delivery of the material at the door step has been started by Stores Department.
- Average Time Taken in Release of Purchase Orders is 2 days. ECoR has occupied No. 1 rank amongst railways over all Indian Railways.
- Tender Finalization (Average Days for FY 2021-22):- TC cases: 45 Days, DA cases: 06 Days.

- Scrap Disposal:- As against the target (fixed by Rly. Board) of Rs. 220 Cr., this railway is able to sale scrap worth of Rs.313.74 Cr. in 2021-22 which is 42.61% more than the target and it is the best ever sale performance of ECoR since its inception.
- Average time taken for payment of online supplier Bills : 08 days (Average Days for FY 2021-22).
- GeM Procurement: During FY 2021-22, Goods of 2418 number orders worth of Rs. 4188.17 Lakhs and Services of 107 number orders worth of Rs. 2338.66 Lakhs have been procured from GeM platform.
- End to End digitization (from indenting to payment) was implemented in case of stock items. With the implementation of UDM and subsequent integration with IPAS, all activities from indenting to payment are being done online for Non-Stock items w.e.f. Oct' 21.
- ECoR has been working 100% online on IREPS & iMMS platforms for all purchase activities. For other non-purchase activities, ECoR has switched over to e-Office in the entire Stores HQ office and in all other field units.
- KUR Division of ECoR achieved Rank No.1 position in all Indian Railways Divisional rank based on total PO value amount of Rs. 50.58 Cr. for FY: 2021-22.

MEDICAL FACILITIES

East Coast Railway provides preventive, promotive & curative health care services to its 48520 no. of employees and 27394 no. of RELHS Card Holders and their family members (Total Railway beneficiaries – 248868) through a network of Hospitals - One Central Hospital at BBS, three Divisional Hospitals and 28 Health Units. Besides Railway beneficiaries, Railway Doctors also attend sick passengers in Trains and Stations on being called.

Achievements:-

- In-House out sourced Hemodialysis Unit has been inaugurated at DRH/WAT by DRM/WAT, ADRM in presence of CMS/WAT and other Doctors on 29.01.2022 and it is functional since then.
- New OPD Block: New OPD Block was inaugurated by General Manager of ECoR on 13th August 2021 at Central Hospital, Bhubaneswar and OPD is functioning there presently.
- Bhubaneswar & Vishakhapatnam Railway Stations are certified as “Eat Right Station” as per guidelines established by Food Safety and Standard Authority of India (FSSAI)
- HMIS (Hospital Management Information System) has been implemented in 04 Hospitals and 27 Health Units of E.Co.Railway. Software replication is done by Rail Tel.
- Registration of patients and prescription generation facility in OPD is available.

PERSONNEL MANAGEMENT

The Personnel Department handles Personnel Management and Human Resource Development in the zonal railway. It looks after appointments, transfers, postings, promotions, performance assessment management, training, employee payments, retirement benefits, employee welfare activities, manpower planning, industrial relations, implementation and clarification of personnel policy, rules and regulations.

Achievements:-

- 90% of court cases (190/212) were disposed of in favour of Railways.
- 100% of staff grievances were disposed 689/689).
- 1171 settlement cases (NR-795 & ONR-376) were finalized.
- 1082 Nos. of candidates were recruited through RRB & 59 candidates were recruited through RRC.
- 78 Medically de-categorised cases were finalized.
- 916 RTI cases have been disposed on top priority within target time (100% cleared).
- All 559 Nivaran& CPGRAM cases disposed within target time (100% cleared)
- 10 Ex-gratia settlement were finalized during this period (100% cleared)
- 196 Nos. of COVID Compassionate Ground Appointment finalized (100% cleared).
- HRMS successfully implemented over ECoR.
- As a part of commemorative activities under the 75th Anniversary of India's Independence “AZADI KA AMRIT MAHOTSAV”, Personnel department celebrated anniversaries & centenaries of famous personalities connected to the freedom movement.

SECURITY

For the safety and security of the travelling passengers, frequent drives and checks were conducted. In addition, Dog squads were extensively utilized during the year for checking of important Trains, for anti sabotage checks in Yards, Stations, Tracks, Empty Coaching rakes, Parcel and Goods sheds and other important Railway Installations to detect explosive materials.

- During the year 2021-22, 956 officers and staff of RPF have undergone various training sessions to sharpen their professional skill and to equip them so as to thwart any type of security threats to Railway installation and passengers.
- 35762 Mail/ Express trains are escorted by deploying 1,34,507 RPF including 9,183 lady RPF personnel.
- Punctuality has been improved by arresting unauthorized alarm chain pullers. During the FY 2021-22, total 1,292 persons are arrested U/S 141 Rly Act and fine realized Rs.5,83,950/-.
- RPF have successfully arrested 160 criminals who are found involved in various crimes against passengers.
- Drives are conducted at various PRS/ Reservation counters/ Internet points over ECoR, in which 123 touting cases are registered U/S 143 Railway Act with arrest of 130 offenders, 5005 Railway journey tickets valued Rs. 63,03,027/- are seized and 1235 IDs are blocked by using Cyber Skill.
- Apart from these so many outstanding detections and good works are done by RPF in the financial Year- 2021-22

PROGRESS IN HINDI

भारत सरकार की राजभाषा नीति के अनुसार समस्त कार्यालयीन कामकाज हिंदी में किया जाना अपेक्षित है। इस नीति के अनुपालन हेतु जिन अधिकारियों व कर्मचारियों को अपेक्षित हिंदी का ज्ञान नहीं है, राजभाषा विभाग उन्हें गृह मंत्रालय की हिंदी शिक्षण योजना की सहायता से उनके कार्य की प्रकृति के अनुरूप निर्धारित हिंदी पाठ्यक्रम (प्रबोध, प्रवीण एवं प्राज्ञ) का प्रशिक्षण संबंधी सुविधाएं उपलब्ध कराती है। राजभाषा विभाग का यह एक प्रमुख कार्य है।

राजभाषा नीति के कार्यान्वयन को बढ़ावा देने के लिए राजभाषा विभाग समय-समय पर मुख्यालय, मंडलों, कारखाना व प्रमुख स्टेशनों पर अनेक कार्यक्रम आयोजित करती है। राजभाषा के प्रयोग-प्रगति का जायजा लेने के लिए मुख्यालय, मंडलों, कारखाना एवं प्रमुख स्टेशनों में राजभाषा कार्यान्वयन समितियां गठित की गई है। इसकी तिमाही बैठकें नियमित रूप से आयोजित की जाती है।

पूर्व तट रेलवे में हिंदी के प्रचार-प्रसार तथा सांस्कृतिक गतिविधियों को बढ़ावा देने के लिए राजभाषा विभाग द्वारा हिंदी पखवाड़ा, हिंदी साहित्यकारों की जयंती, कार्यशाला, कवि सम्मेलन तथा अन्य विभिन्न प्रकार के प्रतियोगिताओं का आयोजन किया जाता है।

INFORMATION TECHNOLOGY

In an all India panorama, selected Rlys have been nominated by Rly Bd to act as the nodal Rlys who are to act as the interface between the users and the developer, i.e. CRIS. So this Rly has the privilege to act as the nodal Rly for Cash and Pay Module and Stores A/c Module. This Rly has fulfilled its obligations in this regard and both the modules have now gone live. Being the pioneer in promoting IT culture and bringing all the divisional units under the banner of digital family, IT Deptt has made significant strides in the following areas.

1. **BEST-(Blank Paper Ticket and Excess Fare Ticket System for Traffic A/s)-** The (earlier systems developed on outsource basis has been revamped with a new look system.
2. **BTS (Bill Tracking system):** To bring in more transparency and to enhance the image of working culture in ECoR, an innovative idea in the form of BTS, has been developed by this Railway which is related to the payments related to works contract.
3. **Railway Internship Portal for Students-** Online portal has been developed to facilitate students interested for Summer Internship in Railways.
4. **FPMS (Financial Proposal Monitoring System)-** This e-applications keeps track of all financial proposals received, processed, vetted or returned.
5. **SIAS-** Signal Incidences and Analysis System (SIAS) Various managerial reports like month and year wise, gear wise, cause wise, punctuality lost, station wise, route wise, make wise etc are generated from this software.
6. **e-APARS-** In Annual Performances and Appraisal Reports (e-APARS) ,employees can view their annual working performances.

7. **Data pulling from CMS System**-In SBP Divn, data from Crew Management System (CMS) portal is being uploaded in IPAS(AIMS) duly calculating the KMA, ALK etc for loco pilots as in WAT & KUR division.
8. **Incentive Module**- Duly developed by CRIS, it has been implemented in the lone workshop Mancheswar of ECoR and it is running successfully.
9. **On line NPS family pension bill**- It is being generated and processed on line for the beneficiaries of NPS staff.

STATISTICAL ORGANISATION

The main objective of the Statistical organization is to appraise the top management at specific intervals with the factual position of previous achievements and performance indices of present progress to enable them to make better and efficient future planning.

With the mechanization of the various compilation works, this branch has been able to compile all the periodical, monthly and annual returns for the year under review in time with the least number of Staff.

The Publication works namely "GM's ANR", "Pocket Book of Financial results and Important Statistical Highlights" are done by this department.

Public Relations Organisation

Public Relation Organisation of ECoRly, which exhibits the linkage between the Railways and the Public, plays a vital role in projecting the corporate image of East Coast Railway.

Press releases comprising of both dealings with train operations and development oriented – highlighting the achievements and innovations in the various facets of Railway activities are the basic inputs that keep the public informed of day-to-day working of the Railways.

Performance Highlights of the organisation during the year 2021-22 are as below:

SL. NO.	ACTIVITY	INDICATE NUMBER (S)	REMARKS, IF ANY
1.	PRESS RELEASES ISSUED	387	
2.	PRESS RELEASES PUBLISHED	387	
3.	PRESS CONFERENCE	24	
4.	PRESS TOURS CONDUCTED	02	
5.	PUBLICITY BROCHURES BROUGHT OUT	04	Limited quantity due to ban of printing.
6.	PARTICIPATION IN EXHIBITIONS	01	
7.	ADVERTISEMENTS RELEASED		
	a) Display	02	
	b) Tender	1097	
	c) Others	06	
8.	RADIO/TV SPOTS PRODUCED	04	
9.	RADIO/TV SPOTS BROADCAST/TELECAST	04	
10.	INTERVIEWS/BYTES ORGANISED	52	
11.	TWITTER		
	a) No. of Tweets done	3994	
	b) No. of Likes	46200	
	c) No. of followers increased	12958	
12.	FACEBOOK		
	a) No. of Posts done	3994	
	b) No. of Likes	15117	
	c) No. of followers increased	1531	
13.	YOUTUBE		
	a) No. of videos uploaded	12	
	b) No. of Likes	272	
	c) No. of subscribers increased	145	
14.	INSTAGRAM		
	a) No. of Posts done	1425	
	b) No. of Likes	7380	
	c) No. of followers increased	295	

DETAILS OF IMPORTANT EVENTS FROM 01.04.2021 TO 31.03.2022	
DATE	IMPORTANT EVENTS
01-04-21	Inauguration of safety bulletin
06-04-21	GM's Annual Inspection Central Hospital
07-04-21	GM's Annual Inspection MCS workshop
11-04-21	Vaccination at work place
15-04-21	Dr.B.R.Ambeskar Jayanti
21-06-21	Yoga Day Seminar
21-06-21	Hindi meeting
21-07-21	PREM Meeting
28-07-21	GM's Inspection BAM Railway Station & Press Conference
11-08-21	Shaheed Samark inauguration
13-08-21	Inauguration of OPD at Central Hospital
15-08-21	75th Independence Day Functions
19-08-21 to 23-08-21	Hon'ble MR visit to Bhubaneswar, Puri, Raygada, Koraput, Bolangir
10-09-21	Flagging off Hirakhand Express New Modern LHB Rake
26-01-22	73rd Republic Day function
06-02-22	Hon'ble MR visit
25-02-22	Hindi Meeting
28-02-22	GM's Annual Inspection Waltair Division
08-03-22	PNM Meeting
08-03-22	International Women's Day Celebrations
16-03-22	GM's Annual Inspection SBP Division
17-03-22	Kavi sammelan
22-03-22	PREM Meeting
23-03-22	CRS inspection Mahipur to Nuagaon
28-03-22	GM's Annual Inspection Khurda Division

Inspections carried out during the year by MR/GOI, CRS & GM and some Inauguration ceremonies by GM



Visit of MR to different places of SBP Division on 21st & 22nd Aug 2021



CRS inspection in BLSN_ANMD Section.



Inauguration of Staff Quarters by Ms. Archana Joshi, G.M/ ECoR during Annual Inspection to KUR Division on 28.3.22



Ms. Archana Joshi, G.M/ECoR's Annual Inspection in Waltair Division (KRPU - RGDA) on 28-02-22.



Ms. Archana Joshi, GM/ ECoR's Annual Inspection in Sambalpur division (TIG-SBP) on 15-03-22.



Inspection of Ms. Archana Joshi, GM/ECoR to Waltair Division (KRPU - RGDA) on 28-03-22.

FINANCE DEPARTMENT

A. Introduction:

Finance Department acts as an associate in managerial decision-making process by tendering advice to executives in all matters having financial implication. Apart from the above, internal check of all receipts and payments made to/ by Railway is done as per Codal provisions and laid down rules and regulations.

The major activities of Railway Accounts involve: -

- Participate in management to render financial advice and assist in speedy implementation of plans to achieve the set targets.
- Compilation of Budget in consultation with other departments and monitoring the budgetary process as per extant orders and provision, and also ensures implementation of austere measures issued from Board from time to time.
- Review of the trend of expenditure and submission of periodical budget reviews and returns to Hon'ble Parliament through Railway Board.
- Discharging other Management Accounting functions such as providing financial data for management reporting, assisting inventory management, participation in tenders, Surveys for major schemes, etc. in accordance with the relevant rules and orders.
- Conduct of periodical inspections of field units and stations to verify the reports submitted to Accounts Office, the progress of works being executed and to educate the field staff regarding the importance of maintenance of records and relevant registers.
- Ensure prompt settlement of claims against the Railway.
- Internal Audit of all revenue and payment transactions as per extant rules and procedures.
- Acts as interface between the management and statutory audit.

Besides the above, Finance Branch of ECoR is entrusted with the management of IT, Statistics and Traffic Costing Cells.

B. Operating Ratio:

The Operating Ratio for the year **2021-22** is **54.58 %** as against the target of **52.45%**. The position of Operating Ratio during the last six years is as under:-



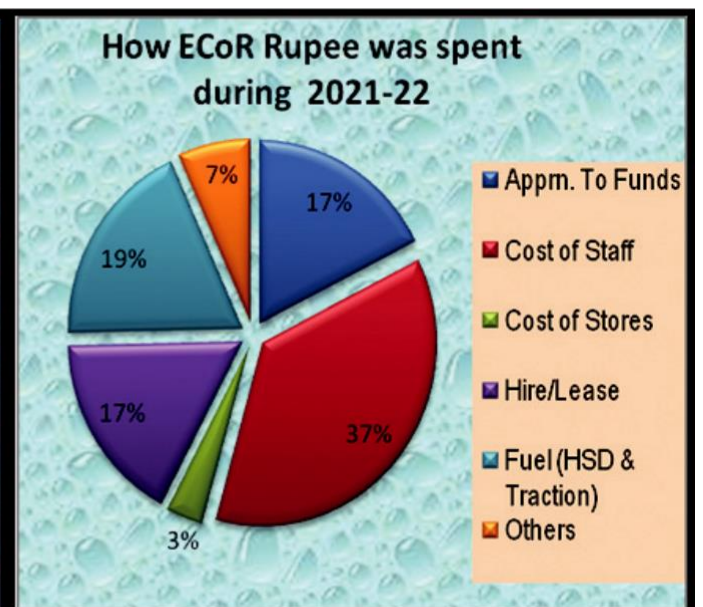
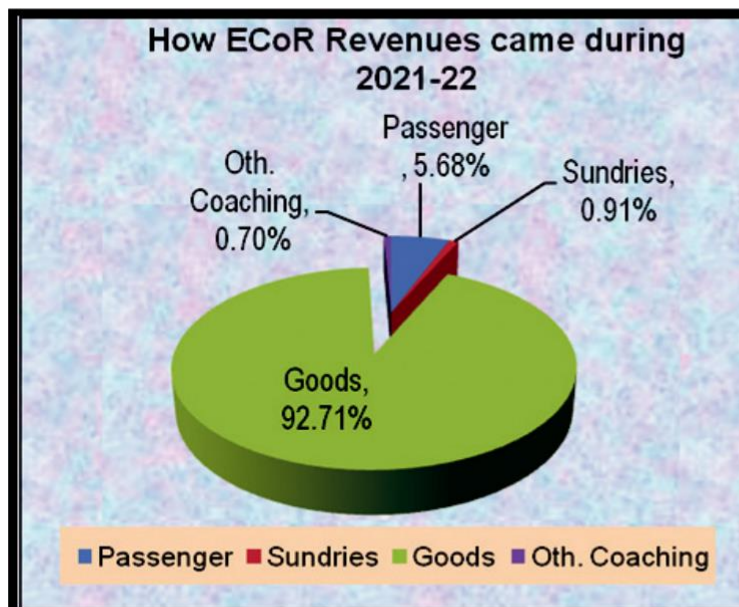
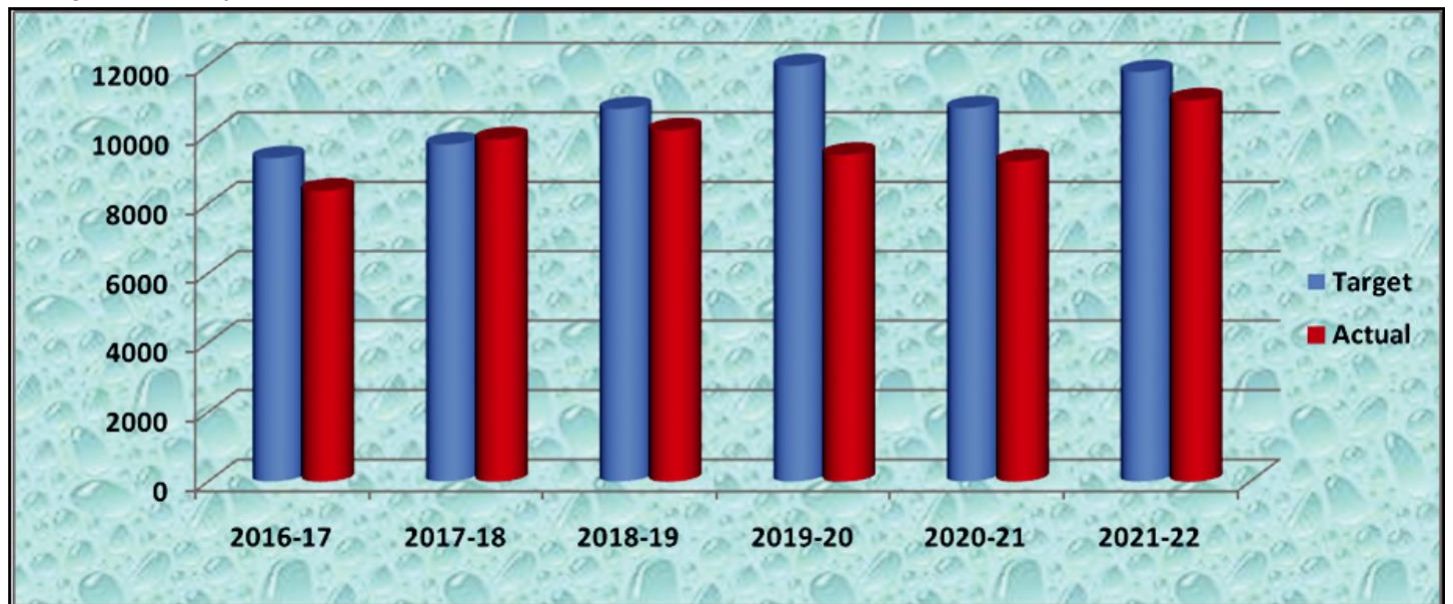
C. Performance Efficiency Index(%)

The performance efficiency index of East Coast Railway for the year **2021-22** is **44.18 %** against the target of **43.90 %**. The position during the last six years is as under:



D. Operating Surplus

The operating surplus for the year 2021-22 is Rs. 10984.82 Crs. against the target of Rs. 11800.05 Crs. The position during the last six years is as under:



E. Mission Items:

Finance Department in addition to Target set for Mission Items by Railway Board has set its own Target in other housekeeping items for the financial year 2021-22. Details of target and achievement during this period are as under: (Fig. in Crs. of Rs.)

Sl.No.	Heads	2021-22	
		Target	Achievement
1	Apportioned Revenue:		
(a)	Passenger	1286.88	1134.76
(b)	Other Coaching	147.56	138.82
(c)	Goods	19152.33	18511.22
(d)	Sundries	202.61	182.28
	Total	20789.38	19967.08
2	Originating Revenue:		
(a)	Passenger	982.07	1162.19
(b)	Other Coaching	137.34	134.10
(c)	Goods	23519.14	23184.83
(d)	Sundries	202.61	182.28
	Total	24841.16	24663.40
3	Total Working Expenses	10904.33	10897.26
4	Traffic Suspense	7.72	19.04
5	Bills Recoverable (Closing Balance) (Rs/Cr.)	55.95	49.81
6	Stock Sheet (Nos) (Closing Balance)	41	34
7	Accounts Notes (Nos) (Closing balance)	43	42
8	Audit References:		
(a)	Special Letter (Nos) (Closing Balance)	9	9
(b)	Audit Note Part-I	6	9
(c)	AIR Part-I	13	11
(d)	Draft Para	0	4
(e)	Provisional Para	0	0
9	Computerization of Pay Rolls (%)	100%	100%
10	Verification of Leave Account (%)	100%	100%
11	Payments of Salary through STEPS/NEFT/ECS/EFT/Cheque (%)		
	(i) Group A & B	100%	100%
	(ii) Group C & D	100%	100%

F. Notable achievements of Finance & Accounts Department during 2021-22.

Finance & Accounts Department of ECoR was able to achieve the following peaks during the Financial Year 2021-22:

1. The Financial-cum-Budgetary review was done round the year to manage Traffic Revenue, Ordinary Working Expenses(OWE) and Capital Expenditure(CAPEX) within the allotted Budget. ECoR has achieved an Operating Ratio of 54.58 % against target of 52.45 %.
2. As regards CAPEX, monitoring of fund utilization was done throughout the year, finally achieving an Utility Ratio of 97.63 %.
3. Gross Apportioned Revenue of Rs.19967.08 Cr. as against target of Rs.20789.38 Cr. and Last Year Revenue of Rs.17472.11 Cr.

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4. Goods Revenue to end of Mar'22 is Rs.18511.22 Cr. as against target of Rs.19152.33 Cr. and last year Goods Revenue of Rs.16913.89 Cr. The Growth in Goods Revenue is 9.44 % over Last Year.
5. Originating Freight Loading up to Mar'22 is 232.13 MT, i.e. an increase of 27.23 MT (+13.29%) over COPPY of 204.90 MT.
6. The Gross Originating Revenues to end of Mar'22 stood at Rs.24663.40 Cr. which is more by Rs.4216.42 Cr. (+20.62%) over COPPY of Rs.20446.98 Cr.
7. In Ordinary Working Expenses, Savings of Rs.24.41 Cr. over Final Grant (Rs.8984.33Cr) has been achieved with adoption of Cost Control measures.
8. The staff of Stock Verification Branch of Finance & Accounts Department played a significant role in identifying Scrap by conducting foot-by-foot survey as a result of which, a record scrap sale of Rs.313.59 Cr. has been achieved as against the target of Rs.220.00 Cr.
9. Compliances of Railway Administration on Chapter 2 of Draft Report of the Comptroller & Auditor General of India on Railway Finances for the year ended 31 March 2020 on 'Review on Implementation of Integrated Pay Roll and Accounting System in Indian Railways', Para No 3.7.2.6 "Excess Expenditure over Sanctioned Estimate on D&G Charges" of Audit Para Chapter-3 of C&AG's Report No 24 of 2015, Audit Para No 3.2 of CAG Report No 19 of 2019 regarding "payment of Workers Welfare Cess by Railways in compliance to Building and other Construction Workers Welfare Cess" to RB has been submitted. Further, Remarks on Compliance Audit on procurement of Medicine and Surgical instruments and Review note on "Construction of ROB and RUB on National Highway by NHAI on NH Corridor" has been submitted to PDA.
10. Corpus money to the tune of Rs.62.01 Crores has been recovered from NSDL on Death/ Shifting cases of NPS subscribers to the end of Mar' 2022. The same has been apportioned and credited to proper heads (Demand No.13) and remaining amount has been settled/ disbursed to the nominees of demised NPS subscribers
11. Recoverable dues payment by Vishakapatnam Port Trust (VPT) has been made for an amount of Rs.13.00 Cr to end of March 2022
12. Inventory Turnover Ratio:

Inventory Turnover Ratio	Final Grant 2021-22	Actual
With Fuel	3 %	3 %
Without Fuel	1 %	1 %

13. During the FY 2021-22, an amount of Rs.235.31 Cr has been recovered against outstanding dues recoverable as compared to previous year of Rs.173.52 Cr.
14. Carriage Bill Outstanding has been brought down considerably from Rs 4.30 Cr to Rs 1.27 Cr by pursuing Long standing Payments from BSF (Rs 2.5 Cr paid) and AG offices.

G. Implementation of Accounting Reforms :

Efforts made for taking of Accrual based financial statements for financial year 2018-19 onwards on its own:

1. Accrual Based Financial Statements (ABFS) for the FYs 2015-16 & 2016-17 were prepared by the Central Team of CAO (AR) Office. As advised by Rly Board, steps have been taken by East Coast Railway for in-house preparation of ABFS from the FY 2017-18 onwards with engagement of local Chartered Firm.
2. Staff of all Divisions/ Units entrusted with Accrual Accounting work are capable for compiling the basic inputs like- Fixed Asset Registers (FARs) and Accrual Impact Sheet (AISs) i.e. Current Assets (CA) & Current Liabilities (CL) as per guidelines issued Railway Board and CAO (AR)/NR. Due to their persistent effort, FAR and CA/CL data have been compiled for the FYs 2017-18, 2018-19, 2019-20 & 2020-21.
3. FAR and CA/CL data for the FYs 2017-18, 2018-19, 2019-20 & 2020-21 have already been uploaded in the Accounting Reforms Management System (ARMS) Utility in AIMS before the targeted time line fixed by Railway Board. Apart from the above basic data, data on 'deletion/condemned Fixed Assets' and 'Rate of Ballast' have also been uploaded in ARMS Utility.

4. After several rectifications/modifications in the system, Trial Balance and ABFS were generated for the FY 2017-18 & 2018-19 as per feedback given by ECoR. ECoR is the first among all Zonal Railways to finalize the ABFS for the FY 2017-18 & 2018-19. Accrual Based Financial Statements (ABFS) for the FY 19-20 have been successfully generated and sent to CPM/AR.

H. Innovation and use of technology :

Innovative steps taken by the railway using IT Technology for improving the day-to-day working of Accounts office:

IT Innovations: Signal Incidences and Analysis System (SIAS):

It is developed with Oracle 10g XE at the database level and HTML/CSS/JAVA at the front end provides the users interface i.e. the forms, where users have to input the relevant data. Upon processing it, various managerial reports are generated. This helps in analyzing the nature of failures (which may be route wise, cause wise, gear wise, make wise, duration wise and punctuality lost) thereby alerting the management about the possible recurrence such failures.

Railway Identity Card

The system for filling up the hard copy of one's particulars is now a matter of past. The staff and Officers of HQrs only desirous to have an identity card (may be due to new appointment, promotion to higher grade etc) has to fill up the relevant data online. The contents will seamlessly flow after approval by the authority concerned to CPO Office for preparing the I/ Card.

The benefits of the system I) No. filling of hard copy and II) Retrieval of required data as per requirement. This has been developed in house and hosted in the RAILNET for the users, wide acceptability.

Implementation of on line NPS Family Pension in Sambalpur and Khurda Division:

The module caters to the demand of Sambalpur and Khurda Division as far as payment of NPS Family Pension through online to the beneficiaries are concerned.

I. Innovations related to Control of Expenditure, Finance Proposals, Internal Check and Budget Related Activities:

- In FY 2021-22, considering significant drop in Passenger Operations, Outsourcing done for Maintenance Activities of Coaching Depot, Carriage Workshops and Diesel Loco Sheds/ Diesel Loco POH workshop has been reduced. Thus, the same trend of expenditure is continuing as in FY 20-21 with SL being at last year Expenditure level. The Expenditure upto Dec'21 is Rs 40.71 Cr as against SL of Rs.75.32 (54.05%) and is within limit.
- Rationalization of Crew Sanctioned Strength and Bringing down Crew per Cab Ratio (LP/ALP) to 6.1 for Goods Train as against earlier Crew to Cab ratio of 7.67 to suffice Train Operation requirements and HOER provisions has been concurred by Finance as part of Crew Review for FY 21-22 and Sanction Memorandum issued which has been lead to considerable Cost control of Revenue Expenditure and existing cadre will shrink by 789 numbers. Similarly for Guard 10% reduction as given in Economy measures target achieved and 316 posts surrendered.
- This Office has worked out the procedure for expenditure booking and accountal of Vadlapudi Wagon Workshop where in Periodic overhauling (POH) of wagons will be done by Railway PSU selected through competitive bidding (M/S Braithwaite) and subsequent reimbursement of all expenditure by ECoR and has sent the suggestion to OSD/ Accounts/RB. It has been suggested for introduction of separate Sub Head under SMH 04-300 for work to be carried out by Rly PSU/ Braithwaite and the expenditure has not been through CAPITAL Suspense (P-7200/WMS) to Revenue Head 6D-PU 34 & 35 (H/L POH). The expenditure in New Head of Allocations i.e. SMH 04-322/333/334/342 and 362 has not been routed through WMS and will be directly booked to Revenue Head of allocation.
- To cater to COVID-19 treatment requirements, Oxygen (O2) plant for DRH/WAT, CH/MCS, Oxygen concentrators for CH/MCS and Divisional Railway Hospital and Contract Medical Practitioners (CMP) over and above sanctioned cadre for COVID purpose, Special Imprests have been created duly concurred. COVID 19 related urgent proposals and bills have been accommodated on top priority.
- Expression of Interest (EOI) for AI based Predictive Maintenance of Points and Crossings and ROR for LTE and TCAS of HUN (for Rs.795 Cr at ROR of 19.70%) and HDN network (for Rs.538 Cr at ROR of 27.83%) of ECoR was concurred.

- Detailed analysis of Traction expenditure in ECoR has been carried out and detailed section wise data of Diesel Trains being run under wire had been taken from CRIS. For ensuring economy in Traction expenditure guidelines for running Diesel Trains in case of essentiality (Non electrified Siding etc) or unavailability of Electric Loco taking into consideration allied factors such as energisation of TSS, Crew availability, Availability of Electric Loco, pattern of working in Siding /Terminal etc. have been issued. Further, advice for improvement of Load factor of TSS of all the Divisions, feasibility of keeping HSD inventory in RCD to 3-4 days as against current above 5 days and reduction of HSD-oil consumption by closing of @ least 20 % of RCDs has been issued. Monitoring of Phasing out of Diesel ALCO locos as per RB letter and suggestion for exploring Option for transferring Diesel Loco on lease basis or selling to other neighbouring Countries, Port authorities, Siding Holders etc has also been given. Modification in Billing methodology and Rates which are favourable to Railways, to be negotiated with DISCOMS and State Electricity Boards has been stressed upon along with the need for Strategic Running of Trains, specifically in the high penalty area where the Load Factor is very low. Aiming for Purchase of Solar Power through PPA in view of per unit Tariff of Solar Power being low at Rs 2.48/KWh has been stressed for Non Traction usage.
- ECoR's average time taken for payment of NS and Stock bills is only 8 days during FY 21-22, which is lower than other Zonal Railways /Production Units. Similarly EMD refund (online) average time taken is 1 day whereas in case of other Zonal Railways, it is more than 6 days. Stores TC is finalized in 47 days in this Railway, which is amongst lowest three Zones. Bill passing is done in a quick and transparent manner to vendors and will affect tender pricing in a positive manner.
- In order to expedite the settlement payments in death cases due to COVID- pandemic Joint Procedure Order (JPO) duly signed by FA&CAO (HQ) and CPO/Admin has been issued for immediate relief to the families of the deceased Railway Employees as a "one time measure" on 09.06.2021. Out of 197 COVID related Death Cases of employees, PPO of 146 deceased employees issued and most of the settlement dues finalized.
- SBI has confirmed the account no. for use of PGPRS/POS transactions and the same has been shared with CommI. Dept. vide Lr.No. ECoR/BBS/Accts/Books/RIB/POS-E-Receipt. Dtd.21.09.2021. The reporting format has been confirmed by SBI.
- Additional Reports for Reconciliation and Accountal of IREPS Transactions in AIMS has been implemented with help of CRIS has also been implemented. Generation of Auto TC/JV as per Transaction Type (BSV, EMD, TDC etc) for IREPS transactions. Credit Scroll towards IREPS Transactions shared by SBI to IPAS is being used for RIB reconciliation and Uploading of credit scroll by individual Railways has been discontinued as per suggestion of ECoR.
- The first unified Standard Schedule of Rates-2019 (Formation, Bridge and P. Way Works) has been finalized after detailed review, cross references of rates of Divisions, Railway Board etc. This has been form the basis for adaption of Rates in relevant Detailed Estimates/Revised Estimates and many anomalies in earlier rates have been streamlined. It can be appreciated that P. Way Rates (Sec. Z) were adopted from SE.Rly. 1992 Booklet and has to updated for 20 years.
- Timely Submission of RE-BE of OWE, CAPEX and Revenue for FY 2021-22 has been ensured.
- Significant notional Savings have been achieved while pruning the Estimate in Finance proposals mainly in Outsourcing of Track Machines for Deep Screening work for 10 years for 1000 TKM for Rs.20 Cr & in Building Estimates where 75 % of DSR rates(CPWD) has been taken (which is closer to earlier USSOR rates prevalent in Zone) have been achieved.
- Improvements for MERS e-receipt accountal & reconciliation as well as process flow for automated reconciliation of POS and PGPRS receipts through System (IPAS) have been shared with Railway Board/OSD (Accounts) and CRIS vide letter dtd.17/18.11.2021.
- IRFA debit /Credit through auto TC and auto JV by fetching of IRFA data from ICMS and FOIS to prevent any manual intervention and wrong calculation was designed by ECoR for all Zonal Railways and submitted to RB. It was made live in Dec 21 and has resulted in reducing manual checking as well as any mismatch.

J. Innovations and System Improvements in Traffic Accounts Activities :

- O&M Agreement signed with HPRCL (SPV) as per Railway Board guidelines, Concession Agreement and as per unit cost of maintenance of Assets of ECoR in Annual Statistical statements of the FY.
- JPO on levy of Engine Hire Charges under EOL working of Private Siding (PFTs), Terminals under Port Trust Railway except Terminals operating under NGR has been finalized for the purpose of levying Demurrage Charges and Engine Hire Charges.
- Detailed policy guidelines and clarification for City Booking Agencies for Parcel Traffic have been issued to units for maximizing Parcel Revenue.
- As part of initiative taken under Business Development Unit (BDU), Traffic Earnings have been augmented by Rs.200 Crs from April 2021 to August 2021. Further, Rs. 2.36 Cr has been solely collected against Mango Traffic loaded during 2021-22 over ECoR through Kisan Rail Service.
- Owing to BDU initiative 22.95 MT increased over last year loading has been done mostly in Coal, Iron & Steel, Iron Ore and Food Grains. Additional traffic has been captured in Fly Ash((MBMB/MAAL/NTPC Kaniha, STDV), Steel (VSPS to MGPV), Iron Ore(from Hindol Road), Q.Stone (from CPP), Red Mud (from MUAT/Tikiri & MVAA/AMB), Ammonium Nitrate(From VZP), IFFCO Fertilizer(From DNM), FG, Fertiliser, Cement and Steel.
- Rs 3.47 Cr Recoverable dues has been recovered from M/S Vedanta Limited (VAL) (Rs.2.54 Cr towards Repair of Sick Wagons in MVAA Ambadola Siding, Rs 33.74 Lakh D&D Charges (AMB & BXQ) and Rs 60.99 Lakh Restoration Charges (AMB & BXQ) due to Finance initiative in getting it adjusted from LTTC credit and also by disagreement to Divisional view and prevailing upon PCME.
- Review and Suggestions on Concession agreement for redevelopment of BBS station has been shared with PCE for communicating to Railway Board.
- Internal check of EFTs issued by TTEs is being conducted through a locally/departmentally application software developed by IT Branch of ECoR with proper coordination with TA Office is running successfully since 18.10.2021.
- Unconnected balance under Deposit TA for more than 3 years amounting Rs. 3 Cr (approx.) was credited to Sundry Earning.
- Distance vetting for three private freight terminal DDIP, DDSP and PEQP for operationalisation under jurisdiction of Paradeep Port done.
- Unrealized e- freight amount amounting to Rs 16.85 Lakh recovered from PNB/CSPR branch.

K. Other Innovations and System Improvements:

- 258 nos. of Stock Sheets & 12 no. of Accounts Notes have been cleared to end of 2022.
- 4 Audit Paras, 5 Provisional Paras, 1 Draft Para, 5 Special Letters, 5 AIR Pt. I have been cleared to end of 2022.
- 138 Sr.SOs/ Sr.TIAs/ Sr.ISAs have been upgraded to Level 9 on completion of 4 years of regular service in Level 8 as per RBE. No. 39/2021, which resulted in dropping 13 MACP, related CAT cases.

L. Savings achieved (To end of Mar'22) (Rs./Crs.)

Sl. No.		Particulars	To end of the Month		
			Actual	Notional	Total
1	General Accounts	Internal Check & Finance Scrutiny	3.56	114.12	117.68
2		Energy Bills			
		Traction	0.00	6.97	6.97
		HSD Oil	0.00	0.00	0.00
3		Pension			
		Overpayment Detected	0.00	0.09	0.09
		Overpayment Recovered	7.67	0.00	7.67
4	Con. Accts.	Internal Check & Finance Scrutiny	1.14	59.39	60.53
5	Traffic Accts.	Internal Check & Finance Scrutiny and others	197.89	10.89	208.78
		TOTAL	210.26	191.46	401.72

M. Plan Expenditure

The funds under Planned Expenditure (Final Head) during the year 2021-22 is achieving an Utility Ratio of 97.63 %, as against allotment of Rs.5789.92 Crs. (Net), Rs.5652.82 Crs. have been spent.

TRANSPORTATION OPERATING

A. FREIGHT OPERATION:

Since reorganization of IR in 2003, East Coast Railway has continued in creating history of achievements. During the fiscal 2021-22, ECoR continues to be the **Highest Freight Loading Zone** for the 5th successive year with an unprecedented all time high loading of 232.13MT amongst all railways and crossed 200 MT for 3rd consecutive year which resulting ECoR grew by 27.22 MT over last financial year translating 13.3% growth.

Despite the year long COVID pandemic, the zone made all significant efforts in picking up the pent up demand for Coal, Steel & Iron ore through its uninterrupted 24X7 freight trains operations across the country.

Coal: Coal traffic has registered a growth of 18.78 MT (+17 %) by introducing more number of Hopper wagons and faster turns round of wagons. From October the nation saw an unprecedented coal crisis. ECoR again rose to the challenge and loaded 16.7% more of coal especially from Talcher which loaded 23% more in FY; this helped in building up coal stocks in many power houses throughout the country.

Steel: Loading of steel traffic has increased significantly with a growth of 2.9 MT (+16%) in comparison to last year due to uninterrupted supply of steel loading wagons to ports for export and Northern India.

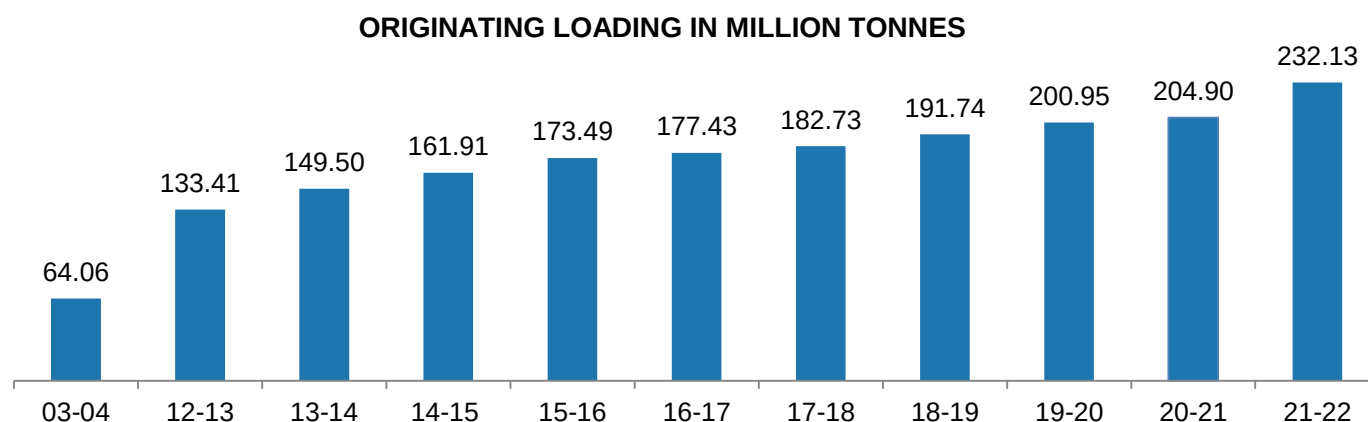
Iron Ore: Loading of iron ore has picked up with a growth of 2.32 MT (+8%).

From October the nation saw an unprecedented coal crisis. ECoR again rose to the challenge and loaded 16.7% more of coal especially from Talcher which loaded 23% more in FY; this helped in building up coal stocks in many power houses throughout the country.

ECoR did not allow the momentum of loading to be slackened despite Covid. ECoR ran **44 nos of Oxygen special** in short notice to various parts of the country which was appreciated by one and all.

Apart from the above, Business Development Units have been formed at zonal & divisional level to explore the possibilities of additional traffic by diverting traffic from road to rail and also attracting new traffic. Major focus was on new commodities like fly ash, red mud, granite, cotton bales, limestone chips and export bound slag and steel which expanded our freight basket.

The loading trend is represented graphically as under:



(i) TRENDS OF FREIGHT TRAFFIC IN LAST FIVE YEARS:

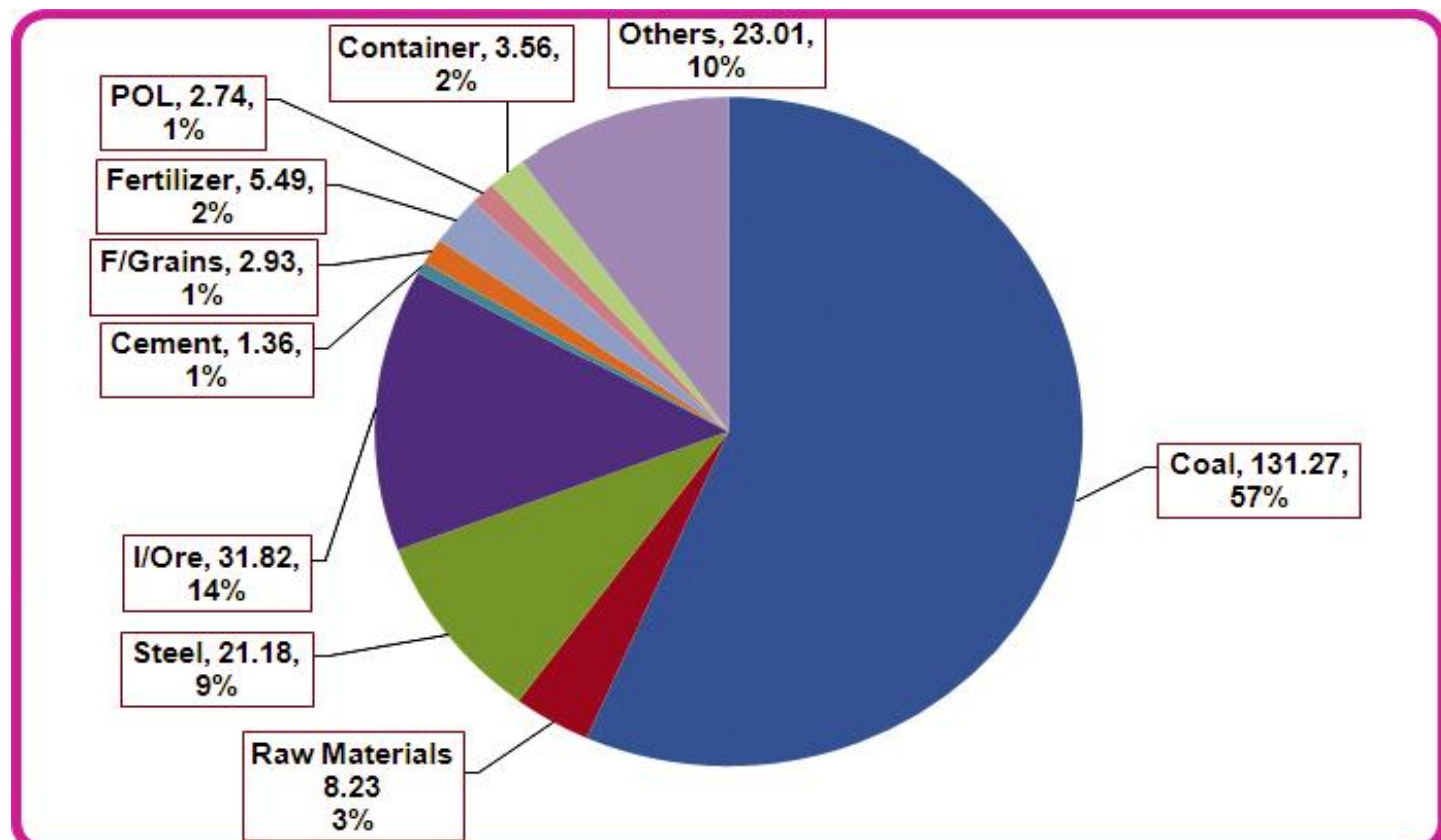
Items	17-18	18-19	19-20	20-21	21-22
Net tonne Kms (Billions)	89.10	89.75	96.76	96.06	113.55
Revenue Goods (Rs.in crores)*	17075	18180	20127	19648	23012

* Excludes other goods revenue such as wharfage, demurrage etc.

(ii) REVENUE FREIGHT TRAFFIC FOR IMPORTANT COMMODITY FOR 2021-22, COMPARED TO THAT OF 2020-21 IN MILLION TONNES:

Sl. No.	Items	2020-21	2021-22	Variation over 2020-21	
				Tonnage	%age
1	Coal	112.49	131.27	18.78	17%
2	RM for SP except I/ore	7.62	8.23	0.61	8%
3	Iron & Steel	18.24	21.18	2.94	16%
4	Iron ore	29.50	31.82	2.32	8%
5	Cement	1.00	1.36	0.36	36%
6	Food grains	2.76	2.93	0.17	6%
7	Fertilizer	6.18	5.49	-0.69	-11%
8	POL	2.91	2.74	-0.17	-6%
9	Container Services	3.14	4.10	0.96	31%
10	Others	21.06	23.01	1.95	9%
	TOTAL	204.90	232.13	27.23	13%

(iii) COMMODITY BASKET OF EAST COAST RAILWAY 2021-22 IN MT & PERCENTAGE:



(iv) HUB-WISE LOADING IN RAKES PER DAY & MILLION TONNES:

HUB	Rakes per day		Million Tonnes		Variation	
	2020-21	2021-22	2020-21	2021-22	Rakes per day	Million tonnes
Talcher area	42.9	52.9	59.66	73.00	10.0	13.34
Paradeep area	21.1	21.6	27.11	27.34	0.5	0.23
Dhamra	14.1	15.2	20.09	21.79	1.1	1.70
Vizag area	14.1	14.1	16.27	15.99	-0.1	-0.28
Gangavaram	9.5	9.8	13.33	14.00	0.4	0.67
Nayagarh area	6.9	6.4	10.39	9.65	-0.5	-0.74
KK-Line	11.8	13.8	18.72	21.15	2.0	2.43
Steel Plants	16.5	21.1	19.13	24.41	4.6	5.28
Aluminum Plants	7.0	8.0	7.54	8.45	1.0	0.91
Others	10.7	13.4	12.65	16.35	2.7	3.70
Total	154.7	176.4	204.89	232.13	21.7	27.24

(v) INWARD, OUTWARD RAKES HANDLED AT PORTS IN RAKES PER DAY:

PORTS	INWARD		OUTWARD	
	2020-21	2021-22	2020-21	2021-22
PARADEEP	24.5	29.8	18.0	18.2
DHAMRA	7.2	6.1	14.1	15.2
VIZAG	12.3	11.9	14.1	14.1
GANGAVARAM	5.0	3.1	9.5	9.8
GOPALPUR	1.1	1.6	3.7	2.3

(vi) INWARD, OUTWARD RAKES HANDLED AT MAJOR STEEL PLANTS IN RAKES PER DAY:

PLANTS	INWARD		OUTWARD	
	2020-21	2021-22	2020-21	2021-22
AARATI STEEL GHANTIKHAL (ASGN)	0.5	0.5	0.2	0.2
BHUSAN STEEL, LAPANGA (BPSL)	4.9	6.4	1.3	1.9
JINDAL STEEL, SUKINDA (JSLS)	1.6	1.7	0.7	1.2
JINDAL STEEL, KERJANG (JSPK)	8.8	8.8	4.1	4.1
ARYAN ISPAT, LAPANGA (MAIL)	-	0.2	-	1.5
TATA STEEL BSL, MERAMANDALI (MBMB)	8.4	8.8	4.5	5.0
SHYAM METTALIKS, RENGALI, (SMER)	0.8	0.7	0.3	0.2
TATA STEEL, JAKHAPURA (TSLJ)	7.0	7.3	2.3	2.7
RINL, VISAKHAPATNUM (VSPS)	6.9	8.6	3.1	4.3
ALL STEEL PLANTS	38.9	43.0	16.5	21.1

(vii) INWARD, OUTWARD RAKES HANDLED AT ALUMINIUM PLANTS IN RAKES PER DAY:

PLANTS	INWARD		OUTWARD	
	2020-21	2021-22	2020-21	2021-22
Hirakud Industrial Works siding (HIWS)	0.4	0.3	0.0	0.1
Aditya Aluminium, Lapanga (MAAL)	3.0	2.3	0.5	0.5
Vedanta ,Brundamal (MAVB)	7.3	7.2	1.2	1.5
Utkal Alumina, Tikiri (MUAT)	0.8	0.9	1.4	1.7
Vedanta,Ambadola (MVAA)	5.0	4.9	1.7	1.9
NALCO, Damonjidi (NLOD)	1.5	1.5	1.9	2.1
NALCO Smelter Plant,Angul (SCPM)	3.9	3.4	0.2	0.2
Total	21.8	20.5	7.0	8.0

WITH ZONE	I/C POINT	MADE OVER		TAKEN OVER		BOTH		
		2020-21	2021-22	2020-21	2021-22	2020-21	2021-22	%
SC	DVD	19.3	27.5	19.9	27.8	39.2	55.4	41.3%
SEC	LAE	14.6	16.2	14.2	14.4	28.9	30.6	6.0%
	IB	12.8	12.6	13.3	13.3	26.1	26.0	-0.7%
SE	JSG	11.0	10.0	11.5	11.5	22.5	21.5	-4.8%
	BHC	29.6	32.5	27.6	30.7	57.2	63.3	10.6%
	JRLI	10.2	10.2	11.2	11.0	21.4	21.2	-1.1%
TOTAL		97.6	109.0	97.8	108.9	195.4	217.9	11.5%

(ix) SOME NOTABLE FREIGHT PERFORMANCE MADE DURING 2021-22:

- The highest 152.46MT of freight was carried from KUR division, 66.87MT from WAT division and 12.79 MT from SBP division during the period.
- Two divisions - KUR & WAT have obtained the 3rd & 6th position respectively among 68 loading divisions of IR.
- Increase in avg. speed of goods train from 37 Kmph of 2020-21 to 44.1 Kmph of 2021-22, which is 19% higher than last year.
- Maximum interchange of 217.9 trains per day in 2021-22 as against 195.4 in 2020-21.
- Increased in release of BOXN rakes from 49.8% to 53.9% & BCN rakes from 39.6% to 44.0% in comparison to last year despite of less inward rake holding.
- Improvement in wagon turn round by 8% over last year i.e wagon turn round reduced from 2.16 days during 2020-21 to 1.99 days during 2021-22.
- Reduction in terminal detention in unloading improved by 7.7% over last year i.e average detention of rakes reduced from 19:44 hrs during 2020-21 to 18:13hrs during 2021-22. Similarly in loading improved by 3.7% over last year i.e average detention of rakes reduced from 16:25 hrs during 2020-21 to 15:48hrs during 2021-22.

B. COACHING PERFORMANCE (2021-22):

- Punctuality:** - This Railway has achieved punctuality of 89.22% for Mail/Express trains.
- Extension of trains:** -Train No. 68408/07 BBS-BHC-BBS MEMU has been extended upto Balasore (BLS) w.e.f. 07.01.2022.
- Special trains:-** 2876 numbers of special trains (in trips) of this Railway have run during the year 2021-22 for clearing extra rush of passengers vis-a-vis 1964 numbers of special trains were run in last year (2020-21).
- Parcel express trains:-** 62 numbers of Parcel rakes were loaded during 2021-22 generating extra revenue of Rs.10.115 Crores. Out of which 29 numbers of Kissan Rail trains were run for transportation of 10,179 Tonnes Mango from VZM area to Adarsh Nagar, New Delhi generating an amounting of Rs.4.457 Crores.
- Coaches & trains booked on FTR:-** 29 coaches and 13 numbers of special trains booked on FTR during the financial year 2021-22 generating revenue of Rs.8 Crores.
- Augmentation of coaches:-** During the financial year 2021-22, 1869 numbers of coaches were augmented temporarily by 242 numbers of Mail/Express trains vis-à-vis 923 coaches were augmented by 31 Mail/Express trains in last year.
- MEMU service:-**

	Train No.	w.e.f.
1	18423/24 BBS-NYGT-BBS "SEVA" Express	15.11.2021
2	58403/04 KUR-PURI-KUR Passenger	05.03.2022

- Replacement of ICF stock to LHB stock:-**

05 pairs of Express trains involving 10 rakes have been converted to LHB stock in 2021-22.

	Train No.	No. of Rakes	W.e.f.
1	08565/66 (20811/12) VSKP-NED-VSKP Tri-weekly S/F Spl	02	31.07.2021
2	08445/46 (18447/48) BBS-JDB-BBS Spl	02	10.09.2021
3	08503/04 (18507/08) VSKP-ASR-VSKP Spl	02	11.09.2021
4	18551/52 VSKP-KRDL-VSKP Express	02	23.11.2021
5	18451/52 HTE-PURI-HTE Tapaswini Express	02	06.01.2022

C. PLANNING PERFORMANCE (2021-22)

Sl. No.	Description	Remarks
1	New Line (PH-11) commissioned (13.12 Km)	Mahipur - Nuagoan section of Khurda Road - Balangir new B.G. line project along with electrification commissioned on 23.03.2022.
2	Doubling (PH-15) commissioned (73.30Km)	Waltair division: 18.08 Kms.; Sambalpur division : 55.22 Kms.;
3	Traffic Facility works commissioned (11 Nos)	i) Long Loop : 2 [Sambalpur division: Handapa&Charmal] ii) IBS : 6 [Sambalpur division: 4 ; Khurda Road division: 2] iii) Electrification : 1 [Khurda Road division] iv) Bypass line: 1[Khurda Road Bypass] v) Cross over : 1 [Waltair division: 2nd crossover between twin single lines at VSP Gate Junction Cabin (towards Vadlapudi end) to facilitate simultaneous movements].
4	Yard remodeling in connection with doubling/ 3rd/4th line works etc.(18 Nos)	Khurda Road division: 4 ; Sambalpur division: 9 ; Waltair division: 5
5	New Rakes inducted by Private Parties (5 Nos)	i) Under GPWIS : 3 (BOXN rakes) (ii) Under LWIS : 2
6	No. of Private Sidings commissioned (3 Nos)	i) M/s Gopalpur Port Ltd., Chatrapur. ii) Deep Draught Iron Ore and Coal Berths of M/s PPT, Paradeep - SILOs under Phasell, Stage-I of the BOT Project (Expansion) iii) M/s Paradip East Quay Coal Terminal Pvt. Ltd. (PEQCTPL), Paradeep.
7	PET Survey for New Lines - Survey Report submitted to Railway Board (2 Nos)	i) Talcher - Gopalpur New Line ii) Puri - Konark New Line
8	Final Location Survey (FLS) sanctioned for new railway line projects (14 Nos)	i) Connecting Bauxite Mines : 8 [Waltair : 7 ; Sambalpur: 1] ii) Connecting Iron Ore Mine : 1[Khurda Road : 1] iii) Connecting Junagarh-Nabarangpur, Malkangiri - Bhadrachalam, Talcher – Gopalpur, Bargarh Road – Nawapara Road & Balangir – Nuapada (via Patnagarh) : 5
9	New Stations opened (3 Nos)	Khurda Road division -3 : Argul B.H. Jn. (betweenKhurda Road- Kaipadar Road), Haripurgram B.H. Jn.(betweenKhurda Road- Motari), Nuagoan(betweenMahipur- Dasapalla in Khurda Road- Balangir new line)

D. IT APPLICATIONS (FOIS) (2021-22)

CRIS-developed applications are handled by Zonal FOIS cell viz; RMS, TMS, ICMS, CMS, COA, RAS, TPMS, EMS, SATSaNG& TSR, DATA LOGGER, RTIS etc. During the financial year 2021-22, following milestones were accomplished by the Zonal FOIS branch.

1. TMS (Terminal Management System):

- 100 % loading in ECoR is being covered under TMS and system generated RRs are being issued for all rakes. The updated version of TMS 9.5.8, TMS 9.6, TMS 9.6.3, TMS 9.7, TMS 9.7.1 and RMS 9.6 have been installed at all the terminals of ECoR.

E-payment:

- 8- E-payment customers have been added in TMS.
- Large number of Small traders not having e-payment facility are opting for Online payment, thereby the transactions in cash has become negligible.

2. COA (Control Office Automation):

- New exe. Version 5.3.4 , COA 5.3.5 and MIS version 3.9.3 was updated in COA system.
- RV and KR Control Board of WAT division made independent Control Board in COA.
- HKG-SBP Double Line of SBP division incorporated in COA system.

3. ICMS (Integrated Coaching Management System):

- 154 MSPC/HSP TRAINS updated in SATSaNG and ICMS database.
- System generated Caution Orders from ICMS given to all Coaching trains.
- Time Table Special of 176 trains updated in SATSaNG and ICMS.

4. CMS (Crew Management system):

- New version 6.7.2 and 6.7.3 of CMS have been updated in the system.

5. RAS (Rake Allotment system):

- DPCB was added in RAS for loading of Iron Ore ex-DPCB to JSPK. DPCB has been tagged as i3MS location.

6. Weekly rake supply status is being updated in the public domain site of ECoR site.

7. Imported COAL Sanction is being done over system in FOIS cell.

TRANSPORTATION COMMERCIAL

1. PASSENGER BUSINESS:

Item	2020-21	2021-22	% Variation
No. of Passengers (In Millions)	9.73	34.45	245.06
Revenue (In Crores)	439.37	1162.19	164.51

2. FARE & FREIGHT STRUCTURE :

I. Fare Structure: -

- No changes have been made in Passenger Fare during 2021-22.
- No concession in passenger fares was effected during 2021-22 except Students and Patients with acute diseases.

II. Freight Structure: -

- Freight rates have been rationalized w.e.f. 15.04.2021 vide Rly. Brd's letter No.TCR/1078/ 2020/02/3316769 dated 25.03.2021 (Rates Circular No.09 of 2021) and it was valid till date.
- The highest class is remained as Class – 200 since 2008-09.
- Total classes assigned (with suffix 'A'&'B') for charging commodity is remained as 24.
- Minimum distance for charging freight has been reduced from 125 Kms to 100 Kms for all commodities vide Railway Board's letter No.TCR/1078/2016/05 dated 13.07.2016 (Rates Circular No.20 of 2016) and it was valid upto 31. 03. 2020. Vide Rates Circular No. 02 of 2020 dated 17.02. 2020 it is extended till further advice.
- Railway Board vide Rates Circular No.19 of 2018 dated 31.10. 2018 have revised the Rationalized Coal and Coke Tariff Structure w.e.f. 01.11. 2018 and it is valid till date.

- Commissioning of Private siding/ Private Freight Terminal and Additional Rail Infrastructure during 2021 - 2022.

Sl. No.	Additional Rail Infrastructure/	Name of Terminal	Date of Commissioning
1.	Pvt. Siding	M/s Gopalpur Ports Limited / Chatrapur (GPLC)	12.04.2021
2.	Siding under Port	Deep Draught Iron ore and Coal Berths of M/s PPT- DDSP	06.01.2022
3.	Siding under Port	Paradip East Quay Coal Terminal Pvt. Ltd of M/s PPT - PEQP	20.02.2022

- Rakes of following LWIS, SFTO, LSFTO & GPWIS customers have been inducted into ECoR system during financial year 2021-22.

a) LWIS

Sl. No.	Name of the customer	Execution of Agreement
1.	M/s Hindustan Petroleum Corporation Ltd.	LWIS agreement has been executed for BTPGLN rake.
2.	M/s Utkal Alumina International Ltd	LWIS agreement has been executed for BTAP rake.

b) SFTO

Sl. No.	Name of the customer	No. & Type of rakes inducted
1.	M/s TM International Logistics Ltd.	02 BFNSM 22.9 T rakes

c) **LSFTO**

Sl. No.	Name of the customer	No. & type of rakes inducted
1.	M/s Utkal Alumina International Ltd.	02 LSFTO Agreements have been executed for movement of 'Caustic Soda' in 01 BTCS rake and for movement of 'Alumina Powder' in 01 BTAP rake.
2.	M/s Vedanta Limited	01 LSFTO Agreement has been executed for movement of 'Alumina' in 03 BTAP rakes.

d) **GPWIS**

Sl. No.	Name of the customer	No. & Type of rakes inducted
1.	M/s Adani Logistics Ltd	02 BOXNHL rakes.
2.	M/s TM International Logistics Ltd	01 BOXNHL rakes.

- Three stations viz. Tapang (TAP), Bachel (BCHL) & Rengali (RGL) have been opened for Goods traffic in 2021-22.
- 27 (Twenty Seven) Electronic in motion weighbridges (EIMWBs) were integrated with FOIS during 2021-22.
- Weightometer/ Pre-weigh bin system of weight were implemented at Bachel & Kirandul siding of NMDC & 3 location at LSST, BSTC & SSMT of M/s MCL Talcher.
- 3 new (Three) Railway weighbridges (EIMWBs) were installed at Parbatipuram, Bhansi & Kumarmaranga over WAT division.
- The following **Rail Terminals** have been notified as container Rail Terminal for Chasis stuffing / destuffing and loading/ unloading operation.
 - Chasis Stuffing/ De-stuffing only: Kaipadar Road, Porjanpur (PRNR), Bobbili (VBL), Chipurupalli (CPP), Hirakud (HKG), Sambalpur City (SBPY), Khariar Road (KRAR), Doikalu (DKLU), Kantabanji (KBJ), Lapanga (LPG), Rengali (RGL), & Handapa (HNPA).
 - Chasis Stuffing/ de-stuffing & Loading/ Unloading: Balangir (BLGR) & Kapilas Road (KIS).
- E-Payment** of Freight: During 2021-22 the system of E-Payment of freight has been commissioned at various locations over this Railway for **09 major** customers viz.

Sl. No.	Name of the customer	Booking points	Date of signing Agreement
1	UltraTech Cement Ltd, Unit: Bela Cement Works	All locations over ECoR	28.06.21
2	Orissa Metaliks Pvt. Ltd	All locations over ECoR	07.09.21
3	Nu-Vista Ltd	CBSP, PPAP, PPTP, DDSP, VZP, VGSD, DPCB, PRPL, PPGP, MGPV, IPCP, VSPV & CFVS	16.11.21
4	UltraTech Cement Ltd, Unit: Baikunth Cement Works	All locations over ECoR	23.11.21
5	M/s Smbcorp Energy India Limited, Project – II	MCL Sidings/Talcher	07.12.21
6	M/s Ramco Cement Ltd	RCLH	15.02.22
7	NMDC Ltd	VSPV, NMVK, NMDB, KRDL, MGPV, VPTG, VGSD	14.02.22
8	M/s Orissa Alloys Steel Private Ltd	All locations over ECoR	29.03.22
9	M/s Orissa Steel and Power Private Ltd	All locations over ECoR	29.03.22

9. Parcel:

Parcel & Luggage traffic: - Achieved parcel loading of 90410 Tonnes and revenue Rs 36.27 Crore which is 112.23% higher in tonnage and 122.01% in revenue as compared to last year.

Bulk Parcel traffic (Coca-cola):- Total 31 rakes transported carrying 16326 Tonnes with revenue Rs 5.21 Crore which is boost by 501.10% in tonnage and 559.49% in revenue compared to 2020-21.

VP lease Contract: Two (02) VP lease contracts with contract value Rs 23.65 Crore & Rs 13.24 Crore have been awarded by train No.12807/08 Ex.TIG to NZM and 12815/16 BBS-ANVT respectively for 05 years.

New parcel traffic:-

(i) Onion (Perishable traffic): One (01) rake loaded from VSKP to JAG with carrying 246 Tonnes of onion fetching revenue of Rs 9.07 Lakhs.

(ii) Fish Feed: - Two VP rakes loaded from CTC to AGTL transporting 1116 tonnes fish feed with revenue Rs 50.07 lakhs.

(iii) Livestock (Buffalo): One (01) VP loaded from KUR to OGL transporting 20 buffaloes fetching revenue of Rs 1.45 Lakhs.

Utilisation of GS coaches for Parcel traffic: Idle GS Coaches utilised for transportation of 03 Coca-Cola rakes & 14 mango rakes with total load of 3999 tonnes.

Train Service VP: To meet demand of parcel space due to limited resumption of trains, regular VP has been attached by train No.12839/40, 12898/97, 11019/20 & 12727/28.

Opening Station for Parcel traffic (New): Paralakhemundi station (PLH) over WAT division has been opened for parcel traffic.

Parcel Management System (PMS): Tender has been floated for installation of PMS at 17 locations over ECoR to bring transparency in parcel business with computerisation.

3. TICKETLESS TRAVEL AND TICKET CHECKING (2021-22)

1.	a. Number of passengers found traveling without ticket or with irregular tickets	622937
	b. Fare	Rs. 173307540
	c. Excess charge	Rs. 157572646
2.	a. Number of Un Booked luggage cases	4668
	b. Freight on Un Booked luggage	Rs. 676706
3.	a. Total number of cases (1a + 2a)	627605
	b. Total amount of Fare and Excess charge realized(1b+1c+2b)	Rs. 331556892
4.	a. Number of Non Penalty Cases	9951
	b. Amount realized	Rs. 4035708
5.	a. Number of passengers prosecuted for irregular travel	NIL
	b. Number of passengers fined	NIL
	c. Amount of fine realized	NIL
	d. Number of passengers imprisoned	NIL

4. CATERING SERVICES:

During the year 2021-22, catering facilities (both Railway and IRCTC managed including Water Vending Machines) were available in 360 units at 72 stations. Catering service (through pantry cars/mini pantries) were also provided in 33 pairs of trains by IRCTC. Apart from the above, catering services through train side vending (TSV) has also been provided in 30 trains

5. CLAIMS PREVENTION (2021-22): -

Sl. No.	Item	Coaching/ Goods
1	No of claims, carried forward from previous year	360
2	A. No of claim received during the period	426
	B. No of claim re- opened	14
3	No of claim disposed off during the year.	585
4	Average time taken for settling of the claims	344 days

6. MISSION ITEMS - PROGRESS

Sl. No.	Item	Unit	2020-21	2021-22
1	Passenger Originating	Millions	9.73	34.45
2	Originating Revenue			
A	Passenger	Crores of Rs.	439.37	1162.19
B	Other Coaching	Crores of Rs.	46.96	134.10
C	Goods	Crores of Rs.	19835.58	23201.85
D	Sundry	Crores of Rs.	125.07	130.45
3	Ticket Checking			
A	No of A + B Cases	Thousands	* 73.28	622.94
B	Revenue	Lakhs of Rs.	* 411.43	3308.80
C	No of C cases	Thousands	* 0.41	4.67
D	Revenue	Lakhs of Rs.	* 0.99	6.77

**- Revised figs.

7. PASSENGER FACILITIES

Sl. No.	Passenger Facility	Stations where provided
1	UTS-Cum-PRS	KUR: Nayagarh Town
2	YTSK	WAT: Parlakhemundi
3	STBA	KUR: Khallikot, Delang, Gurudijhatia, Mancheswar, Golanthara, Kenduapada, Talcher Bypass, Sakhigopal
4	Foot Over Bridge	KUR: Baruva
5	Platform Shelter	WAT: Dantewara (2 Bays)
6	High Level Platform	KUR: Sagadapata WAT: Harishchandrapuram on P.F.No.1 & 2
7	Retiring Room	KUR: Khurda Road
8	Dormitory	KUR: Khurda Road
9	Waiting Hall (Sleeper)	KUR: Khurda Road
10	Waiting Hall (Upper Class)	KUR: Khurda Road
11	Waiting Hall (General/2nd Class)	KUR: Khurda Road
12	Toilet for Divyangjan Passenger	WAT: Baiguda, Bheja, Darliput, Dumuriput, Laxmipur, Kakrigumma, Padua, Paliba, Singaram, Suku

8. COMPARATIVE ORIGINATING REVENUE :

Item	Actuals to the end of Mar' 2021	Actuals to the end of Mar' 2022	% Variation
Originating Freight Loading (MT)	204.90	232.13	13.29
Originating Freight Revenue (in crore of Rs.)	19835.58	23184.83	16.89
Originating No. of Passengers (in million)	9.73	34.45	254.06
Originating Passenger Revenue (in crore of Rs.)	439.37	1162.19	164.51
Other Coaching Revenue (in crore of Rs.)	46.96	134.10	185.56
Sundry Revenue (in crore of Rs.)	125.07	130.45	4.30

MECHANICAL DEPARTMENT

1. ASSETS AS ON 31st MARCH 2022

1.1. Coach Ownership

Sl. No.	Type of coach	No. of Coaches	
		2020-21	2021-22
1.	Air conditioned	1035	1225
2.	Non-air conditioned	2482	2539
	Total	3517	3764

1.2. Wagon Ownership

Sl. No.	Type of wagon	No. of Wagons		Sl. No.	Type of wagon	No. of Wagons	
		2020-21	2021-22			2020-21	2021-22
1	BOBRN	1050	1050	14	BOBRNHS	1112	1112
2	BOXNHS	3287	3287	15	BCNHL	1911	1911
3	BOBYN	221	221	16	BFNS	65	65
4	BRNA	65	65	17	BOXNHL	7911	9269
5	BRNAHS	361	383	18	BOBRNHSM1	1988	2016
6	BVZI	357	357	19	BRN22.9	421	421
7	BCNAHS	632	632	20	BOSTHSM2	26	26
8	BOST	110	110	21	BOXNS	1434	1434
9	BOSTHS	1257	1257	22	BVCM	133	200
10	BOXNLW	1306	1306	23	BOYEL	93	93
11	BOY	298	298	24	BOBYN22.9	77	125
12	BTPN	455	549	25	BCNAHSM1	64	202
13	BOBSN	85	85		TOTAL	24719	26474

1.3. SPARME & ART:

Div.	Location of SPARME	Location of ART	
		A- Class ART	B- Class ART
KUR	KUR, BHC & PSA	KUR	PSA, BHC & TLHR
WAT	VSKP, KRPU & RGDA	VSKP, KRPU, KRDL & RGDA	Nil
SBP	SBP & TIG	SBP & KBJ	Nil

1.4. Break Down Cranes:

Sl. No.	Division	140T Crane	120T Crane
1.	KUR	KUR-1	—
2.	WAT	VSKP-2, KRPU-1 & RGDA-1	VSKP-1, KRPU-1 & KRDL-1
3.	SBP	SBP-1 & KBJ-1	—

2. FACILITIES FOR MAINTENANCE OF ASSETS:

2.1 Carriage Repair Workshop (Mancheswar):

i. Introduction

Carriage Repair Workshop at Mancheswar undertakes periodic overhauling of Coaches of ECo Rly. The workshop sanctioned by Rly. Bd. in 1978 starting with corrosion repair. First POH coach was turned out on 31.12.1983. Thereafter Workshop has attained ISO 9001:2015(QMS) valid till 10.01.2025, ISO 14001:2015 (EMS) valid till 10.01.2025, OHSAS 18001:2018 valid till 10.01.2025, 5S certification valid till 08.02.2025, ISO 50001:2018 valid till 12.04.2023, ISO 3834-2:2005 fusion welding of metallic material valid till 25.04.2024 and Silver medal got in Green company rating A Group Incentive Scheme was introduced in Sep' 2003, which resulted in a quantum jump in outturn of coaches. MCSW has also extended POH services to MEMU.

ii. Out turn

Outturn activity	2020-21		2021-22	
	Target	Actual	Target	Actual
POH of Coaching stock (including SS2, SS3)	1092	1030*	1224	1209*

(*)-could not achieve target as there was lockdown due to Covid-19 pandemic.

The breakup of outturn of POH, POH-cum-corrosion repairs, Special repairs of Coaches are given as follows:

Sl. No	Activity	2020-21	2021-22
1.	a. PCV POH	805	1011
	b. PCV POH-cum-Corrosion	115	115
2.	a. OCV POH	71	58
	b. OCV POH-cum-Corrosion	39	25
3.	Special Repairs (MRR,ERR, TC CONV in RA and LWLRRM)	MRR - 01 TC CONV-19	MRR/ERR-05 TC Conv. LWLRRM-10

iii. Unit Cost Of POH

The average POH cost of coaches turned out from Carriage Repair Shop(in Rs.):

Sl. No.	Activity	2020-21	2021-22
1.	Average cost of PCV POH	13,97,304	11,96,176
2.	Average cost of PCV (AC coaches)	21,94,075	18,60,780
3.	POH-cum-Corrosion repair	18,31,224	15,05,072
4.	Average cost of OCV POH	9,61,478	10,27,606
5.	Average cost of OCV POH-cum-Corrosion repair	12,26,775	12,62,184

iv. POH Cycle Time

Coach Type	2019-20	2020-21	2021-22	Improvement in 21-22 over last year (%)
ICF AC	22.1	43.2	40.29	6.74
ICF Non AC	13.3	27.5	19.55	28.9
LHB AC	24.9	36.5	33.57	8.02
LHB Non AC	24.9	36.5	22.61	38.1

v. Accident involving Workshop Staff of Mechanical Department

Cases	2019-20	2020-21	2021-22	Loss of man days
a. Cases of permanent disablement	Nil	Nil	Nil	56 man days in 2021-22
b. Major accident	Nil	Nil	Nil	
c. minor accident	03	01	01	
d. Cases of Fatal Accidents	Nil	Nil	Nil	

vi. Quality Performance

a) 100 days sick marking of OFF POH coaches

Description	2019-20	2020-21	2021-22
No of cases	61	02	15
In %	1.5 %	0.06 %	0.39 %

NB:- 2020-21- Most of the period was under Covid-19, Hence the improvement 21-22 may be compare with 2019-20 .The improvement is = 75 % (46 cases less)

b) En-route detachment (Reported cases)

Dept.	2019-20	2020-21	2021-22
Mechanical	05	Nil	01
Electrical	00	Nil	Nil
Total	05	Nil	01

vii. POH Performance

MCSW POH activities shown as under:

Sl. No.	Description	Monthly Target 21-22	Monthly Average 2019-20	Monthly Average 2020-21	Monthly Average 2021-22	% Improvement in 2021-22 over last year
1	Non AC ICF Coach POH	64	81.9	60.33	63.08	+4.56
2	AC ICF Coach POH	17	18.2	14.00	19.0	+35.71
3	LHB Coach POH	18	10.2	11.50	18.0	+56.5
4	MEMU	3	-	-	0.66	+66.00
	Total POH	102	110.40	85.83	100.74	+17.37

viii Trolley Supply to Depot:-

Sl. No.	Description	Monthly Avg. 2020-21	Monthly Avg. 2021-22	% Improvement in 2021-22 compared to last year
1	IOH FOR ICF (Trolley sets)	56.0	43.6	-22.14
2	IOH FOR LHB (Trolley sets)	23.6	33.0	+39.83
	Total	79.6	76.6	-3.77

• Other major achievements:-

MCSW has achieved following performance:

Sl. No.	Description	Monthly Avg. 2020-21	Monthly Avg. 2021-22	% Improvement in 2021-22 compared to last year
01	Total Wheel Outturn	756	815	+7.80
02	Bogie Outturn	322.4	353.3	+9.58
03	Corrosion coach out turn	12.8	8.5	-33.59

• Coach conversion: -

22 Coaches conversion works were undertaken during 2021-22.

Sl. No.	TYPE		2020-21	2021-22
01	RT/TV	Tool Van	05	01
02	RT/SV	Staff Van	05	02
03	RCCN	Camping Coach	08	15
04	RAAC	Saloon coach	01	02
05	OC	Observation Coach	01	00
06	DC	Dining Car	01	00
07	RSWC	Wheel coach	03	02
08	RH	Medical Van	02	00
	TOTAL		26	22

ix. Scrap Disposal :-

Taking a Cue from "Swachh Bharat Abhiyan", MCSW dedicated itself towards cleanliness and safe working environment for employees. The scrap disposal detail for the year 2021-22 is follows:

Sl. No.	Description	Qty in MT
01	Ferrous	2977
02	Non ferrous	73.44
03	Low value	844.61
04	WTA	1318.54
05	BG coaches	1935.4 (68 coaches)
	TOTAL	7149.00

x. Other Major Highlights:-

- Commencement of POH activities for MEMU & Tower wagon.
- Coach conversion: - 15 coaches converted in to RCCN, 02 coaches converted into observation car and 05 coaches converted into other Departmental vehicles.
- Commissioning of Vital Machine & plant: - 06 machines.
One Scrap to Energy plant 500Kg per shift was installed on 22.01.2020 and successfully commissioned on 22 Sept. 2021.
EOT Crane -10 Tn capacities was successfully commissioned on 10.09.2021.
Road cum Rail Vehicle (Shunting) was successfully commissioned on 25.11.2021. Two 500 Cfm cap compressors commissioned on 09.12.2021.
One dynamic wheel balancing machine successfully commissioned at wheel shop on 24.02.2022.
- Refurbishment of LHB Shatabdi coaches: - 09 AC coaches were refurbished with 100% replacement of Chairs fabric, arm hoist, PVC etc.
- Provision of Passenger amenities: -

Sl. No.	Description	Fitted during 2020-21	Fitted during 2021-22
1	Fire Extinguisher in the coaches	361 coach sets	420 coach sets
2	Fitting of Dustbin in coaches	526 nos.	580 nos
3	Double Acting AC door in coaches	-	33 coach sets
4	Transition coupler	50 nos	49 nos.

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- f) Increase in LHB coach out turn: - Achieved the Rly. Board target of 216 coaches, 57% more than 2020-21 out turn.
- g) Increase in LHB Trolley production and Trolley supply for IOH: - more than 62% LHB bogie production and 40% LHB trolley supply in compare with 2020-21.
- h) Increase in LHB Wheel set outturn: 44 % more than 2020-21.
- i) Biometric attendance system with face reader has been put in to service.
- j) Infrastructure Inputs: -
 - 1140 Sq. mtrs of new Cover shed extended during FY 21-22.
 - 08 nos of two-wheeler parking stand have been provided at different shops of MCSW to fulfil demand of staff.
 - Store room size of 40x20 mtrs at main store.
 - Drainage work length of 442 mtrs completed during FY 21-22.
 - Pathways of 350mtr length were provided in coach inspection line.
 - Two nos. of compressor room shed was provided at Bogie repair & wheel shop.
 - One dedicated cover shed has been provided for LHB flexi springs cleaning & stocking purposes.
 - Two numbers of dress changing rooms have been provided at Bogie repair & Wheel shop to fulfil the demand of staff.
- k) One scrap to energy plant 500Kg per shift was successfully commissioned on 22nd Sep'21 as a part of green initiative taken by workshop.
- l) Award of valid ISO certification of Quality Management System (QMS), Environment Management System (EnvMS), Occupational Health and Safety Management System (OHSAS), Fusion Welding of Metallic Material, Energy Management System (EngMS) and Workplace Management System(5S) in the FY2021-22.
- m) Silver medal achieved in Green Company Rating during FY 21-22.
- n) Commencement of corrosion repair LHB coaches.
- o) 100 % functions of modules of WISE related to workshop (49).

xi. Infrastructural Development-

Infrastructure augmentation works pertaining to Workshop are as under:

Sl. No.	PB//LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
		Pink Book Items			
1	530 of PB 2021-22	Mancheswar (CRW) - Development of bogie shop with EOT cranes facility	DF-3 & RRSK	Abs. Est- 5.61 Cr. Det. Est -2.42 Cr	Work completed in all respect. Recommended for deletion
2	534 of PB 2021-22	Extension of Wheel shop of CRW/Mancheswar	RRSK	Abs.Est-14.28Cr. Det Est-13.84 Cr.	Work completed. Recommended for deletion.
3	545 of PB 2021-22	Mancheswar - Development of infrastructure facilities for maintenance of Linke Hofmann Busch bogies with allied works (Sanctioned in 2018-19)	RRSK	Abs Est -15.94Cr. Det. Est -13.65 Cr	Engg work is in progress 45% completed
4	544 (i) of PB 2021-22	Improvement of infrastructure facilities for maintenance of LHB coaches at CRW/ (Sanctioned in 2018-19 as . umbrella work)	RRSK	Abs Est.-23.33 Cr. Det. Est -21.52 Cr	Engineering and Electrical work under progress 70 % completed. 07 M&Ps commissioned and 02 M&Ps are yet to be received
5	544 (ii) of PB 2021-22	Up-gradation of critical infrastructure for maintenance of LHB coaches at CRW Mancheswar (Sanctioned in 2018-19 as umbrella work)	RRSK	Abs Est. -5.99 Cr. Det. Est -6.09 Cr	Engineering and electrical works are in progress and 90% completed. 01 No. M&P commissioned, 01 M&P is under commissioning and 02 nos. are under procurement through Local stores

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
Pink Book Items					
6	594 (i) of PB 2021-22	Mancheswar - Automation in work area for enhancement of POH capacity at CRW / Mancheswar.	RRSK	Abs cost 19.92 Cr.	Work has been sanctioned under umbrella work 2019-20. Work is to be executed by COFMOW. Work is kept in abeyance for the time being.
7	549 (ii) of PB 2021-22	Mancheswar - Automation in up keep, inspection, record keeping and record transmission at CRW/ Mancheswar.	RRSK	Abs cost 4.73 Cr.	Work has been sanctioned under umbrella work 2019-20. Work is to be executed by COFMOW. Work is kept in abeyance for the time being.
8	550 of PB 2021-22	Improvement, augmentation & replacement of old infrastructure at CRW/ Mancheswar for enhancement of POH of LHB coaches.	CAP DRP	Abs cost - 19.35 Cr 19.95 Cr.	Work has been sanctioned under umbrella work 2019-20. Work is to be executed by WPO/Patna. Detailed estimate sanctioned. Tender to be floated.
9	554 of PB 2021-22	Mancheswar (CRW) - Construction of POH shop for MEMU coaches at Carriage Repair Workshop, Mancheswar, PHASE-1.	CAP DRP	Abs cost - 37.16 Cr 10.14 Cr	New work sanctioned and included in umbrella work 2020-21, in Dec'2021. CAO (Con)/ECoR has been nominated as executing agency for the work. Drawing and detailed estimate is under preparation.

2.2 Wagon Repair Workshop (Vadlapudi)

i. Introduction

Wagon Repair workshop Vadlapudi undertakes periodic overhauling of wagons. The workshop sanctioned by Railway Board in the year 2017 at Vadlapudi in an area of 203 acres with an estimated cost of Rs.328.81 crore. The project was constructed by RVNL and handed over to Railway for production of POH of wagons. For Project Management Consultancy M/S Braithwaite Co. Limited is chosen on competitive bidding among Railway PSUs for outsourcing of POH repair on turnkey basis. M/S Braithwaite Co. Limited entrusted the complete POH work to M/S Tuaman Engineering Limited. First POH wagon was turned out on 31.10.2021.

ii. Outturn

In the Financial Year 2021-22 from Oct' 21 to Mar' 22, total 309 Wagons were POH out as shown below

Oct' 21	Nov' 21	Dec' 21	Jan' 22	Feb' 22	Mar' 22	Total
2	5	26	55	100	121	309

iii. The breakup of outturn of POH, POH-cum-corrosion wagons are given below:

Sl. No.	Activity	2021-22
1	POH	279
2	POH-cum-corrosion	30

iv. Quality Performance:

Description	Monthly Average of 2021-22
90 days sick marking of POH Wagons	Nil

100% off POH wagons are being offered to NTXR and No Wagon turned out with Local passing.
100% Quality being ensured.

v. Other Performances:

- a. During the period, 76 Wagons converted into twin pipe air brake system.

- b. APM & LSD test bench, Laser Engraving Machine, Computerized BMBS Test Bench, Baker air gauges for measuring dimensions of cup & cone of CTRB digitally with accuracy commissioned during the period of Railway utilizing RVNL fund.
- c. **Infrastructural Development-** Setting up of new workshop at VDPD and Kalahandi

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
Pink Book Items					
1	529 of PB 2021-22	Vadlapudi - Wagon POH workshop of 200 Nos capacity near Duvvada station.	CAP	DE cost: 381.36 Cr	Work completed in all respect and handed over for its operation in Oct 2021
2	541 of PB 2021-22	Kalahandi - Setting up of Electrical Loco POH Workshop	CAP	Abs Cost: 186.37 Cr	Land acquisition is under progress in collaboration with State Govt. of Odisha. Detailed estimate is under process for sanction.

2.1 Carriage Maintenance:

i. Coach Holding and Trains Maintained.

ECoR has coaching train examination and maintenance facilities at Puri, Visakhapatnam, Bhubaneswar and Sambalpur. The depot-wise holding, numbers of primary and secondary trains handled are as under:

Depot	Coach holding					No. of Primary Trains		No. of Secondary Trains		Round Trip	
	A/C	Non A/C	Power Car	Pantry	Total	Total	Avg. Per day	Total	Avg. Per day	Total No. of Trains	Avg. Per Day
PUI	406	827	44	37	1314	31	12	4	1	16	9
BBS	250	484	26	22	782	22	7	0	0	4	4
VSKP	376	969	28	27	1400	32	11	1	0.43	21	9
SBP	37	222	0	9	268	6	3.4	0	0	0	0
Total	1069	2502	98	95	3764	91	33.4	5	1.43	41	22

ii. Maintenance facilities

The infrastructure facilities available at the coaching depots for under taking maintenance and repair of coaching trains are given as under:

Name of the Depot	No. of integrate pit lines	Covered sick line capacity in terms of coaches under covered shed	No of Pit line without catwalk	No of Washing line
PUI	6	12	0	0
BBS	4	7	0	0
VSKP	6	16	0	0
SBP	3	2	0	0

iii. Infrastructural Development

Infrastructure augmentation works pertaining to Carriage Maintenance are as under:

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
Pink Book Items					
1	526 of PB 2021-22	Mancheswar - Integrated washing pit line (2No.) (year of sanc: 2010-11)	DF3	Abs Cost 15 Cr DE Cost 40.48 Cr	Earth work is at completion stage. Service Building finishing work is in progress. 2 nos. of UG water reservoir completed. Tender for Pit line and other allied works awarded work is yet to be started.
2	536 of PB 2021-22	SBP-augmentation of 3no of existing pit line by 250m for 26 coach length pit. (Yr. of sanc: 2017-18)	RRSK	DE cost 6.08 Cr	Work completed except some minor electrical work.

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
		Pink Book Items			
3	539 of PB 2021-22	VSKP- One washing line as per RDSO drawing & covering of open gantry of existing shed. (Yr. of sanc: 2015-16)	CAP	DE cost Rs. 9.14 Cr	80% Work completed. LHB store building and toilet are in progress. Electrification of extended covered shed and store building to be done.
4	542 (i) of PB 2021-22	Puri: Up gradation of piline no. 20 (Old Line no. 14 and improvement of IPL no. 23, 24 & 25 coaching depot/Puri (Yr. of sanc:2018-19 Umbrella)	RRSK	DE cost Rs. 10.15 Cr	Survey completed, Drawing approved. Tender awarded on 13.04.2020 and contract terminated Fresh tender opened on 07.07.2021 and tender discharged. Tender re-floated and opened on 20.04.2022.
5	542 (ii) of PB 2021-22	Bhubaneswar- Upgradation of new IOH shed with pit lines in Coaching depot/BBS (Yr. of sanc: 2018-19 Umbrella)	RRSK	DE cost Rs. 8.71 Cr	Civil work for up-gradation of pit line no. 1 completed electrical work is in progress. Overall progress 85%.
6	542 (iii) of PB 2021-22	Puri: Building of Mechanical & Electrical Equipments maintenance and other facilities for pitlines at Coaching depot Puri (Yr. of sanc: 2018-19 Umbrella)	RRSK	DE cost Rs 3.06 Cr	Foundation and column work is in progress. 15% completed
7	542 (iv) of PB 2021-22	Bhubaneswar- Upgradation of new IOH shed with pit lines in Coaching depot/BBS (Yr. of sanc: 2018-19 Umbrella)	RRSK	DE cost Rs 1.05 Cr	Earth work is in progress. 5% of the work is completed.
8	546 of PB 2021-22	KUR Road - Construction of Main line electrical multiple unit car shed (Phase 2) (Yr. of sanc: 2018-19 Supplementary)	RRSK	DE Cost Rs 65.44 Cr	Service building completed. Trip maintenance bay work is in progress. Construction of washing line and wheel lathe shed is in progress. Construction of heavy repair bay is to be started. 70% of the work completed.
9	552 (i) of PB 2021-22	Bhubaneswar - Upgradation/ augmentation of rolling stock maintenance facilities at Coaching Depot/BBS (Yr. of sanc: 2019-20 Umbrella)	CAP	DE Cost: Rs. 7.01 Cr	Tender opened on 16.02.2022 under finalization.
10	552 (ii) of PB 2021-22	Puri - Upgradation/ augmentation of rolling stock maintenance facilities at Coaching Depot/PURI(Yr. of sanc: 2019-20 Umbrella)	CAP	DE Cost: Rs. 8.72 Cr	Tender re-floated to be opened on 20.04.2022
11	552 (iii) of PB 2021-22	Visakhapatnam - Service Building and Other Infrastructural facilities for Washing line of VSKP/ECOR (Yr. of sanc: 2019-20 Umbrella)	CAP	Abs Cost: Rs. 1.04 Cr	Detailed Estimate sanctioned. Tender floated and opened on 07.04.2022
12	552 (iv) of PB 2021-22	Sambalpur - Construction of fourth integrated pit line and extension of existing stabling line at coaching depot Sambalpur (Yr. of sanc: 2019-20 Umbrella)	CAP	DE Cost: Rs. 11.15 Cr	Work has been de-frozen. DE sanctioned. Tender to be floated shortly

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
Pink Book Items					
13	552 (v) of PB 2021-22	Mancheswar - Augmentation of sick line facilities at coaching depot / Mancheswar (Yr. of sanc: 2019-20 Umbrella)	CAP	Abs cost: Rs. 7.38 Cr	Feasibility of construction of two sick lines is under review.
14	552 (vi) of PB 2021-22	BBS - Construction of 11kV/750V substation for extending power supply for maintenance of LHB rakes at Coaching depot Bhubaneswar (Yr. of sanc: 2019-20 Umbrella)	CAP	DE Cost: Rs. 2.48 Cr	Work awarded but work not started by the agency. NSR for store items processed
15	552 (vii) of PB 2021-22	VSKP - Construction of 11kV/750V substation for extending power supply for maintenance of LHB rakes at VSKP (Yr. of sanc: 2019-20 Umbrella)	CAP	DE Cost: Rs. 2.48 Cr	Work awarded and work is in progress. 20% completed. Stores NSR are under process for procurement.
16	555 (i) of PB 2021-22	Bhubaneswar - Improvement of Coach Maintenance facilities in Coaching Depot/Bhubaneswar under Umbrella work 2020-21. (Yr. of sanc: 2020-21 Umbrella in 2021-22)	CAP	Abs. cost Rs. 4.49 Cr	Work sanctioned in Dec. 2021. Drawing and detailed estimate are under preparation
17	555 (ii) of PB 2021-22	Puri - Development/ Improvement of Main Store Building at Coaching Depot/PURI under Umbrella work 2020-21. (Yr. of sanc: 2020-21 Umbrella in 2021-22)	CAP	Abs. cost Rs. 1.20 Cr	New itemized umbrella work sanctioned in Jan 2022. Executing agency to be nominated and Drawing and detailed estimate is to be prepared.
18	555 (iii) of PB 2021-22	Sambalpur - Setting up of Automatic Coach Washing Plant at Coaching Depot Sambalpur (Yr. of sanc: 2020-21 Umbrella in 2021-22)	CAP	Abs. cost Rs. 4.30 Cr	New itemized umbrella work sanctioned in Dec'21. Drawing and detailed estimate under preparation.

2.2 Wagon Maintenance:

i. Wagon Examination facility & work load:

Wagon examination facilities are located at 10 locations over East Coast Railway. Facility categorization and number of rakes examined per month in **2021-22** as under:

Division	Examination Yard				Attached Sick Line/ ROH Facility	
	Yard	Cat	Rakes/ Month	Type of Exam *	Name	Category
VSKP (7)	Ore Exchange Complex	A	80	CC/P/I	OEC	A
	Raw Material Unloading Yard-VSPS	A	105	CC/P/I	RMUY	A
	Reception Yard	A	210	CC/P/I	CSL	A
	Finished Product Yard VSPS	B	115	P/I	FPY	NIL
	RAYAGADA	F	10	I	NIL	NIL
	VZP	F	92	I	VZP	NIL
	GPL Yard	F	43	I	NIL	NIL
KUR (2)	PARADEEP	A	241	CC/I	PRDP	A
	CUTTACK	D	48	P/I	CTC	A
	BUDHAPANKA	F	25	I	NIL	NIL
SBP (1)	KANTABANJI	A	10	P/I	KBJ	F

* CC- Close Circuit, P-Premium, I-Intensive.

ii. Wagon Repair facilities and workload:

There are 6 wagon repair facilities in ECoR. Their classification in terms of available facilities and the average monthly outturn in **2021-22** are given as under.

Sl.No.	Name	Category	Average sick wagon repaired per month in VU	Average ROH out turn per month in VU
1.	Central Sick Line-VSKP	A	686.3	181.8

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2.	Ore Exchange Yard-VSKP	A	586.5	185.7
3.	Visakhapatnam Steel Plant	A	713	155.6
4.	Cuttack	A	77	Nil
5.	Paradeep	A	507.4	107.1
6.	Kantabanji	F	2	Nil

iii. **Infrastructural Development-** Infrastructure augmentation works/ setting up of new facility pertaining to Wagon Maintenance are as under:

Sl. No.	PB//LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
		Pink Book Items			
1	527 of PB 2021-22	RYD Yard/ VSKP- Carrying out NPOH & "C" Category repair through Pink Book 2015-16. (Yr. of Sanc.: 2015-16)	CAP	DE Cost: Rs. 22.79 Cr	Civil work is at Completion stage. Overall progress 80%. 8 out of 21 M&Ps are yet to be received.
2	528 of PB 2021-22	RMUY/VSPS-Augmentation of sick line facilities to handle addl. sick wagon due to increase in traffic. (Yr. of Sanc.: 2015-16)	DF 3	DE Cost: Rs. 28.02 Cr	Civil work is at Completion stage. Overall progress 80%. 4 out of 21 M&Ps are yet to be received.
3	535 of PB 2021-22	VSKP - Upgradation of central sick line & ore exchange center wagon depots (Yr. of Sanc.: 2017-18)	RRSK	DE Cost: Rs. 6.21 Cr	Civil Engg work completed. Some electrical works like Welding facilities at CSL and illumination and welding facilities at OEC are in progress. Over all progress 90%.Work is in
4	537 of PB 2021-22	VSKP - Extension of cover shed and other facilities - OEC. (Yr. of Sanc.: 2017-18)	CAP	DE Cost: Rs. 5.63 Cr	Work in progress for ROH shed extension. Otherworks are .completed. Over all progress 40%. Out of 6 M&P items 4 nos. received another 2 are under procurement.
5	538 of PB 2021-22	Visakhapatnam (RYD)-BTPN Examination facilities & other infrastructural facilities (Yr. of Sanc.: 2017-18)	CAP	DE Cost: Rs. 9.14 Cr	Civil Engg work completed. Overall Progress 95% Out of 12 M&P items, Received- 3, To be received- 9 Nos)
6	540 of PB 2021-22	MANESWAR-Freight train maintenance facilities with routine overhauling facility for freight wagons. (Yr. of Sanc.: 2017-18)	CAP	DE Cost: Rs. 72.06 Cr	Work is in progress. ROH shed, Wheel lathe shed, Compressor room etc have been constructed. Service building staff quarter, etc are under construction. Earth work for laying of track and construction of minir bridge work are in progress. S&T cable laying and construction of Goompty are in progress. 45 5 of the M&P items arrived at the site. Over all progress 50%
7	543 (i) of PB 2021-22	VSKP: Augmentation of cover shed to another 80 M X 20 M with EOT gantry at RMUY/VSPS (Yr. of Sanc.: 2018-19 umbrella)	RRSK	DE Cost: Rs. 6.45 Cr	Engg work completed. Electrical work is in progress. Over all progress 95%
8	543 (ii) of PB 2021-22	KUR: Construction of Pathways and providing lighting facilities for BFNS rakes examination at KUR. (Yr. of Sanc.: 2018-19 umbrella)	RRSK	DE Cost: Rs. 2.02 Cr	Work completed in all respect
9	543 (iii) of PB 2021-22	Visakhapatnam - Welding grid facilities and path ways at RMUY/ VSPS and CTRB facilities at OEC (Yr. of Sanc.: 2018-19 umbrella)	RRSK	DE Cost: Rs. 1.52 Cr	Work is in progress.

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
Pink Book Items					
10	543 (iii) of PB 2021-22	PARADEEP- Construction of CTRB Room at ROH Depot (Yr. of Sanc.: 2018-19 umbrella)	RRSK	DE Cost: Rs.0.55 Cr	Civil Engg work completed. M&P items are under procurement.
11	551 (i) of PB 2021-22	PRDP-Up-gradation of Freight Wagon maintenance facilities at Sick Line near ROH Depot/PRDP. (Yr. of Sanc.: 2019-20 umbrella)	DRF	Abs cost Rs. 14.52 Cr	Detailed estimate is under preparation
12	551 (iv) of PB 2021-22	7 nos. of CC path ways in FPY VSPS and 3 nos of Rolling in huts in FPY & RMUY (Yr. of Sanc.: 2019-20 umbrella)	DRF	DE Cost: Rs1.03 Cr	Work is in progress.
13	551 (vi) of PB 2021-22	Baghuapal - Construction of CC Examination Facilities at BGPL. (Yr. of Sanc.: 2019-20 umbrella)	CAP	DE Cost: Rs. 62.04 Cr	Work is being executed by WPO/Patna. Detailed estimate sanctioned tender under process.
14	551 (viii) of PB 2021-22	Baghuapal - Construction of ROH Shed at BGPL under PB No. 563e/2019-20 Umbrella Work. (Yr. of Sanc.: 2019-20 umbrella)	CAP	DE Cost: Rs. 50.76 Cr	Detailed estimate sanctioned. Tender awarded. Work started.
15	556 of PB 2021-22	Augmentation of rolling stock maintenance facility for BTAP Examination at SLRA (Yr. of Sanc.: 2020-21 umbrella sanctioned in 2022-23)	CAP	Abs. Cost Rs. 33.65 Cr	Work was sanctioned in April 2022. CAO (Con) has been nominated as executing agency.

2.3 Electrical Coaching Items:

a) Provision of mobile charging points from 01.04.21 to 31.03.2022: -

Revised Mobile Charging points @ 36 nos. to be provided in 537 LHB Non-AC Coaches. LOA issued on 30.12.2021.

b) HOG failures from 01.04.2021 to 31.03.2022: -

Depot	No. of trains run during the period from April'2021 to	No. of train services on HOG Non HOG Loco/Conv	No. of train services on EOG due to March'2022 failure/others etc.	Remarks
BBS	2937	2857	80	(i) 92.27% on HOG (ii) 2.7% on EOG
PUI	4053	3883	170	(i) 95.80% on HOG (ii) 4.19% on EOG
VSKP	2665	2625	40	(i) 98.49% on HOG (ii) 1.5% on EOG
Total	9655	9365	290	(i) 96.99% on HOG (ii) 3.01% on EOG

c) Sick marking on account of 'V' belt from 01.04.21 to 31.03.2022: -

Division/ Depot	Month	Holding of TL coaches	Total no. of TL coaches marked Sick on account of V-belt/Month	Life in days for TL Coaches (Average)	Holding of AC coaches	Total no. of AC coaches marked sick on account of V-belt/Month	Life in days for AC coaches (Average)
PUI	April' 21 to March' 22	279	26/12=2.16	NA	148	35/12=2.91	NA
BBS		297	18/12=1.5	NA	72	23/12=1.91	NA
WAT		651	37/12=3.083	NA	127	36/12=3	NA
SBP		205	5/12=0.41	94	40	7/12=0.58	189

d) Equipment failure of HEATER/ RMPUs (from 01.04.21 to 31.03.2022): -

Sl. No.	SGAC/ LHB	Depot	Population	Total failure	Equipment					Less cooling	Duct damage
					Compressor	Condenser motor	Blower motor	Gas leakage	AC plant Small component		
1	LHB	PUI	198		20	25	4	20	21	16	88
2	SGAC		148		13	15	7	02	0	5	4
3	LHB	BBS	214		19	32	8	38	17	13	65
4	SGAC		72		6	3	2	5	0	3	2
5	LHB	VSKP	34		12	5	3	5	4	3	2
6	SGAC		37		18	15	3	9	2	9	1
7	SGAC	SBP	40		4	11	2	1	69	5	0
Total			743		92	106	29	80	113	54	162
Equipment failure %					12.38%	14.26%	3.9%	10.76%	15.2%	7.26%	21.8%

3. DISASTER MANAGEMENT:

i. Implementation of High Level Committee's recommendation (items pertaining to Mechanical Department):

Sl.No.	Status	Total No. of Items	Recommendation No.
1	Implemented	48	2, 7, 8, 13, 25, 36, 37, 38, 39, 40, 42, 52, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70, 72, 73, 74, 76, 77, 79, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 106, 107
2	Awaiting Board's Guideline	01	91
3	Other associated Department (Medical and PR)	03	4, 5, 104
4	Not applicable to ECoR	07	9, 27, 71, 78, 100, 102 & 111
5	TOTAL	59	

ii. **Infrastructural development:** Infrastructure augmentation works/ setting up of new facility pertaining to Disaster Management Rolling Stock Maintenance are as under: -

Sl. No.	PB/LB No.	Name of work	Allocation	Sanct. Cost.	Remarks
		Pink Book Items			
1	551 (ii) of PB 2021-22	Sambalpur - Provision of Crane shed for maintenance of 140T BD crane at Sambalpur	DRF	DE Cost: Rs. 2.00 Cr	Contract awarded on 18.01.2022. Work in progress.
2	551 (iii) of PB 2021-22	Kantabanji - Provision of Crane shed for maintenance of 140T BD crane at Kantabanji	DRF	Abs Cost Rs. 2.71 Cr	Detailed estimate is under vetting.
3	551 (v) of PB 2021-22	Maintenance of 140 Ton BD Crane as per CAMTECH guide lines at RGDA	CAP	Abs Cost Rs. 1.62 Cr	Since RGDA station remodeling work is being executed by RVNL, letter issued to Sr. DEN (North) to advise M/s RVNL for inclusion of this work in RGDA station remodeling work.

4. OTHER ACHIEVEMENTS:**4.1. Performance parameters for 2021-22.****a. C&W:**

Sl. No.	Parameter	Target 2021-22	Actual		% Improvement over last year
			2020-21	2021-22	
1	Train Parting	35	27	33	-22.22
2	Wagon Detachment (Including Hot Axle)	88	65	53	18.46
3	ROH (including BTPN) (monthly avg.)	650	517	594	14.89
4	Hot Axle	38	51	49	3.92
5	Freight Ineffective (%)	1.1	0.31	0.36	-16.13
6	Coaching Ineffective (AC)	10%	6.43	4.99	22.39
7	Coaching Ineffective (NAC)	8.5%	5.17	3.12	39.65
8	Coach Detachment (Ownership)	-	0	1	-100

b. TL & AC:**i. Punctuality Performance:-**

April-20 to March'21			April-21 to Mar'22			% improvement/ Deterioration
AC	TL	TOTAL	AC	TL	TOTAL	
15	1	16	17	7	24	50% Deterioration

ii. % Ineffectiveness of AC, TI & Power Cars:-

Year	TL(SG)	TL(LHB)	SGAC	LHB AC	POWER CAR
2020-21	0.002	0.022	0.240	0.200	0.714
2021-22	0.001	0.005	0.139	0.199	0.654
% Improvement Deterioration	50% Imp.	77.27% Imp.	42.08% Imp.	0.5% Imp.	10.36% Imp.

4.2. Miscellaneous**Carriage &Wagon:-****KUR Div:**

- The lighting work of IPL-1 of Coaching Depot/BBSR was completed.
- 02 Rakes of 18452-51 (PUI-HTE) Tapaswini Express has been converted to LHB rake on 06-01-2022 & 07-01-2022
- Three In Motion Weigh Bridges were installed at PPT yard (Third line, Down line), and ADB Yard (Down line) of PRDP.

WAT Div:

- 188 wagons were rehabilitated by Power tech and 1454 unloadable wagons were repaired by Braithewaite.
- 2 nos. of OMRS were commissioned in WAT Div on 17.06.21.
- For the first time, a BCN CC rake formed for movement within WAT division on trial basis.
- The 08525/26 train (VSKP-ARAKU) was converted to LHB rake with 2 Vistadome coaches and was inaugurated by Hon'ble Vice-President of India on 22.11.21.



- VDPD wagon workshop started turning out wagons after POH

SBP Div.:

- Stamping and calibration of newly installed EIMWB at SMER/RGL was completed on 11.02.2022.

CRW/MCS:

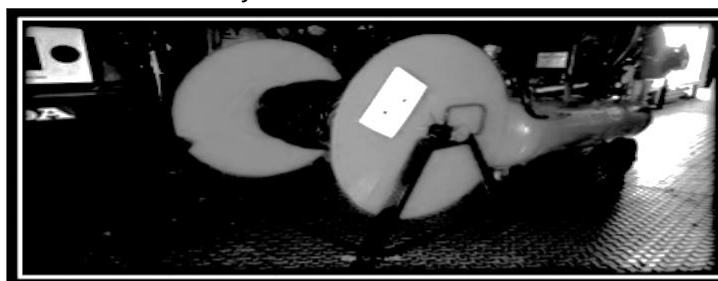
- a. RAIL KAUSHAL VIKAS YOJNA (RKVY) was launched at CRW/Mancheswar by Sri Ashwini Vaishnaw, Hon'ble Minister of Railways, Communications, Electronics, & Information Technology, Govt. of India on 17.09.2021.

General:

- Supply of linens is gradually being started.
- Out of 54 Rakes, at present 52 Rakes/39 Trains are running on HOG. 37nos LSLRDs are running in place of one Power Car in 37 nos HOG Rakes. Thus generating capacity for commercial earning in addition to fuel savings and reduction in noise pollution & Power Car requirement during 2021-22.
- HOG Fuel savings: All LHB AC Coaches, LHB Non-AC Coaches and Power cars have been modified to work on HOG system. The fuel savings due to running of trains on HOG system is Rs. 64.26 Crore in 2020-21 and Rs. 112.74 Crore in 2021-22.
- 11KV/750 volt transformers have been installed at Coaching maintenance depot, Puri, Bhubaneswar for testing of HOG rakes. This has resulted fuel savings to the tune of Rs. 2.25 Crores during 2021-22 in testing of rakes. At VSKP depot it will be commissioned very shortly.

Innovations:

- Two nos. of Single Car Test Rigs were received from M/s Neils Rail Products Pvt. Ltd., Kolkata, and West Bengal on 05.03.2022. Both the machines were commissioned at Coaching Depot/BBS on 23.03.2022.
- One wire drum constructed to keep cable of plasma cutter in SPARME/TIG.
- Motorized Ladder of Tool Van was modified and fitted in tool van of SPARME/TIG for easy movement of man and materials.
- One model for connecting BP & FP air hose with Angle cock has been made by C&W/TIG and kept in Model Room of Crew Lobby/TIG.



(Wire Drum for cable of Plasma Cutter)



(Motorized Ladder)

(Model of BP&FP)

Achievements By Divisions

A. Khurda Road Division:

- Quick Watering System arrangement has been commissioned at KUR station.
- Up-gradation of pit line of Coaching Depot/BBS was sanctioned under Umbrella Work 2018-19. The construction of CAMTECH design pit line (IPL-1) has been completed and rake examination being done on this IPL.
- OBHS control room has been started at Coaching Depot PURI with round the clock working .
- In house attempt to maintain the electro pneumatic flushing system is being carried out by Coaching Depots.
- All 2012 built coaches found having corroded channels connecting inner headstock & first inner channel replaced with seamless pipes suitably to provide strength.
- A drive was conducted for checking of coaches to find out any leakage in roof.
- A drive was conducted at both coaching Depots to identify trolley frame crack in LHB coaches.
- EOT Crane-10 Ton capacity for Coaching Depot/ PURI commissioned on 15.12.2021.

- Railway Heritage Loco at BRN Hotel/ PUI is rehabilitated.
- To facilitate free flow of water for comfortable journey of passengers, the sludge & sediments deposited in under slung water tanks and water pipe lines of LHB AC coaches were cleaned with application of Vinegar.
- Total 126 Nos. of Double Diamond have been formed, examined and issued BPC.
- Total 606 CC rakes were examined at ROH Depot/PRDP in this year.
- 66 Nos. of Hot Axle Wagons made fit by salvage special in this year.
- The premium examination of BOXN rakes has been started at BOXN Depot/ANGL on 01.07.2021 and total 60 rakes have been examined and issued BPC.
- The duration for pipe coupling at PRDP has been reduced from 2 hrs. to 1hr 25 minutes resulted improving turnout time of rakes. Average CC examination has been reduced to 07:00 hrs. and average sick marking per CC reduced to 10 wagons per rake.
- Total 04 Nos. of in-motion weighbridges installed in this year. Three (03) Nos. installed at PPT yard (Third line, Down line), and ADB Yard (Down line) of PRDP and 01 No. at Gopal Pur Port.
- Total 39 Nos. of weighbridges have been calibrated by Railway test wagon and has earned revenue to the tune of Rs. 1,32,46,580/-.

B. Waltair Division: -

- A "Movable gadget for detecting Roof leakage" has been fabricated at Coaching Depot, VSKP to detect the exact location of leakage in coaches.
- Special attention is being given for detection of water leakage from toilets and spilling on RMPU unit of AC coaches to avoid any AC failures on enroute.
- A gadget for replacing of control arm silent block in LHB coaches has been fabricated in-house which helps in minimizing man power, time as well as the replaced control arm can be reused.
- To facilitate removal & fitment primary dampers in FIAT type bogies, one in-house gadget has been made for easy replacement of primary dampers against defective one.
- With the existing man power, Coaching Depot, Visakhapatnam achieved a record of 103 IOH due coaches' attention during March' 2022.
- OBHS services are introduced in Tr. no.17487/88 / 18518/17 Tirumala / Korba Express to instantly redress the complaints lodged by passengers through Rail Madad.
- The ICF rake of 18551/552 VSKP-KRDL Passenger was converted to LHB and was inaugurated by honorable Vice president of India in which, two Vistadome Tourist coaches of LHB type are attached to run for VSKP to Araku and back.
- The sick wagon generation was 84.12 per day during 2021-22 against 82.40 per day in 2020-21. The outturn was 82.63 per day in 2021-22 against 80.36 per day during 2020-21.
- Highest ever CC examination 2409 rakes achieved in 2021-22.
- Highest ROH Outturn 727 wagons has been achieved in the Month of Mar'22
- The number of wagon detachments cases reported was 1 compared to 8 in 2020-21.
- The number of Hot Axle cases reported was 14 compared to 18 in 2020-21
- 737 rakes were formed for long haul train operation to improve throughput.
- During the year 2861 wagons were dispatched to POH workshops out of 2912 wagons detached for POH attention.
- Modification of BLC wagons to upgrade its axle load capacity from 20.32T to 22T during ROH was done. Total 175 BLC wagons have been completed so far.
- Provision for fitment of two doors on BOXNS wagon for 1500 wagons has been started and so far total 795 BOXNS wagons have been completed.
- Retro fitment of Twin Pipe Air Brake System in Freight Stock for 3700 BOXN wagons is being carried at OEC & CSL depot. So far total 2665 wagons have been converted.

C. SBP Division: -

- STP of 250 KLD capacity has been commissioned at SBP on 28.06.2021. This STP is utilized for treatment of waste water of SBP Station, Platform, Office Buildings and Railway Colony of Sambalpur. The treated water is being utilized in SBP station & platform cleaning, Gardening etc.
- Material Recovery Facility (MRF) has been commissioned at Sambalpur
- Stamping and calibration of newly installed EIMWB at SMER/RGL completed this year.
- During COVID pandemic to meet the exigencies of Medical Oxygen in the Country, Mechanical Department has made all the arrangements and safe running of 146 nos. of Oxygen Special Trains loaded with Medical Oxygen Container vehicles to different states by providing C&W Supervisors and staff.
- FOIS integration of EIMWB of MAIL siding has been made .
- Modification work done in Coach no. ECo 200098 Auxiliary Tool Van of newly arrived SPARME/TIG. Rakes have been made to accommodate the equipments of Mech & Electrical.

DLS/ VSKP

- DLS/VSKP has earned ₹ 4.48 crores this financial year which is the highest ever earning of DLS VSKP during a financial year by carrying out different PSU loco works.
- **Augmentation Work** for homing 100 HHP Locos is completed
- As desired by HQ, a **Toy Train** has been fabricated at DLS/VSKP consisting the replica of Steam Engine along with a Coach to use at Kalinga Rail Museum, Bhubaneswar.
- Modification is being carried out in Loco No. 33368 for converting conventional head light to twin beam LED type head light as per RDSO specification.
- DLS has developed the 12V LED light to utilize in electrical loco during engine room & under gear inspection, repair & rectification works. Due to use of magnet, it can be fixed anywhere in the loco as desired by the maintenance staff. It is a simple and good innovation by DLS.
- During the second wave of Covid-19, Diesel Loco Shed (DLS) has taken up a life-saving project by in-house designing of humidifier, oxygen regulator when flow meter, regulator, humidifier were not readily available in the market.
- Two nos 65T EOT Cranes were installed and commissioned for lifting of Electric Locos for replacement/coil springs, Traction Motors etc. 25T/15T EOT cranes were commissioned in Light repair bay for lifting of pares.
- 1st Electric Loco (Loco no. 33257) directly commissioned at DLS/VSKP on 31.08.21 and was inaugurated by DRM/ WAT.
- DLS has commissioned 72 electric locos which is the highest ever in history of DLS.

5. EnHM- MAJOR WORKS DONE:**a. Fitments of Bio-toilets:**

Installation of Bio-toilet has been completed in all coaches of ECoR trains up to Mar'22. During April-2021 to March - 2022, 24 nos Bio-toilet (Tank) were installed in 09 nos Coaches over ECoR.

b. Train Housekeeping:

OBHS facility has been introduced in all eligible trains of ECoR till Mar'22.

c. Special Cleanliness Drives:

During the financial year 2021-22 total 7255 nos of cleanliness Drives has been conducted.

d. Details of installation of Sewerage Treatment Plant (STP) in ECoR during Apr'21 to Mar'22:

Sl.No.	Location	No	Capacity
1	Railkunj Colony/Bhubaneswar (BBS)	01	100 KLD
2	Sambalpur (SBP) Railway station	01	250 KLD
3	Railway Colony Mancheswar/BBS	01	10 KLD

e. Details of installation of Rain Water Harvesting (RWH) in EcoR Apr'21 to Mar'22.

Sl. No.	Location	Nos	Sl. No.	Location	Nos
1	Dhenkanal (DNKL)	1	10	Bhalumaska (BLMK)	1
2	Sambalpur (SBP)	4	11	Naupada (NWP)	1
3	TRD Visakhapatnam	2	12	Kendujhargarh (KDJR)	3
4	Balangir (BLGR)	2	13	Bhadrakh (BHC)	1
5	Bargarh Road (BRGA)	1	14	Cuttack (CTC)	1
6	Duvada (DVD)	2	15	Mancheswar (MCS)	1
7	Rayagada (RGDA)	1	16	Bhubaneswar New (BBSN)	1
8	Bhubaneswar (BBS)	1	17	Komakhan (KMK)	1
9	Tikiri (TKRI)	1		Total	25

f. Details of Water Audit, Energy Audit, Consent to Operate (CTO), Green Initiatives completed during Apr'2021 to Mar'2022.

Sl. No.	Subject	Location
1	Water Audit	Brahmapur (BAM), Palasa (PSA), Khurda Road (KUR), Balugaon (BALU), Cuttack (CTC), JajpurKeonjharRoad(JJKR), Bhadrakh (BHC) &Araku (ARK)
2	Energy Audit	Bhadrakh, JajpurKeonjhar Road, Cuttack, Bhubaneswar, Brahmapur, Palasa, Khurda&Balugaon railway stations andElectric Loco Shed ANGL (Angul)

3	Consent to Operate (CTO) obtained for Railway station.	Sambalpur (SBP), Kesinga (KSNG), Titlagarh (TIG), Balangir (BLGR), Rayagada (RGDA), Khurda Road (KUR), Brahmapur (BAM), Bhubaneswar (BBS), Cuttack (CTC) & PURI Rly station.
4	IMS-Integrated Management System	Coaching depot/Sambalpur, Coaching depot/Visakhapatnam. Ore Exchange Complex (OEC), Visakhapatnam Steel Plant (VSPS yard), Central Sick Line (CSL) Reception Yard (RYD).

g. Step has been taken for Solid Waste Management and Air Pollution Control Measures.

Sl. No.	Initiatives	Location	Capacity/ Nos
1	Compost Plant	Rayagada (RGDA)	100 Kg/Day
		Srikakulam (CHE)	100 Kg/Day
		Titlagarh (TIG)	100 Kg/Day
2	Material Recovery Facility (MRF)	Rayagada (RGDA)	75.26 Sqm
		Sambalpur (SBP)	30 Sqm
		Titlagarh (TIG)	31 Sqm
3	Installation of Twin Shaft Shredder Plant	Coach Repairing Workshop Mancheswar (CRW/MCS)	1 No.
4	Sanitary Pad incinerator	In Ladies waiting hall at Balangir&Titlagarh	01 each
5	Twin Dustbins installed	Sambalpur (SBP)	61 pairs
		Balangir (BLGR)	45 Pairs
		Titlagarh (TIG)	49 Pairs
		Kesinga (KSNG)	67 Pairs
6	Plastic Bottle Crushing Machine (PBCM) Commissioned	Khurda Road (KUR)	2 nos
		Bhadrakh (BHC)	1 no
		JajpurKeonjhar Road (JJKR)	1 no
		Balugaon (BALU)	1 no
7	Construction of Toilets at Station	Jharsuguda Road (JSGR), Maneswar (MANE), Brundamal (BXQ), Hirakud (HKG), Rairakhol (RAIR), Sambalpur (SBP), Boinda (BONA), Rayagada (RGDA), Bhubaneswar (BBS) & Cuttack (CTC), Vizianagaram (VZM), Srikakulam (CHE) & Visakhapatnam (VSKP)	
8	Pollution Control Measures at siding	Nayagarh (NYG) Railway siding Completed in Jun'21	01
9	Afforestation	At various locations	4,28,093 nos
10	Decibel meters	Procured by WAT Division	10 nos

h. Installation of Solar Plant during Apr'21 to Mar'22.

Sl. No.	Initiatives	Location	Capacity
1	Solar PV Power Plant	Rail Sadan North Block/BBS	2 nos x 50 KWp
2		DRM building/ Sambalpur	40.3 KWp
3		Cuttack (CTC)	75.08 KWp
4	Solar Water Heater	Diesel Loco Shed Visakhapatnam	2 nos x 1000 Litre

i. Other initiatives for monitoring of Environmental issues completed during Apr'21 to Mar'22.

Sl. No.	Initiatives	Location	Qty
1	Installation of CCTV for monitoring Cleanliness	Titlagarh&Balangir	38 Nos each
		Jagdalpur (JDB)	40 nos
2	Procurement of Personal Computer for monitoring cleanliness and data management purpose at station	JajpurKeonjhar Road, Bhadrakh, KhurdaRoad, Brahmapur &Palasa.	01 set for each
3	Procurement and installation of 55 inch LED TV for monitoring cleanliness at station	Vizianagaram, Srikakulam, Rayagada, Sambalpur, Titlagarh&Balangir	01 each

EnHM- Major works done by Divisions:

Khurda Road Division:

- 100 KLD STP commissioned at RailKunj and the installation and commissioning work of 10 KLD STP completed at MCS Colony.
- Water Audit completed for 7 Nos. Railway Stations namely- JJKR, BHC, KUR, CTC, PSA, BAM & BALU during June-21.
- Energy Audit completed for 8 Nos. Railway Stations namely-BBS, CTC, BHC, JJKR, KUR, BAM, PSA & BALU & Electric Loco Shed ANGL during December-21.
- PBCMs installed at KUR(2 Nos.), BHC(1 No.), JJKR(1 No.) & BALU(1 No.) during May-21.
- For KUR, BAM, BBS, PURI, CTC, JJKR Railway Station, CTO (Consent to Operate) obtained from State Pollution Control Board Odisha Solar Plant-
- Solar Plants commissioned at Station Building & AEN Office of CTC, ELS/ANGL, SPT, IPM, CTC Station, Rail Sadan under PPA.
- Pollution Control Measures at Nayagarh Station completed during June-21.
- World Environment Day was observed on 5th June 2021 over KUR Division.
- A 15 days cleanliness drive had been observed as SwachhtaPakhwada 2021 from 16.09.2021 to 30.09.2021 over KUR Division.

WAT Division

- Swachch Hi Sewa-Pakhwada campaign 2021 has been organized at WAT and all the supervisors, staffs as well as residents of Railway Colonies have actively participated and shown their enthusiasm to maintain cleanly environment and premises. As part of this programme, running rooms and crew lobbies developed surrounding areas in front of their office premises with beautiful flower plants and greenery.

SBP Division

- During SwachhataPakhwada from 16.09.21 to 30.09.21 Swachhata pledge conducted at SBP, BLGR,TIG, K B J , KSNG and different stations, online quiz competition conducted, Colony cleaning competition has been conducted at SBP and Cleanliness drives conducted at different stations and colonies of SBP Division.
- EnHM wing of Mechanical Department observed the "World Environment Day" on 4th & 5th June' 2021 and different activities like webinar, tree plantation, seminar, distribution of cloth bags etc. were undertaken on these days in order to promote awareness among the railway fraternity and stake holders/passenger towards saving of our environment & restoration of ecosystem.

ELECTRICAL DEPARTMENT

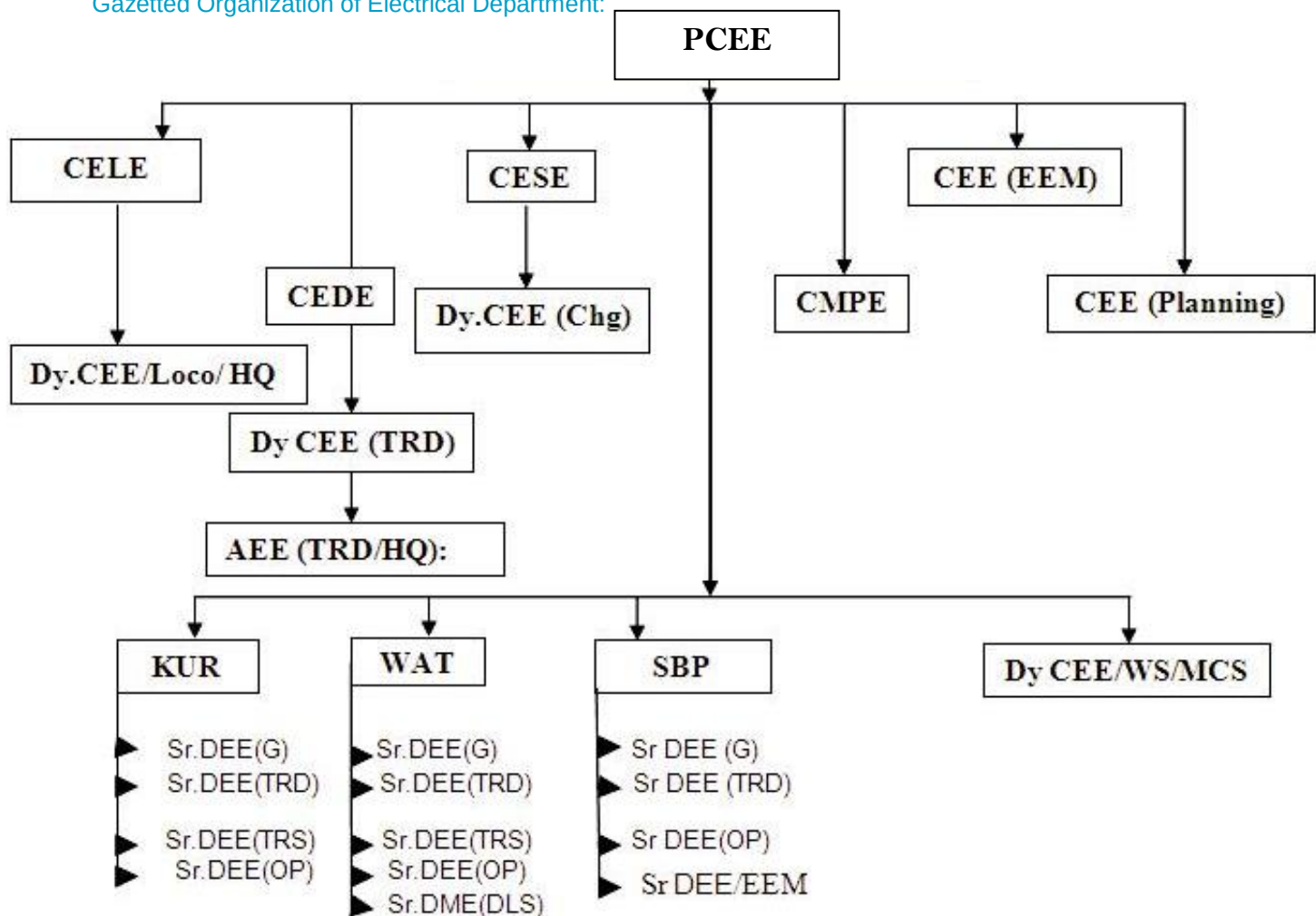
1.0 INTRODUCTION:

Activities of Electrical department:-

- Repair, maintainance, overhauling of Electric and Diesel Locomotives.
- Operation of Electric and Diesel Locomotives.
- Repair, maintainance, overhauling of overhead equipments and power supply installations of traction distribution.
- Repair, maintainance, overhauling of power supply installations and electrical equipments of electric general services.

2.0 ORGANIZATION CHART:

Gazetted Organization of Electrical Department:



3.0 HIGHLIGHTS:

- "HOG Operation: - 15 rakes (11Train) have been converted to HOG during 2021-22 and so far 51 rakes (38 Trains) have been converted to HOG. Saving of Rs. 112.74 Crores has been achieved in Diesel fuel consumption due to running of HOG rake from April'21 to March'22 as against Rs.64.26 Crores in corresponding period of the last year.
- Three Passengers lifts have been commissioned at PSA, KUR & JJKR station over KUR division during 2021-22 and so far 39 passenger lifts have been commissioned at different station over ECoR as passenger amenities.

EAST COAST RAILWAY'S ANNUAL REPORT - 2021-22

- Six Stations (Kotavalsa, Duvvada, Kantabanji, Baragarh Road, Kesinga, Dhenkanal) have been provided with Airport standard illumination over ECoR.
- Power supply has been extended to the Oxygen plant at Central Hospital, Mancheswar & Divisional Hospital, KUR, SBP & VSKP.
- Target Electrification work of 39 TKM of Bolangir – Bichhupali & Nayagarh Town-Mahipur-Nuagaon section has been completed during 2021-22.
- Railway electrification of 290TKM has been completed in ECoR jurisdiction upto 31st March'22, which includes doubling of routes and electrification of sidings.
- As precautionary measure, additional DG sets, generator cars, power cars & extra man powers are kept ready at different stations and at Covid-19 Railway Hospital over KUR division for restoration work at the time of exigency for Cyclone "YAAS" & "JAWAD".
- Rs.8.01 Crores has been availed as Load factor incentive in CSPDCL Traction Electricity Bills 2021-22 as load factor achieved above 20%.
- Rs.8.72 Crores has been saved towards early payment and improvement of power factor in the Electricity Bills of Traction and Non-Traction electrical energy for the year 2021-22.
- Solar Energy:- 328KWp solar photo voltaic power panels have been installed, tested and commissioned over the roof top of Cuttack, SBP, Rail Sadan, Sompeta, Ichchapuram railway station as a green energy initiative during 2021-22 and so far 4.68 MWp solar photo voltaic power panels has been provided over ECoR.
- 41.12 lakhs units of green energy have been generated over ECoR by solar roof top plants and Rs.1.58 Crores has been saved by use of Solar energy during 2021-22.
- RCD at Bhubaneswar have been closed and now fueling of Power car has been done through outside agency.
- Diesel Loco Shed /VSKP has started maintenance of 96Nos. 3-phase electric locos (as on March'22) including in-house test bench in which testing of Relays & Cab Equipment, Contactors & Capacitor, Converters & Electronics, Circuit Breakers and Switches, Speed Recorders Calibration & Master Controller & MU Cable can be done.
- Elimination of Line Box of Loco pilot and Guard:-Common line boxes of loco pilot and Guards in SBP division has been completely removed. Some essential tools have been issued to all Loco pilots for carrying along with their personal Bag. Exigency line boxes have been provided at all stations and sidings containing all other tools. Lockers have been provided at Lobby premises and are allotted to Crews at the time of Sign off to keep the personal bags.
- 100% LED light fittings have been provided at all Stations, Service buildings and Railway Quarters over ECoR.
- Energy conservation week was observed from 07.12.2021 to 14.12.2021.
- Electrical safety week was observed from 1st May to 7th May 2021 over ECoR
- Safety exhibition and safety seminars were conducted for safety awareness among the users.
- Memu car shed commission at Khurdha Road in 22nd July 2018. First rake with composition of 12 coaches started in year 2018-19. The Population of MEMU coaches has reached to 144 coaches as on 31st Mar 2022.
- 32 Nos. of 3 phase MEMU coaches of ICF make have been commissioned in the FY 2021-22.

Salient features:-

MEMU Coach Holding	MC-36+TC-108
No. of 08 car MEMU Rakes	2 Rakes
No. of 12 car MEMU Rakes	5 Rakes
No. of 16 car MEMU Rakes	2 Rakes
No. of MEMU services daily with 08 Car+12 Car+Three 16 Car	18 Trains (Both UP & DN)

4.0 MISSION ITEMS PERFORMANCE (2021-22): -

Sl No	Item	2020-21		2021-22	
		Target	Actual	Target	Actual
1.0	Electric Consumption (traction energy) /SEC				
	-Passenger (KWH/000GTKM)	-	19.71		19.15
	-Goods(KWH/000GTKM)	-	4.23		5.62
2.0	Non Traction Energy Consumption(million units)	-	72.13		75.00
3.0	Asset Reliability				
	-Elect Loco failure (Ownership)	-	457		521
	-Diesel Loco Failure(Ownership)	-	57		60
	-OHE Failure	-	8		24
4.0	Ineffective % of Elec. Loco	8.3	5.8		5.5

5.0 LOCO SHEDS: -**i. ELS / Waltair:**

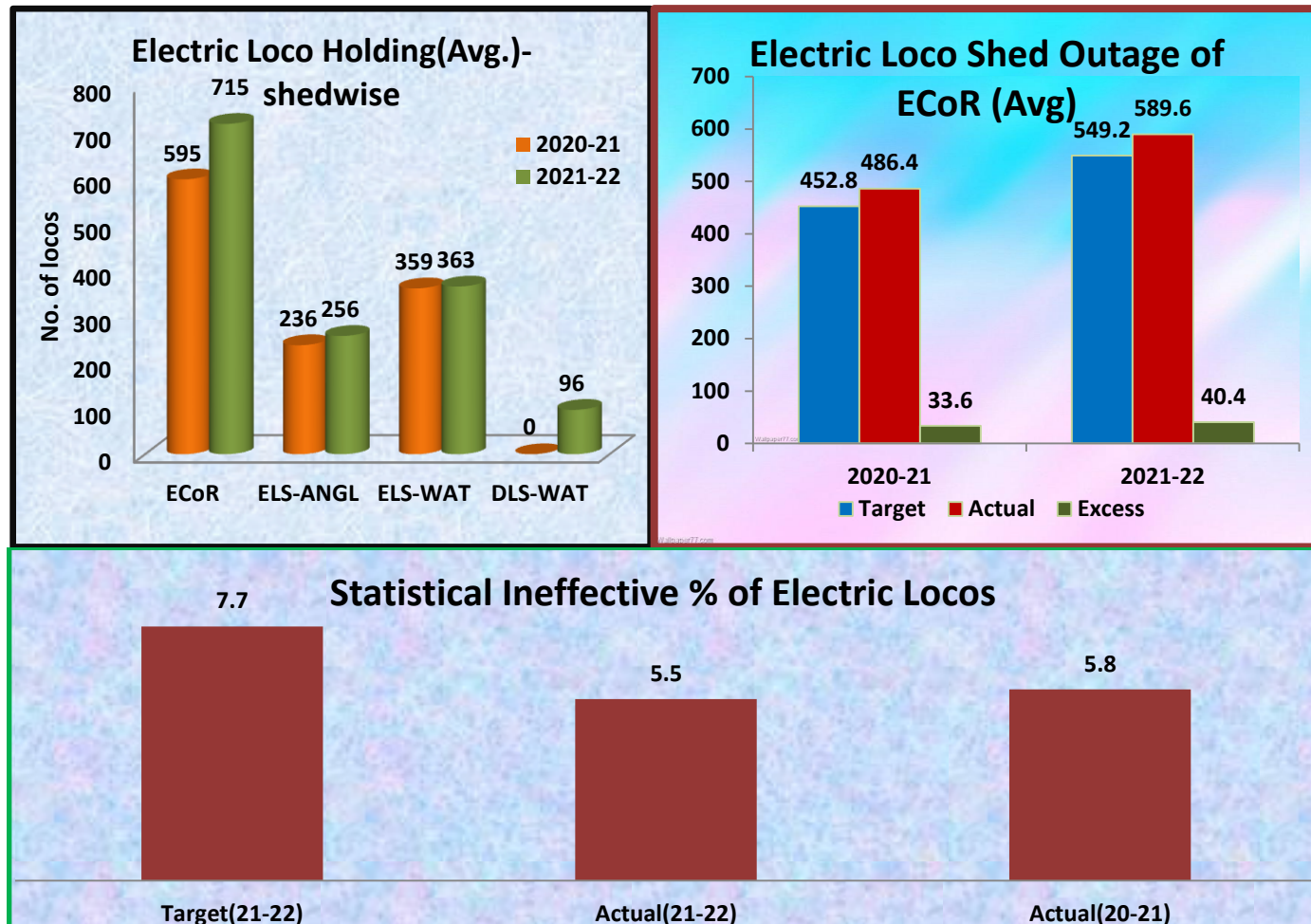
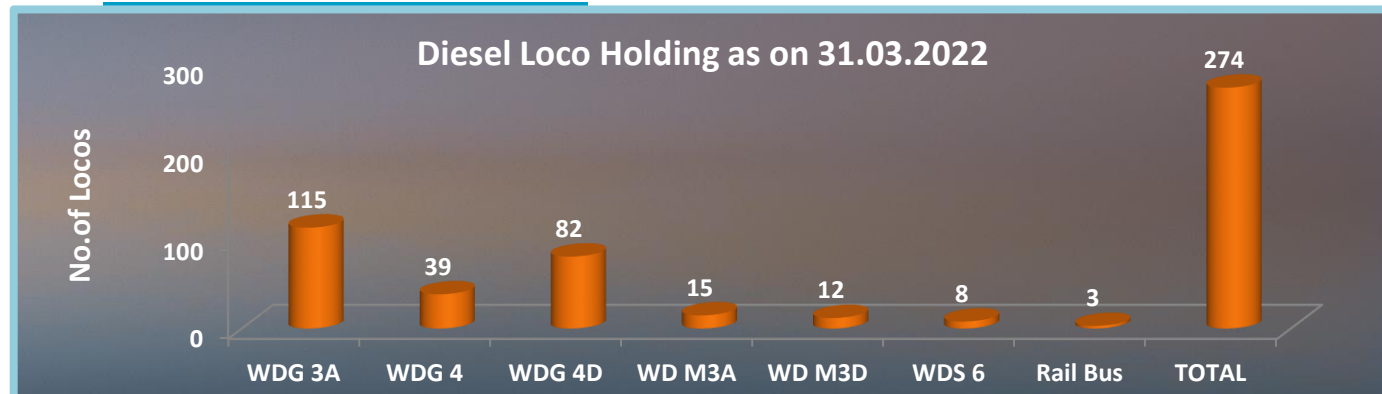
Electric Loco shed, Visakhapatnam was commissioned in 1982 with a holding of 30 locos which has increased to 363 as on 31st Mar'2022.

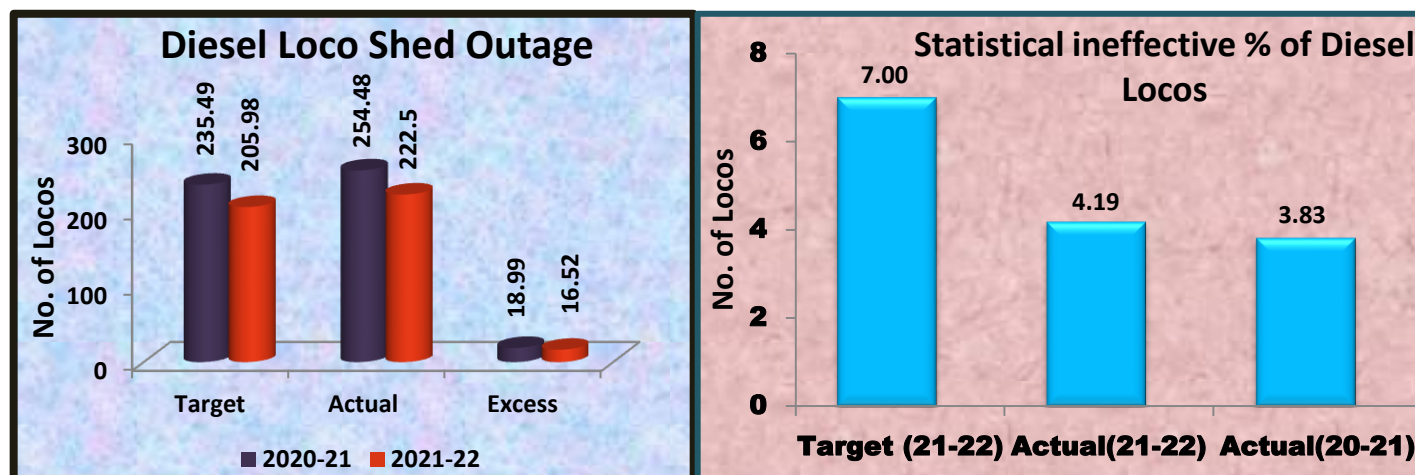
ii. ELS / Angul:

Electric Loco Shed, Angul was converted from Diesel Loco Shed and it was commissioned on 8th Dec' 2005. As on 31st Mar'22, ELS/ANGL homes 256 locos.

iii. DLS/VSKP :

Diesel Loco shed, Visakhapatnam was commissioned in 2nd May 1965 with a holding of 13 locos which has increased to 274 (Including 3 rail buses) as on 31st Mar' 2022. In addition 96 Electric Locos have been added to holding as on 31st Mar' 2022.

5.1 Performance of Electric Loco Sheds:**5.2: Performance of Diesel Loco Sheds:**



5.3 Reliability Action Plan of Electric Locomotives:-

- TC-134 and other 3-ph reliability action plans like test benches etc.
- Regular updation of Reliability Action Plan of locomotives.
- Replacement of spares in kit form.
- Training of drivers on new generation loco equipments like SIV, MPCS, VCD.
- Use of torque wrench, Use of pneumatic tools, Use of modern tools, precision calibrating instruments and condition monitoring equipments.
- Transverse flexibility test and calibration of pantograph.
- Trouble Shooting Directory for drivers in audio-visual and question-answer form.

5.4 Reliability Action Plan of Diesel Locomotives:-

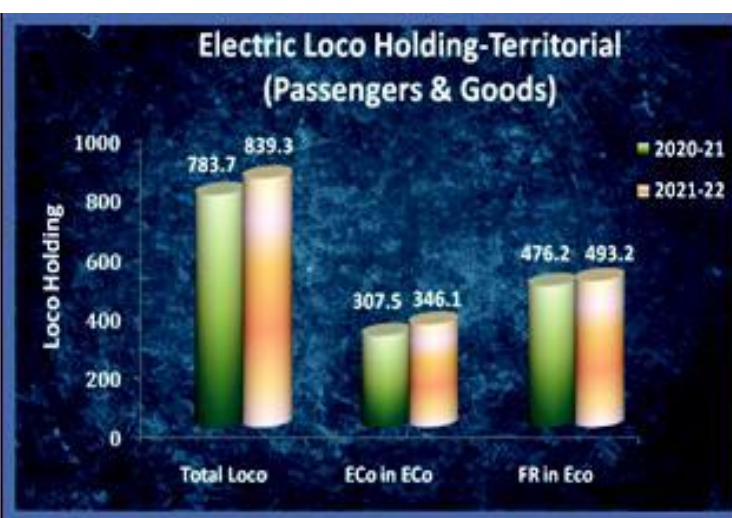
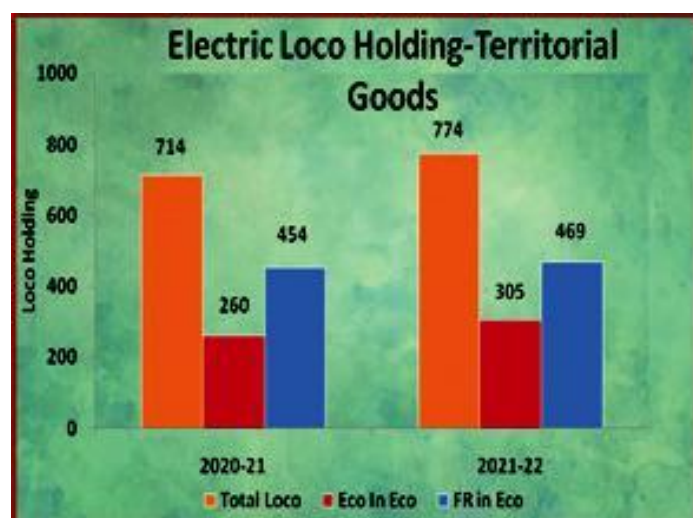
- All subassemblies after overhauling tested at the bench before fitment in the loco.
- Super checking of under gear and engine room items is being carried out regularly.
- Technical circulars have been circulated to restrict recurrence of failures.
- Zyglo testing done in regular manner to detect cracks.
- Bad workmanship cases are dealt with counseling of staff and D&A action being taken as per gravity of the failure.
- Rice blasting in HHP locos are carried out to prevent surging of turbos.
- Cam gear, Split gear and all cam sections are changed during M48 schedule as a measure of preventive maintenance.
- Insulations are checked properly in due schedule.
- Proper sealing of Alternator room is being ensured to prevent water ingressing etc.

5.5 POH, Recabing (RC) and Mid term Rehabilitation (MTR) of Electric Locomotives: -

Workshop	2021-22		
	POH	POH+RC	Mid term Rehabilitation (MTR)
Kancharapara	9		
Kharagpur	6		
Dahood	0		
Bhusawal	12		
Perambur	0		
Total	27	NIL	NIL

6.0 LOCO OPERATION:-

6.1 Performance of Loco Operation:-



6.2 : Training conducted for the Running staff:

6.2.1 : Training Conducted by running crew of OP/(KUR/WAT/SBP) for 2021-22.

Course	Staff Catagory	Total Staff under gone			
		KUR	WAT	SBP	ZONAL
(A) REFRESHER COURSE					
CRC	LP	1125	988	530	2643
ACRC	ALP	393	305	445	1143
LPS	SHUNTER	33	100	6	139
(B) PROMOTIONAL COURSE					
DP	ALP&SHUNTER	159	95	90	344
PDC	LP(GOODS)	52	54	10	116
(C) CONVERSION COURSE					
DC	LP,AC-DC	7	8	55	70
ADC	ALP,AC-DC	4	84	295	383
ACRC	LP,DC-AC	23	34	12	69
AAC	ALP,DC-AC	6	10	6	22
(D) INITIAL TRAINING					
ADC	RRB CANDIDATE	299	145	270	714
(E) SUPERVISOR COURSE					
RSIC	NEW CLI	-	13	-	13
RSRC	CLI	13	19	07	39

6.2.2 : Training position of running staffs MDTC/MIPM/VSKP

SL No	Name of the Course	2021-22				
		WAT	KUR	SBP	Total	Hostel
1	ALP Induction Course(Tech.&SWR)	164	411	312	887	NIL
2	CRC — LP/ALP	842	50	87	979	NIL
3	DPC/SWR	0	0	0	0	0
4	DPC/Tech	0	0	0	0	0
5	DPC(Tech & SWR)	84	241	50	375	NIL
6	PDC/(Tech. & SWR)	43	55	10	108	NIL
8	CLI refresher course	19	28	7	54	NIL
9	CLI/Initial course	13	03	0	16	NIL
10	Conversion Course from Diesel to Electrical for LPS & ALP's	40	32	20	92	NIL
11	CLI conversion course	0	0	0	0	0
12	RC for Technicians (TRS)	0	0	0	0	0
13	RC for KSI (TRS)	0	0	0	0	0
14	Pre-selection 25%JE IAM	0	0	0	0	0
15	Pre-selection chg for 30% AEE	0	0	0	0	0
16	Pre-promotional trg. For Tr.JE	0	0	0	0	0
17	Project Saksham Course for Elect. Ministerial staff	0	0	0	0	0
18	Spl. Crash course 21- 22	54	38	56	148	0
	Total No. of trainees (Electrical)	1259	858	542	2659	0
19	SM & Gd.'s Refresher Course	109	188	79	376	0
20	Project Saksham Course	0	0	0	0	0
21	Soft skills training for Optg., Comml.& RPF)	0	0	0	0	0
22	RRB/Guards/SM's initial trg.	0	0	0	0	0
23	Total No. of trainees (Operating &Comml.)	109	188	79	376	0
	Grand Total	1368	1046	621	3035	0

7.0. : TRACTION DISTRIBUTION (TRD):-

7.1 : Assets maintained by TRD:-

S.N.	Asset	Total As on 31.03.2021		Total As on 31.03.2022	
1	a. 132/25 KV Sub-station owned by ECoR	51		56	
	b. 132/25 KV Sub-station owned by supply auth.	0		0	
2	Installed capacity of Sub-station in MVA	640		719	
3	No. of feeding posts	-		-	
4	No. of sectioning posts	65		65	
5	No. of Sub sectioning & paralleling post	125		127	
6	No. of Auxiliary Transformer	1149		1171	
7	No. of Booster Transformer (Not in service)	-			
8	Maintenance Depot				
	i. OHE Depots (Main)	38		38	
	ii. OHE Depot (Sub)	0		7	
	iii. Power supply Depot	24		14	
	iv. Sub-station Depot	-		-	
	v. Remote control Depot	2		3	
9	Remote control centers	3		3	

Electrified RKM/TKM:-

SI No		KUR		WAT		SBP		ECoR	
		RKM	TKM	RKM	TKM	RKM	TKM	RKM	TKM
1.	Electrified as on 31.3.2021	1023	2745	1106	2415	739	1613	2868	6773
2.	Electrified as on 31.3.2022	1050	2882	1106	2449	739	1713	2895	7044

7.2 : Sections / Sidings have been energized with 25 KV OHE in the year 2021-22:-

EIG sanction of 18 Private Sidings of a total of 124.6 Track Kilometer have been accomplished in the year 2021-22.

7.3 : TRD failures (2021-22):

Sl. No.	Detail	No. of Failures in year 2020-21	No. of Failures in year 2021-22
1	Failure of OHE due to theft	0	0
2	Failure of OHE due to breakdown lack of maintenance/bad maintenance /bad design	4	9
3	Failure of OHE due to external causes like stone throwing, green stick, Panto entangle	4	14
4	Failure of PSI/RC equipments	0	1
5	Failure of OHE due to accident	0	0

7.4 : Reliability Action Plan of OHE (2021-22) / PROGRESS OF 44 POINT ACTION PLAN:**(A). Action Plan for OHE**

Sl No	Works	Periodicity of maintenance	Total volume of work during a year. (Target)	Cummulative Work Completed in 2021-22	% completed/ Remarks
1	A drive to check turnouts / cross over OHE for its proper adjustment / alignment	AOH & during live line checking	2606	1517	58.21
2	Live line checking by TW	Half Yearly	4647	3249	69.92
3A	Free movement of cantilever	AOH	94431	45515	48.20
3B	Status of overhauls of ATD and its free movement	Annually & Foot Patrolling	8504	6482	76.22
4	Checking of PG clamps, splices by thermo vision camera	Half Yearly	61243	61243	100.00
5	Provision of missing of structure bonds/Rail bonds	During Foot Patrolling	-	10621	Is being provided as per requirement
6	Cleaning of insulator at specified interval (both porcelain & composite)	Half Yearly (normal zone), 3-4 times in polluted zones	201352	120006	59.60
7	Attention to critical implantation (<2.36m+ curve allowance) mast on main line	During Foot Patrolling	NIL	0	0
8	Replacement of rusted cantilever assembly	AOH/POH	NIL	368	-
9	Replacement of silver brazing joints in Contact wire	Visual inspection in day time through TW (annually) or ultrasonic testing of contact wire	NIL	NIL	NIL
10	Provisions of screens to 1.83 M height on all FOBs to cover gaps wherever existing between two lines	Annually (jointly with Engg.Dept.)	Already exists	-	Is being followed
11	Compliance of RDSO SMI for bird preventions	As per RDSO SMI	-	-	Is being implemented

Sl No	Works	Periodicity of maintenance	Total volume of work during a year. (Target)	Cummulative Work Completed in 2021-22	% completed/ Remarks
12	Compliance of RDSO SMI for pre & post monsoon precautions	As per RDSO SMI	-	-	Complied
13	Ensure required tension in Guy rods	AOH/POH	13444	11106	82.61
14	Ensure loops of Droppers are fabricated as per RDSO drawing and droppers with worn out loops are replaced during maintenance	AOH/POH	-	3354	Is being provided as per requirement.
15	Minimum electrical clearances as per IRSOD and additional clearances as per site conditions should be ensured	AOH/POH	-	-	Ensured
16	Rail level shall be monitored as per railway board JPO & ACTM	After working each track machine	-	-	Is being monitored.
17	Maximum No. of splices (15 per tension length) and minimum distance between two splices (minimum 100m) to be ensured)	Replacement of tension length immediately in case of more splice	-	10	Is being followed
18	Healthiness of Guard wires under power line crossing ids ensured. Joint check for power line crossing is ensured with State El. Bds.	Annual (Pre-monsoon)	-	56	Is being followed
19	All necessary danger Boards, Caution Boards availability is ensured	Foot Patrolling	-	152	Ensured
20	All unauthorized as well as non-standard laying of overhead cables/pipes over the OHE & overhead structure should be get removed	Check during foot patrolling	-	0	Is being followed
21	Identification & attention to leaning/tilting masts	Foot Patrolling	-	140	-
22	Broken strands of Catenary wire, splicing to be done even for one strand broken	Check during foot patrolling, no binding permitted	-	413	Is being done
23	Progress of removal of Insulated catenary Wire as per Railway Board's order no. 2003/RE/161/1/Vol-III/Pt. dt.19.06.2017	To be completed in next 3 months	0	0	Insulated catenary wire removed.
24	Current collection test by Oliver G system	Every 3 months	-	2920	Is being followed.
25	Pre-testing of insulators	Should be tested before put in as per RDSO SMI	-	2592	Is being followed.

SI No	Works	Periodicity of maintenance	Total volume of work during a year. (Target)	Cummulative Work Completed in 2021-22	% completed/ Remarks
26	Maintain OHE as per SED	Part of regular maintenance schedule	-	-	Is being followed.
27	Identification of dangerous trees in the vicinity of OHE & their pollarding/trimming as per the need	Regular activity and to be completed before monsoon	-	80007	Is being followed.
28	Observe for signs of slippage from ending cone and color coding of ending cones	Visual inspection in day time through TW (annually)	-	-	Is being followed
29	IC of newly electrified section	One time	-	17	-
30	Replacement of 150 sq.mm. electrolytic Cu LS wire by 130 sq.mm.Cu-Cd wire	Immediately	-	-	Is being followed
31	Power line crossing with voltage less than 33KV to be made underground	Action be initiated with SEBs	-	-	In MCL, Talcher area, there are 19 nos. 11 KV crossing exist and letter written to MCL Authorities to modify the same to underground. Affords are being on to convert 11KV power line crossings to under ground 4 Nos in Main line and 4Nos in KK line.
32	Checking of entire earth system of TSS & connection to rail.	As per ACTM	48	23	47.92
33	Checking and calibration of protective relay at specified interval	Yearly	48	40	83.33
34	To check the healthiness of lightening arrestors in lightening prone area	Annually	1248	988	79.17
35	Sealing of top cover in BHEL make BMs to prevent moisture ingress	One time	-	0	Is being followed

B. Action Plan for PSI

Sl No	Works	Periodicity of maintenance	Total volume of work during a year. (Target)	Cummulative Work Completed in 2021-22	% completed/ Remarks
36	Checking of switchyard equipments by thermovision camera for joints, nut-bolts, bus connections, clamps etc	Half Yearly	158	116	73.42
37	Focus on battery maintenance of TSS	As per schedules	-	885	Is being followed
38	Progress of implementation of SMI regarding maintenance of vacuum circuit breaker	As per RDSO SMI	-	57	Is being followed

C. Action Plan for TW

39	Progress of implementation of special maintenance instruction (SMI) of 8 wheeler TW including UST of axle.	As per RDSO SMI	-	-	Is being implemented.
40	Progress of implementation of special maintenance instruction (SMI) of 4 wheeler TW including UST of axle-	As per RDSO SMI	-	-	Is being implemented
41	Planning of spare axles for 4W Tower Wagon (minimum quantity for complete Zonal Railway)	One time activity	-	-	-
42	Tower Wagons-rubber flexible pipes to be replaced by braided pipes as done in electric locomotives	One time activity	-	-	Are being procured from OEM

D. Action Plan for RC/RCC

43	Training of TPCs	Periodicity to be decided at Zonal Rly level	-	-	Is being followed
44	Standard report from SCADA for predictive maintenance	Every day	-	-	Is being carried out.

8.0 : ELECTRICAL GENERAL SERVICES:-**8.1 : Assets (except Coaching stock) maintained by Electrical General Services(as on 31.03.2022): -**

Division	Electric pumps	Water Cooler	AC (Window+ Split)	Central AC Plant	Refrigerator	Diesel Generator Set	Transformer
Khurda	378	292	2378	21	125	67	162
Sambalpur	161	87	453	0	34	99	87
Waltair	297	77	938	1	92	92	143
MCS	5	38	95	0	5	3	10
Total	841	494	3864	22	256	261	402

8.2 : Total Diesel Generating Sets in Service (2021-22): -

Particulars	Generating Sets in Service (DIESEL)	
	No. of Sets	Total installed capacity in KW
As on 31.03.2021	281	17480
New addition during 2021-22	-20	-(195)
As on 31.03.2022	261	17285

8.3 : Electrical Plants in Service: -				
S.N.	Particulars	As on 31.03.2021	As on 31.03.2022	Addition
i	No.of Motors	1160	1180	20
ii	No.of Fan points	72005	73888	1883
iii	No.of Plug points	93191	95736	2545
iv	No.of Deep freezers & Refrigerators	174	174	Nil
v	No.of Air-conditioning units.	3751	3885	134
vi	No.of Water coolers	499	500	01
vii	No.of Sub stations	247	261	14
viii	No.of Pumps			
	a) Electric	825	825	Nil
	b) Diesel	-	-	

8.4 : Solar Assets of ECoR as on 31.03.2022:

Total solar installation during 2021-22 in ECoR territory is 567.34 KWp out of a total cumulative installation of 4707.77 KWp as on 31.03.2022.

SN	Description	Capacity in KWp	Agency	Remarks
1	VZM	100	M/s. Azure	Commissioned on 22.03.2021
2	SBP (GI)	75.08	M/s. Azure	Commissioned on 30.03.2021
3	KRPU	27	M/s. Azure	Commissioned on 30.03.2021
4	KRPU	5.3	M/s. Azure	Commissioned on 30.06.2021
5	Rail Sadan	100.32	M/s. Azure	Commissioned on 30.06.2021
6	CTC Rilway Station	75.24	M/s. Azure	Commissioned on 10.08.2021
7	Sompeta Rly Stn.	39.7	M/s. Azure	Commissioned on 16.08.2021
8	Icchapuram	95.4	M/s. Azure	Commissioned on 18.08.2021
9	DRM building/SBP	40.3	M/s. Azure	Commissioned on 07.09.2021
10	9 LC Gates in KUR division	9.0	-	Commissioned on 25.11.2021
	Total	567.34		Commissioned in 2021-22

9.0 : PASSENGER AMENITY ITEMS AT STATIONS :

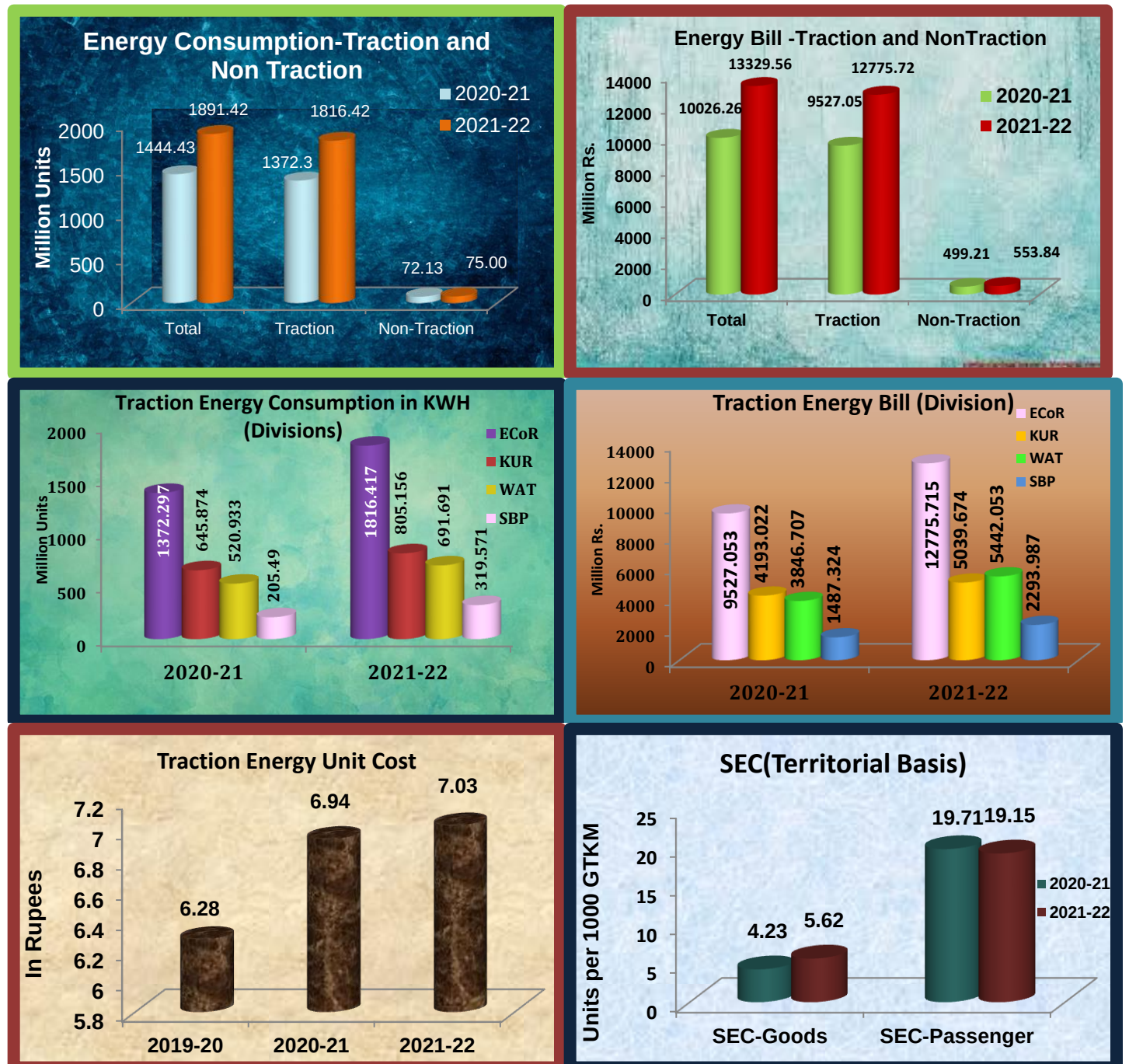
S.N	Particulars	Till March'2021	Till March'2022	Addition
i	Electrified Station/Halt	316	316	0
ii	Escalator at Stations	18	21	3
iii	Lifts at stations	36	39	3
iv	Water Cooler at Station			
	a) No. of Station provided with water coolers	109	100	
	b) No. of water coolers in service	244	251	7

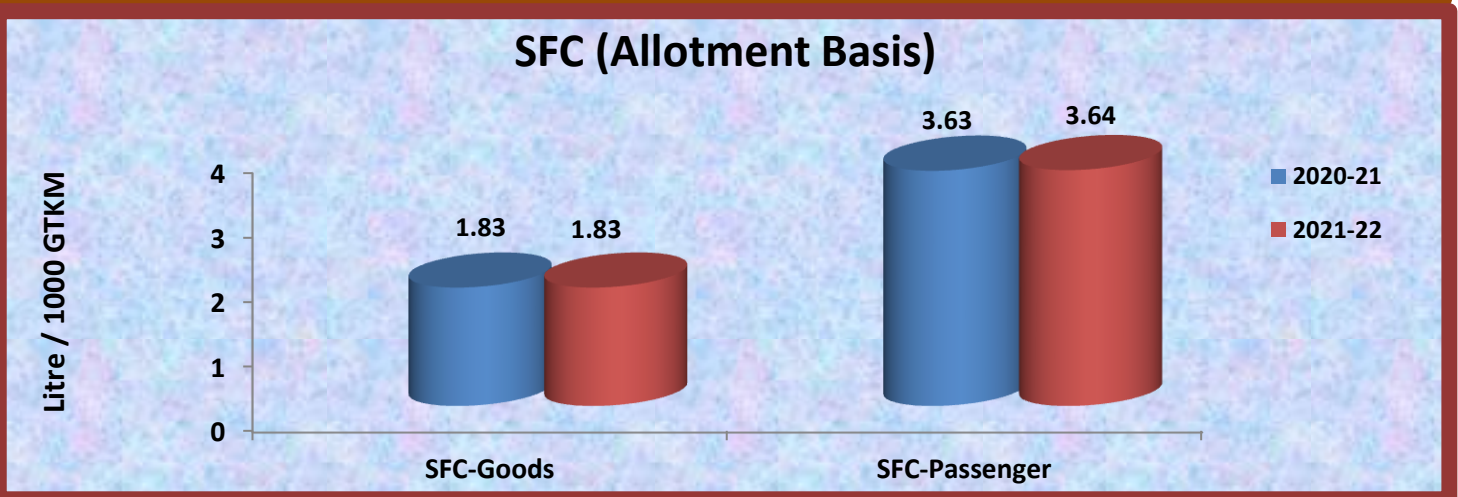
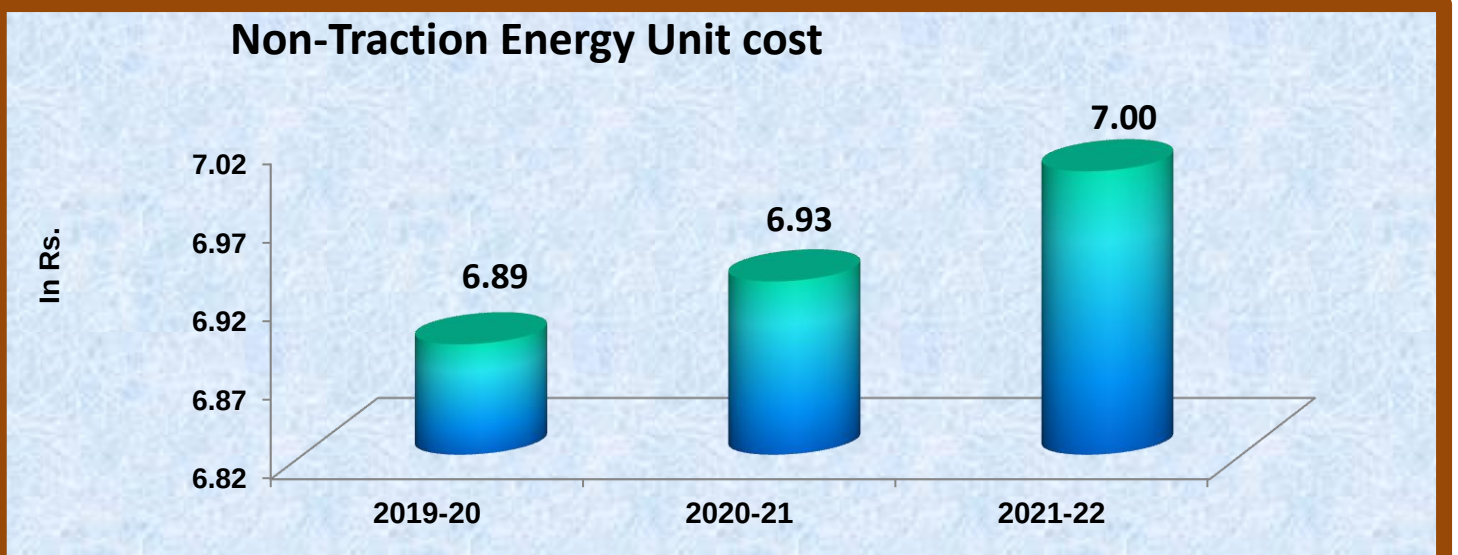
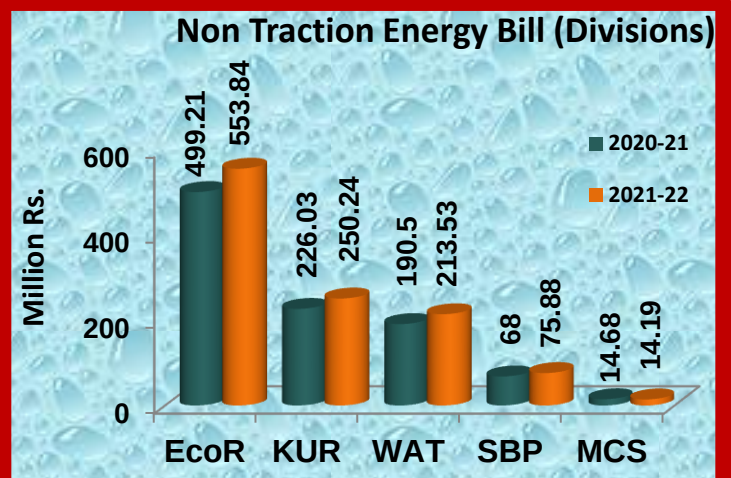
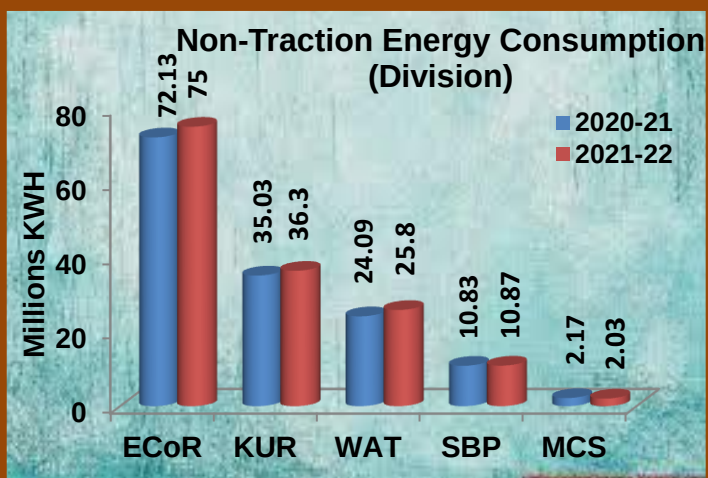
10.0 : STAFF AMENITY ITEMS:-**10.1 : No. of Water Coolers in Premises: -**

S.N.	Location	Upto March'21	Upto March'22	Addition
i.	Workshops	30	30	0
ii.	Hospitals	19	19	0
iii.	Offices	113	107	-
iv.	Other locations	337	312	-
TOTAL		499	476	-

10.2 : Electrified Railway Quarters: -

Type of Rly. Qrs.	As on 31.3.2021	As on 31.3.2022	Addition/Deletion
I	9412	10698	1286
II	8408	8123	-285
III	1757	1701	-56
IV	740	734	-6
IV Spl	240	240	0
V	205	209	4
Other	29	29	0
Total	20791	21734	943

11.0 : ENERGY CONSUMPTION:-**11.1 :Electrical Energy (Traction And Non Traction) Consumption & Energy Bill**



NB: SFC as per monthly statistical statement MS-5.

11.2 : Percentage consumption of Electrical Energy for General Services: -

Sl. No	Consuming Section	% age 2020-21	% age 2021-22
i	Major Workshops	3.28	3.48
ii	Other than Workshop (including ELS & DLS)	6.35	9.05
iii	Non rental buildings (Officers & Quarters)	62.00	68.75
iv	Rental buildings. (Qtrs)	18.45	18.72

11.3 : Purchase, Generation & Consumption of Non traction Energy: -

Sl. No	Particulars	2020-21	2021-22
i	Units purchased from the Electricity Board at all locations. (in Million Units)	72.13	75.00
ii	Total Units consumed. (in Million Units)	72.13	75.00
iii	Total cost of units purchased (in Million Rs.)	499.21	553.84
iv	Average cost of units Purchased (in Rs.)	6.92	7.38
v	Total Units generated by the Diesel set (in MU)	1.11	1.12
vi	Total Diesel Oil consumed for DG sets (inLits)	136715	156276
vii	Cost of Diesel Oil / Ltr. (in Rs.)	96.61	96.51
viii	Cost of Unit in DG Set (in Rs.)	11.90	12.05

11.4 : Diesel Consumption for Traction:

Item	2020-21	2021-22
Total HSD oil issued (In KL) . for Traction purpose	83607	156276

12.0.: ENERGY CONSERVATION:-**12.1: Traction Energy Conservation Measures: -**

Following energy conservation measures have been taken:-

- Use of Regenerative braking and dynamic braking in loco.
- Shutting down of locos in MU/consist or in empty rakes in identified sections.
- Shutting down of idling engines.
- Coasting and judicious use of braking.
- Provision of shunt capacitor banks.
- Keeping standby traction transformers de-energized to save no load losses.
- Commissioning of Dynamic reactor power compensators.
- Shifting of Energy meters from grid sub-station to Railway traction sub-station.

12.2: Non traction Energy Conservation Measures: -

Following energy conservation measures have been taken:-

- Segregating of 70/30 lighting circuits at platforms.
- Replacement of old 90 /60 watt ceiling fans by 30 watt BLDC ceiling fans.
- Use of electronic fan regulators, Electronic ballast in light circuit, Higher Star rating Pumps, 100% LED lighting, Occupancy sensors in officers chamber and Timer switch on high mast towers, yard lighting,street lighting etc. has reduced Energy consumption to a greater extent.
- Setting for optimum voltage for transformers in substations for lighting circuit.
- Replacement of HPMV lamps with metal halide lamps.
- Use of VVF control for cranes, lifts and escalators.

12.3: Diesel Energy conservation Measure:

Following Diesel economy measures have been taken to reduce fuel consumption.

- Zero leakages at all RCDs is being ensured and status regularly monitored.
- Shutting down of diesel locomotives at yards / sidings in case of loco kept idle & expected to be detained for more than 30 minutes.
- Trip Ration of coaching and freight trains has been fixed and monitored accordingly.
- Improving the driving techniques of loco pilots by close monitoring by Loco Inspectors.
- APU fitted in 64 locomotives and the utilization is being improved.
- Rationalization of fuelling pattern to the best possible depending on traffic.
- Leak off channels of Engine blocks connected to fuel tanks.

13.0: SAFETY:-**13.1: Safety Drives:****Following Safety drives have been conducted for the Running staff:-**

Surprise train speed checked for trains at . various places in regular measure	Rolling down of train / securing of train and . locomotive
Working of train without Guard, etc	Not to take authority through walkie-talkie
Brake feel and continuity test by driver	Precautions in foggy weather
Manning of locomotive.	Non assumption of signal aspect.
Observance of speed restriction.	Passing of automatic signal and IB signal at ON.
Operational, Safety & Technical Circulars circulated through Drivers' Order Book for Running Staff, etc.	Signal passing at danger-proceed with proper authority.
Surprise night inspections, surprise breath analyzer tests of the crew, ambush checks and inspections of station, brake van & LC gate have been conducted by LIs.	In order to control SPAD cases families of running crew have been counseled regarding intake of alcohol, taking proper rest etc.
Surprise checking of LP/ALPs regarding switching off of Mobile phones during train on run was carried out in regular measure.	<i>Speedometer data</i> of Electric / Diesel trains have been downloaded and analyzed

Following Safety drives have been conducted by Electrical / General

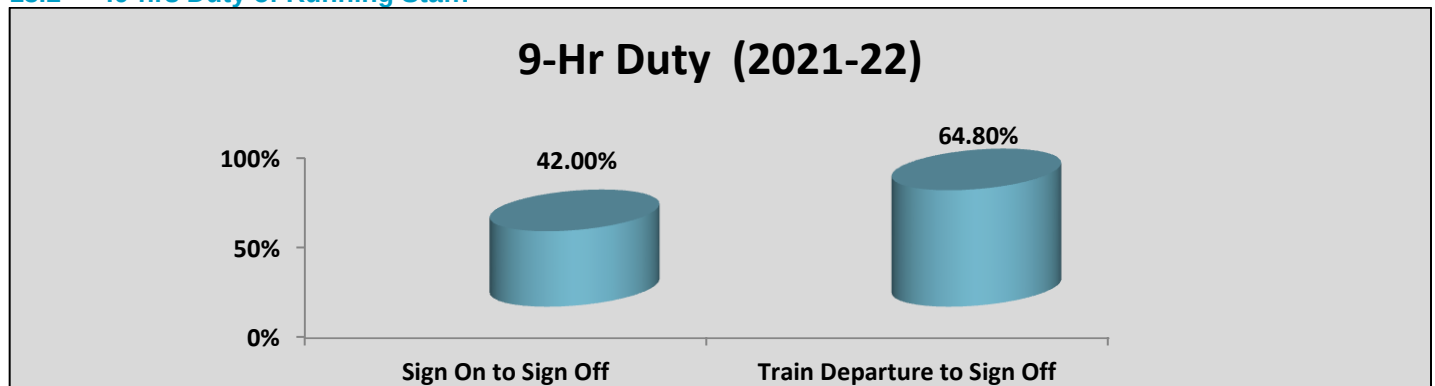
As safety measure earth continuity .checked for sub stations, service buildings and Rly Qtrs and necessary rectification carried out in regular measure	Proper lighting of staion platform and circulation area ensured by maintailing desired Lux level of illumination as per Railway Board guideline.
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Following Safety drives have been conducted by Electrical / TRD

<i>Thermal imaging</i> carried out for P.G. Clamps, connectors and Isolators at different switching posts, stations and sections. Mock Drills have been conducted on various activites in regular measure for achieving efficiency in OHE restoration time during break downs and also during normal maintenance.	To detect hot spot locations, thermal image checking was carried-out in with 'THERMAL IMAGER' camera in aregular measure. Trees and tree branches those infringe the electrified section are being cut in regular measure.
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Following Safety drives have been conducted by Electrical / TRS

In order to improve loco safety & reliability, The Dye Penetrate and Ultrasonic testing are being carried out at critical locations of following equipments.	Special drivefor seasonal precaution (Summer/ Monsoon/ Winter) are being carried out in regular measure.
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13.2 :9-hrs Duty of Running Staff:-

14.0 : PROGRESS OF MAJOR ELECTRICAL WORKS (costing above Rs. 2.5 Crore): -PROGRESS OF MAJOR ELECTRICAL WORKS (costing above Rs 2.5 Crore):-As on 31st Mar.2022

Sl.No.	Item no PB-22-23	Year of sanction	Name of work	Original cost (figure in '000)	Progress
1	502	17-18	ECoR- Provision of escalators at platforms (6 Nos) (PB#594/2019-20/CR)	84000	Work completed at BBS station in all respect and final bill passed.
2	513	13-14	Shrungavarapukota-Similiguda - Repl of 107 sq mm standard contact wire with 150 sq mm	160263	Work completed Physically. PO of 150 Sqmm copper wire 18.35 MT has been cancelled and advised for re indent. Nonstock requisition was made for 18.285 MT sent to HQ on 14.06.2021 and store tender opened on 09.09.2021 and discharged. Tender opened second time on 28.02.2022 and second time is also discharged.
3	505 (iii)	19-20	Provision of cantilevers in place of corroded cantilevers in KUR Division.	35317	All the materials have been supplied by the contractor. 1120 nos (80%) have been changed out of 1386nos cantilevers.As this work involves power block that to in the areas of Paradeep, Humma-Jagannathpur& Puri, difficulty is being experienced for getting of block which is a considerable reason for delaying of completion.
4	506 (i)	19-20	Provision of Equipments on 132KV side of TSSs for metering arrangement.	35920	Fresh LOA issued on 19.08.2021 after getting work the de-freezed as per HQ letter W2/510/ Pink Book/2020-21/De-freezing on dt 06.07.2021. Site survey has been completed and the necessary approval also has been given.Work started at MLT/TSS, JNP/TSS, JRZ/TSS & MRDL/TSS. RITES inspection completed for Structures, PTs & CTs. PTs & CTs received& Bill paid. Both 4Sq.mm & 2.5Sq.mm 2Core cable received through stores & bill paid. For Zebra ACSR conductor- PO issued on 11.03.2022 (DP: 10.05.2022).
5	505 (vii)	19-20	Provision of 160Sq mm Copper Jumpers on isolators in place of 105Sq mm copper jumpers in KUR Division.	30458	After de-freezing of the work, Tender opened on 30.09.2021. Tender discharged after 2nd negotiation with the eligible tenderer due to high rate. Revised estimate sanctioned. For procurement of 160Sqmm copper jumper (13MT) through Stores - PO issued on 12.01.2022. material received & bill paid. Terminal Connector(1730nos) tender opened at Sr.DMM/KUR on 21.03.2022 & PO of traction substations Drawings finalized.Work yet to be started. (ii) 07 sets PTFE N/S received.

Sl.No.	Item no PB-22-23	Year of sanction	Name of work	Original cost (figure in thousand)	Progress
					issued on 24.03.2022, PG Clamp 1030-3(6920nos)- Tender opened 2 times at Sr.DMM/KUR & discharged due to high rate. 18mm Bus term.
6	505(vi)	19-20	Provision of LAs with proper Earthing Arrangement in TSSs, SPs & SSPs and various Relays in TSSs in KUR Division.	33138	The work consists of two parts i.e. provision of relays and provision of earthing arrangements. Regarding the provision of relays, all the works have been completed i.e. relays have been provided. Regarding earthing arrangement, LOA issued on 28.05.2021 for rehabilitation of earthing arrangements after de-freeze of work. Material supplied by agency. Work started at KNPR/TSS & BHC/TSS. Store procurement: 120KV LA (20nos) and 42KV LA(100nos) - Material received & bill paid.
7	516	15-16	Rambha & Joranda Road - Stand-by traction power transformers of capacity 21.6 mva at traction sub-stations	75150	Work completed.
8	519	17-18	Khurda Road Division- Repl of SCADA system	76787	Work has been completed. As because AMC has also been included as part of this contract, this work is kept alive. Work is freezed as per RB Ir no.2020/F(X)II/PW/3/Pt dt.04/05/2021.
9	523(i)	18-19	Mancheswar~~ Provision of 132/25KV Traction Sub-station (TSS) at Mancheswar (MCS) Station in KUR Division.	156803	Initially PSI & associated OHE modification Tender was awarded on 27.2.20 (T-322E); accordingly contractor had supplied some PSI materials. As per PCEE/BBS office letter No. ECoR/EL/TRD/442/01 dt 24.09.2020, it was decided that TSS will be constructed for 2x25KV system. So the tender (T-322E) was short closed as per Clause 61 of GCC on 22.02.2021 & Final bill was passed accordingly. Requisition for Traction Transformer was dropped. Revised advice vide letter No. ECoR/EL/TRD/442/01 dt 23.06.
10	505(ii)	19-20	Replacement of various PSI equipment in view of completed codal life and unreliability in Waltair Division	28468	Detailed Estimate sanctioned in July-20. Non stock requisitions of supply portion for 5 Nos items have made and sent to stores. All material received. Work is being executed departmentally. Till now, 1VCB, 1 No PT I, 8 Nos 120 KV LA, 97 Nos 42 KV LA and 90 Nos disconnecter assemblies replaced.
11	515	15-16	Naupada, Ponduru & Vizianagaram - PTFE neutral section in front	27715	Naupada&Ponduru: Foundation works completed. PTFE Neutral section erection is erection is completed on DN line. Vizianagaram:

Sl. No.	Item no PB-22-23	Year of sanction	Name of work	Original cost (figure in thousand)	Progress
12	517	15-16	Tyada&Similiguda - Augmentation of 132KV/25KV traction transformers	105255	Transformers received through stores. Store materials indent under process.
13	518	16-17	Duvvada – Palasa - Repl. of out dated SCADA system of main line Waltair	45001	Work completed and final bill passed.
14	520	17-18	Division - Overhead equipment modification in connection with repl of critical & leaning traction masts	69429	Out of 500 locations, 323 locations were replaced. For the remaining locations, 61 Nos foundations casted, 36 Nos mast erected and 31 Nos cantilevers erected.
15	522	17-18	Waltair Division - Shifting of IOL/SI where clear distance of 120 m is not available between stop signals to centre line (18 locations)	28334	Work completed on fore closure and final payment done
16		21-22	Replacement of overhead lines with underground cable over coastal belt of Waltair Division on ECoR(Item No.17/Supl/Dec 2021	233100	Estimate submitted to SR.DFM/WAT for finance vetting on 21.02.2022 and awaiting for finance vetting.
17	507(v)	19-20	Augmentation of power supply arrangement over Waltair Division.	49378	Tender opened on 14.06.21 & LOA issued on 28.08.21, Contractor submitted requisite PG on 20.09.21and draft agreement sent to Divl. Finance for vetting. Contractor has been advised to start the work on priority. Contract agreement value : Rs.1,85,35,823/- . The contractor was not turned up till 29.11.2021 & 7 days notice served to contractor on 29.11.2021 & reply given by contractor on 05.12.21 & submitted letter for materials approval and same was given on 07.12.21. The contractor submitted his planning letter on 11.01.22. Again letter issued for improvement of progress on 22.02.22, further 7again 7 days & 48 Hours notices served to contractor on 22.03.22 & 29.03.22. Store materials received for value of Rs.161.73 lakhs including various size LT/HT cables, 500 KVA transformers-8 nos, Lop in loop out boxes-800 nos, Heat shrink straight joint through kits 11 KV-50 Nos and store bills paid. Expenditure in 2021-22:Rs.161.73 Lakhs.

15.0 : FINANCIAL PERFORMANCE (Revenue Grants):- (Figures in thousands of Rs)

Grant No.	Final Budget Grant 2020-21	Actual Expenditure 2020-21	Final Budget Grant 2021-22	Actual Expenditure 2021-22
3A General Administration				
A-700 Electrical Management	209925	221557	241140	237594
5C-Repair and Maintenance of Electric Locos				
C-140-160 Establishment in offices Electrical	122033	127478	138815	137421
C-500- Electric Locomotives	1491928	1706753	1740197	1755977
6D-Repairs and Maintenance of Carriage & Wagons				
D-140-160 Establishment in offices Electrical	83425	81922	95825	95074
D-400-EMU Service	1404	4739	50854	52350
D-500 – General Service	1057537	1021673	1043224	1036427
7E-Repairs and Maintenance of Plants and Equipments				
E-140-160 Establishment in offices Electrical	201947	226254	258065	252941
E-400-Electrical Plants and . equipments	1382408	1375227	1507118	1526664
E-800-Other Plant & Equipment	0	0	0	0
8F-Operating Expenses.				
F-300- Electrical Locomotives.	4033107	5172697	5425193	5583298
F-400- EMU Coaches.	28224	5499	1535	1535
F-500- Carriages	—	—	—	—
F-600- Traction other than .	267824	276325	293858	311859
R/Stock & General Elect Services				
F-900- Credit or Recoveries.	—	—	—	—
9G-Operating Expenses-Traffic				
G-500-Train Operations	4398	2985	3710	5168
10H- Operating Expenses fuel				
H-300- Electric Traction	7021636	9283946	12079795	12060853
11J-Staff Welfare & Amenities				
J-500-Residential & Welfare	191167	196903	269591	263165
Buildings Repairs and Maintenance				
12K-Miscellaneous Expenses	15009	24099	25806	24003
GRAND TOTAL	7232210	9507933	23174726	23344329

16.0 PROGRESS OF CORPORATE SAFETY ACTION PLAN:

Sl. No.	Item	Target for 2021-22	Provision during 2021-22	Remarks
1	DBRs (Elect. Loco)		Completed	
2	Microprocessor based Speed Recorders			
	(a) Elect. Locos		Completed	
3	LED marker		Completed	
	LED flasher lights		Completed	
4	VCD		Completed	
5	Twin Beam Head Light		Completed	
6	Event Recorder		Completed	
8	Automatic switching ON of flasher light		Completed	
9	Elimination of Critical Implantation		19 Nos.	

ACHIEVEMENTS & SYSTEM IMPROVEMENT BY DIVISIONS:**Khurda Road Division:**

- Coaching base at PURI has been started with 15 Nos. of coaching crew to work trains originating from PURI without crew changing at KUR, which resulted in saving of 3-sets of coaching crew and minimized detention on account of crew changing time at KUR bringing operational efficiency.
- An additional 20-bedded new running room has been started at Talcher.
- Trains are working in Lingaraj Silo area on electric traction subsequent to electrification of Lingaraj Silo.
- 05 (Five) Pairs of coaching trains, which were previously run on diesel traction in electrified territory have been taken over on electric traction.
- Operation of RCD at BBS has been closed w.e.f. 23.04.2021.
- New Crew & Guard base has been started at MRDL w.e.f 21.12.2021.
- The passenger information system (PIS) has been provided in all the 3-phase MEMU rakes.
- During this financial year, all the 8-units of MEMU received from ICF have been commissioned.
- During this year, the MEMU POH out turn of 48 could be achieved against the target POH out turn of 36.
- As a safety measure, 188 Nos. FSD have been put into service in KUR division.
- In order to run high speed trains (130 KMPH), 33 Nos. of LPs of KUR-division have been passed the aptitude test & are ready to run high speed trains.
- The Speedometer data of 662 Nos. of electric/diesel trains have been downloaded & analyzed during the year 2021-22.
- In order to control SPAD cases 597 running staff families were counseled by the CLIs.
- 18566 Nos. of switching off of Mobile phones of LP/ALPs was done during singing On to singing OFF.
- a total of Nos. of 45131 crew have been counseled by CLIs
- 88 Nos. of safety seminars were conducted at various crew lobbies of KUR division.
- 37 Stations have been provided with Tri-language Station Name LED signage boards over KUR Division .
- 675.96 kWp Rooftop Solar plants at Rail Sadan (100.32 kWp), ANGL Loco Shed (274.95 kWp), CTC (165.59 kWp), IPM (95.4 kWp) and Sompeta (39.7 kWp) have been commissioned.
- To improve the reliability of power supply and to avoid damage during cyclonic storm, power supply arrangement for all the LT & HT has been changed through underground cable system by replacing overhead lines at BHC, JJKR, CTC, PRDP, KUR, PURI, BAM, CAP, BALU, CLKA, IPM, SPT.
- For up-gradation of power supply and distribution system, at ANGL 33/11 kV HT & at Rail Kunj 11 kV HT are made.
- 233 Nos. inverter based 18 W LED Tube lights and 324 Nos. 45 W inverter based LED Street lights have been provided at PF shelters, Railway colony & LC gates over KUR Division in place of normal LED light fittings. All these lights are with back up supply of 3 to 4 hrs i.e. can glow even if power goes off.
- Building Lightning Protection System has been provided in both South Block & North Block of Rail Sadan and DRM Building at Khurda Road.
- Quick examination of ART/ARME/SPART has been improved by providing 03 Nos, welding points and Path-way lighting with provision of 07 Nos. of 2x35 W LED fittings and 08 Nos. 110V Battery charging points in ART siding at KUR.

SBP Division

- Electrical Safety Week was observed in the Division from 01.05.2021 to 07.05.2021. During this week, an awareness campaign was undertaken in which banners, stickers and posters depicting electrical safety slogans were displayed at various railway stations, railway colonies and service buildings. Supervisors and staff took a pledge on "No Short-cut, never bypass any safety device" for achieving Zero electrical accident. On 07.05.2021, a webinar was conducted to emphasize the importance of Electrical Safety week and also special emphasis on CEA regulation-2010.
- "National Energy Conservation Week" was observed from 8th December to 14th Dec' 21
- 75.08KWp On-grid Rooftop Solar plant have been commissioned at Sambalpur Railway station.
- 40.30KWp On-grid Rooftop Solar plant have been commissioned at DRM Building, Sambalpur.
- Roof top off grid 3KWp Solar Plant at NPD, LKNA, LPG, CHAR, HATB has been provided.
- 02 nos. TSS at NPD & GBQ was commissioned with 132 KV AC power supply from Nuapada GSS & Kantapali GSS respectively.

- 01 no. SP at BHPI commissioned. 01 no. SSP at ACC siding commissioned.
- NPD/TSS & KBJ/TSS have been provided with 132 KV power supply from Padampur Grid sub-station which resulted in Incoming voltage stabilised & frequent tripping at Grid sub-station due to overload was minimised.
- Contract Demand of different TSSs was enhanced to eliminate the probability of MD overshoot and imposition of penalty
- 223 nos. Auxiliary Transformer D.O. fuse rectification work done. 445 nos. of AT maintenance done in SBP division.
- 212 nos. of Power transformer maintenance done, 423 nos. of circuit breaker maintenance done, 604 nos. of interruptors maintenance done, 347 nos. of Current transformer maintenance done and 209 nos. of Potential transformer maintenance done in SBP division.
- 375 nos. isolator maintenance done in SBP division.
- 579 nos. brackets joint SED checking done in SBP division. 129.08 TKM of joint tower wagon checking done in SBP division.
- 26 nos. emergency crossovers maintenance, 32 no. neutral section maintenance & 28 nos. bridge OHE system maintenance done in SBP division

WAT Division

- Electrification of 33.271 TKM was completed through various agencies department Works:
- Attention of Critical Implantation Out of 217 locations, 150 locations were attended so far out of which 19 locations were attended during the current year the balance work at 65 locations is under progress.
- Attention of Leaning Mast: Out of 283 locations 173 locations were attended so far out of which 86 locations were attended during the current year & the balance work is under progress.
- Provision of Disconnecter assembly with modified arrangement was done to 200 Nos. LAs out of 346. The balance work is under progress.
- Annual relay testing work completed at all 27 TSSs in entire Division.
- Maintenance of 25 KV gantries was completed in 68 posts out of 94 posts in entire Division.
- Live line checking of OHE with 8 Wheeler tower wagon was carried out for 1662.47
- 7817 Nos. trees have been cut and 92470 Nos. tree branches were pruned in electrified sections.
- POH of 58 nos of various types of equipments (AT-20, PT-22, CT-16) were overhauled at RRD.JDB and supplied to various depots
- To improve the performance of the Power Transformers 02 nos. 21.6 MVA have been proposed for POH through outsourcing & in this regard tender has been floated.
- As per new SMI, provision of earthing station was completed at 61 posts out of 76 posts. The balance work at 21 posts (KK-15,) is under progress.
- BLMK & LKMR.TSS were commissioned after extension of incoming power supply at 220 /132 KV level by Supply authorities..
- For the placement of ART composition at DMRT yard longer loop, necessary OHE modification works were carried out.
- 597 nos of faded, damaged OHE structures number plates were replaced at various sections.
- To improve reliability of OHE, 178 nos corroded cantilevers were replaced at various sections.
- 5909 Nos different types of bonds have been provided due to corrosion/broken/missing.
- Thermal imaging testing carried out at all TRD installation to detect hot spot locations and as a measure of condition based attention.
- Periodical Current collection test was completed for 1525 TKM .
- Elimination of more than 15 splices in one tension length was carried out in DWZ-KMLR, ARK-SMLG, SCMN-Block Hut on DBK line.
- Elimination of 14 splices in one tension was carried out in ARK yard R1, GPJ-DPC, SLPM-TXD, BGHU-CMDP, SCMN-PDT DN line & SCMN Rd7.
- At PSA/SP, the old ceramic beaded type short neutral section on UP&DN lines were replaced
- As per latest Railway Board's guidelines the process for the collection of maintenance charges for 13 private siding is under progress and so far an amount of Rs. 2,02,26,008.- has been collected from five private siding owners.
- Total scrap disposal of 15.37 MT ferrous and 23.93 MT non ferrous items, which has worth of Rs.1,30,40,230/- disposed during the year 2021-22.
- OHE modification works were carried out in connection with raising of track speed to 130 KMPH in Main line involving alignment of 30 curves and adjustment of OHE stagger at 171 locations.

ELS/VSKP:

- During this year, the electric loco holding at ELS/VSKP has reached to 370 with lowest manpower ratio 1.75.
- 59 no's 3-phase Locos were commissioned till date and another 05 locomotives are waiting for commissioning and 1 locos are allotted to ELS/VSKP.
- During the year, ELS/VSKP has achieved best ever (lowest) Unscheduled lifting's 37 per 100 Locos of against previous best of 44 (2020-21).
- Scrap disposal in 2021-22 is to the tune of Rs. 46.66 crores which is 46.21 % more than previous year.
- 37 sets of M/s Kamney Enterprises were received on 01.09.2020 and installed 'Crew Voice & Video Recording System' (CVVRS) in 26 no's of WAP-7 locos.
- 25 locos which were received from BHEL/JHS unit are fitted with Bio toilet
- 15 WAG9H locos are equipped with Lotus make DPWCS.
- 10 Locos are provided with RMS.
- 21 locomotives are fitted with WFL by firm so far, and being provided for remaining locos by firm REBS.
- 20 numbers of EoTT systems were sanctioned to ELS VSKP.
- Total 269 AC units are fitted in 139 locos.
- Total 505 DLS/VSKP staff & supervisors have been imparted training on 3-phase locos in 26 batches and 18 ELS/Angul staff were trained.

Innovations & System Improvement

ELS/VSKP has done the following innovations/ system improvement during this financial year –

- ELS/VSKP has provided 'Hotel Load Converter' in 7 no's WAP7 locos by modifying the both power and control circuit.
- Changing of draft gear without lifting Loco.
- MRB replacement without removing loco hood.
- Retro fitment of MVMT as TMB.
- Oil Circulation in Radiator.
- Transformer temperature sensor test bench is fabricated
- Portable tester for TBU/PBU is fabricated to test TBU and PBU working status.

SIGNAL & TELECOMMUNICATIONS

Signalling & Telecommunication is playing the role of catalyst in rapid growth of Indian Railways. The S & T department also plays important role for safe and smooth train operations. Signalling over East Coast Railway is being modernised continuously by introducing new technologies such as Electronic interlocking, LED lamps and digital Axle Counter etc. Telecommunication infrastructures have been continuously upgraded for efficient operation of trains and serving public.

Achievements of Signal & Telecom Department for the year 2021-22

Followings are the important highlights of the works commissioned during the year 2021-22. These works have enhanced safety, reliability and line capacity to a large extent.

Reliability Improvement Measures:-

- Electronic Interlocking/ Panel Interlocking Systems have been commissioned at 16 stations during the year. This will improve safety & reliability in train operation.
 - **Visakhapatnam Port Trust (VPT) - R&D yard** of Waltair (WAT) division is commissioned with EI (MEDHA MAKE) on 07.02.2022 at 09:30hrs.
Followings have been provided in Visakhapatnam Port Trust (VPT R&D) yard to provide seamless movement between Visakhapatnam port trust sidings and Railway Marshalling yard.
 - a. EI (Distributed) Medha make with 3 no of Goomties having 282 routes.
 - b. MSDAC :- Frausher make, having no.of DP 113 and 69 track sections
 - c. No of lines:20
 - d. No. of point machines - 65
 - e. No. of Independent shunt signals - 23
 - f. No. of Dependent shunts -30
 - g. No. of signals - 61
 - h. No. of IPS - 4
 - i. No. of Data loggers - 4
 - j. No. of ELB's - 3
 - k. No. of Sliding boom -3
 - **75 sets of HASSDAC** have been commissioned for block working which will ensure reliability in safe running of trains and will avoid accidents due to human error.
 - **Sliding Booms** have been provided at **30** LC gates during the year which will increase the operational flexibility during failure of lifting barriers.
 - **Air conditioning** at relay rooms have been done at **07** stations.
 - **Data Loggers/ RTUs** have been commissioned at **15** stations/ Locations.
- #### Safety Enhancement work :
- 03 Level Crossing Gates have been interlocked towards road safety works during the year.
 - Fire Detection & Alarm Systems have been commissioned at 08 stations during the year.
 - 08 Electric Lifting Barriers have been provided at Level Crossing Gates for smooth and ease of operation in place of mechanical gates.

To increase the section capacity & operational efficiency:

1. **Progress of 130 Kmph work on 'B' route:** The Umbrella work appearing at PB -490 (i) "Provision of Double Distant Signals between BALU-PSA section of KUR division and Ex. PSA-CPP section in main line of WAT division" gets completed **(89 locations)** and the entire 'B' route on ECoR between Bhadrak-Duvvada section is fit for 130 Kmph from signalling side.

The work of Double Distant signaling in the section Kaluparaghat (KAPG) - Chipurupalli (CPP) covering 89 locations (29 EI stations, 06 PI stations, 15 IB and 39 LC gates) got commissioned within a record span of less than 12 months. The work was taken up during the peak COVID pandemic and successfully commissioned within a record time

2. **Provision of Intermediate Block Section: 6 (Six) nos.** of Intermediate Block Signalling (IBS) at Muniguda-Bissamcuttack, Sompeta-Baruva, Doikalu-Muniguda, Jujomura-Charmal, Charmal-Rairakhol & Talcher Road-Angul (Single line IB) have been commissioned to improve section capacity.

The single line IBS between Angul (ANGL) and Talcher Road (TLHD) was commissioned on 10th Jan 2022. This is 2nd IB of East Coast Railway in single line section; the first single line IB of East Coast Railway (also first of Indian Railway) was between Bargarh-Barpalli was commissioned on 24th Jan 2020.

The Angul-Talcher Road IBS is provided with Object controller for Control from Medha EI installed at Angul (ANGL) and Talcher Road (TLHD). IBS has been provided with HASSDAC with media diversity, IPS, data logger, ring earth and class-A protection. The IBS is connected with adjacent LC gate for controlling of aspect of signals. The IBS has provided increase of approximately 6-7 rack per day in goods traffic in very important ANGL TLHD section.

3. **Doubling** has been commissioned in **06 sections (66 RKms)**. This will increase the line capacity and the operational efficiency.

Passenger Amenities & Other Telecom Achievements :

1. **Provision of CCTV/ VSS:** CCTV under Nirbhaya fund has been commissioned at Titlagarh & Balangir stations on Sambalpur Division; Koraput & Jagdalpur stations on Waltair Division. Cumulatively VSS have been provided at 15 locations over East Coast Railway. This is addition to ISS provided at 4 locations.
2. **Kalinga Rail Museum** has been facilitated with Audio reinforcement system, large format video display system, CCTV surveillance system, Wi-Fi system, Displaying of vintage S&T items & Counter communication system. The Museum was inaugurated by Hon'ble GM/ECoR.
3. **Provision of PRS/UTS:** PRS has been commissioned at Damanjodi station on Waltair Division.
4. **Provision of TIB/ CIB:** Both Train Indication Board & Coach Indication Board has been commissioned at Harishankar Road, Baragarh Road, Khariar Road stations of Sambalpur Division. Additional 6 line TIB and Counter communication system has been provided at Brahmapur station, additional TIB at Puri station, TV based display provided at Bhubaneswar Station of Khurda Road Division.
5. **Use of Technology during COVID-19:** To manage registration, testing and vaccination of Covid-19, manual PA system has been installed at Central Hospital/ Mancheswar, Divisional Railway Hospital/ Khurda Road, Railnet & Telephone connection has been provided at Divisional Railway Hospital/ Sambalpur and Waltair. Face to face enquiry system installed at OPD of Divisional Railway Hospital/ Waltair. An additional bullet camera installed at Oxygen plant of Mancheswar Railway Hospital.
6. **Special announcement system** provided for Covid-19 at major stations over ECoR.
7. **IPIS integration** with NTES has been done at 11 stations over ECoR.
8. **322 nos. of CUG** have been activated under Plan-C for ALPs, Technicians and other Safety Category staffs of Khurda Road Division.
9. **Auto announcement system** provided at Nirakarpur station.

10. **50 MBPS Railnet connectivity** provided at VDPD Workshop AND Railnet upgraded from 20Mbps to 50 Mbps at Angul of Khurda Road Division.
11. **CCTV** have been installed at Weigh bridge locations of Lapanga, Kandel Road and Crew Lobby of Sambalpur division, DRM Camp office of Waltair Division and Kalinga Rail Museum at Mancheswar of Zonal HQ.
12. **TPC, SCADA and EC** communication provided at new SP between Budhapank- Talcher.
13. **FOIS** commissioned at Lingaraj Siding (Talcher), CC office/Keonjhar of Khurda Road Division and MGMT(VSPS) IMWB location of Waltair Division.
14. **36 Kms. Of OFC** laid between Jujomara-Charmal (19 Kms.) and Charmal- Rairakhol (17 Kms.) for IB signalling. 2.2 Kms. of 6 Quad UG cable from Mancheswar and 1.5 Kms OFC laying has been done from Rail Sadan for extending all Telecom facilities to Kalinga Rail Museum.
15. **Digital camera** provided at ART /Kantabanji.
16. **Control phone** provided from Sambalpur at IB station under Bilaspur Division of SECR.
17. **TC, TPC, EC** communication with Railway phone facilities have been extended by providing STM-1 and PD MUX equipment at Newly commissioned stations Nuagaon, Argul and Haripurgram of Khurda Road Division.
18. **2 Mbps Data circuit** between CTC RS -Kujang Sub Post Office, CTC RS-Dharmasala and KUR-PUI station have been **surrendered** saving RS 4527770.58/- from revenue.
19. **Kalinga Rail Museum** of East Coast Railway has been inaugurated on 30.10.2021 with telecom facilities like 04 no's 43" LED TV, 1 no.32" LED TV, 8 Watt Ceiling Speaker & 500 Watt Power Amplifier (Ahuja Make), 16 GB Pen drive, CCTV with 3 no's Bullet cameras, PA System with NVR, Railnet 3 No's Railway Auto phone and one magneto phone.

MATERIALS MANAGEMENT

Achievements:-

- Heading towards Paperless Working.
- Implementation of e-RA in Procurement.
- Complete Digitalization of Procurement Process.
- Record Breaking Performance in Scrap Disposal.
- Ease of Doing Business; Auto EMD refund, Digital Submission and payment of supplier's Bills.
- Full implementation of Public Procurement Policies (MII, MSE).
- 100% implementation of working on e-office platform.
- Implementation of User Depot Module (UDM)

1. Innovations: -

Direct delivery of the material at door step of workshop consignee: - At Mancheswar (MCS) workshop direct delivery of the material at the door step has been started by Stores Department. Earlier workshop staff used to collect the material from the depot and lot of manpower of workshop was wasted. To save time & manpower and timely delivery of materials to end user, a store Department has taken initiative to deliver the material at the door step of the workshop consignee. This will go in long way for customer satisfaction.

2. Average Time Taken in Release of Purchase Orders: -

Average time taken in release of purchase orders is 2 days. ECoR has occupied No. 1 rank amongst railways over all Indian Railways.

3. Tender Finalization (Average Days for FY 2021-22):-

- (i) Average finalization of TC cases: 45 Days
- (ii) Average finalization of DA cases: 06 Days

4. Scrap Disposal:-

Extensive efforts were made throughout the year to identify and mobilize the scrap available in the Railway system and disposed off the same promptly.

E-auction has eliminated the interface between the auction conducting authority and the bidders as well as between the bidders thereby ensuring anonymity between the bidders and the auctioneers which is an essential requirement to prevent cartelization between bidders. This has resulted in wider participation.

Railway Board has fixed scrap target of Rs.220 Crs for ECoR in FY-2021-22. ECoR surpassed the target fixed for 2021-22 FY. As against the target of Rs.220 Cr., the railway is able to sale scrap worth of Rs.313.74 Cr, which is 42.61% more than the target fixed by Rly. Board for FY 2021-22 and 14.72% higher than the previous year's FY 2020-21 achievement and it is the best ever sale performance of ECoR since its inception

4.1 WAT Division of ECoR achieved Rs.113.42 Cr. through scrap sale earning in FY 2021-22, which is highest scrap sale value among all Divisions of Indian Railways.

5. Availability of Stock items: FY 2021-22 (Average %age)

- (i) Safety items: 99.60%
- (ii) Passenger Necessity items: 97.75%
- (iii) Overall items: 98.74%

6. Steps taken to improve customer interface: -

Average time taken for payment of online supplier Bills: **08 days (Average Days for FY 2021-22)**

7. GeMProcurement:-

During FY 2021-22, upto March-22, Goods of 2418 number orders worth of Rs. 4188.17 Lakhs and Services of 107 number orders worth of Rs. 2338.66 Lakhs have been procured from GeM platform.

This office has been able to finalize the following service contracts through GeM e-platform (a first of its kind) thus paving the way for full automation of procurement system (Goods & Services) in keeping with Govt guidelines. (i) Hospital Canteen/ Catering Services (ii) Hospital Cleaning Contracts (iii) Vehicle hiring Contracts (iv) Track Machine Manpower hiring contract.

8. Digital Initiatives:-

Integration of UDM to IPAS: - End to End digitization (from indenting to payment) was implemented in case of stock items. With the implementation of UDM and subsequent integration with IPAS, all activities from indenting to payment are being done online for Non-Stock items w.e.f. October-2021. During FY 2021-22, upto March-22, 383 no of consignees on-boarded and a total value of Rs. 851.29 Cr. transactions on User Depot Module (UDM).

8.1 ECoR has been working 100% online on IREPS & iMMS platforms for all purchase activities. For other non-purchase activities, ECoR has switched over to e-Office in the entire Stores HQ office and in all other field units.

9. Fund Utilization: -

KUR Division of ECoR achieved Rank No.1 position in all Indian Railways Divisional rank based on total PO value amount of Rs. 50.58 Cr. for FY: 2021-22

10. Expenditure on Purchase for FY: 2021-22

Sl. No.	INDUSTRY TYPE	STOCK ORDERS		NON-STOCK ORDERS		TOTAL ORDERS	
		No. of PO's	PO Value (Rupees)	No. of PO's	PO Value (Rupees)	No. of PO's	PO Value (Rupees)
1	ACASH	1	368805	2	27223	3	396028
2	IMPORTED PURCHASED IN INDIA	0	0	0	0	0	0
3	MSE	1180	908669154	2338	1569631345	3518	2478300499
4	OTHER GOVT. DEPT.	3	18283096	3	1675904	6	19959000
5	OTHER INDUSTRIES	532	709173352	2501	914981258	3033	1624154610
6	OTHER RAILWAYS	185	192208823	32	33794437	217	226003260
7	PUBLIC SECTOR	45	147751584	35	11702596856	80	11850348440
TOTAL :		1946	1976454814	4911	14222707023	6857	16199161837

11. Inventory Control and (TOR):-

Item	FY 2020-21	FY 2021-22
AAC	233.66 Cr.	268.15 Cr.
Issues	207.80 Cr.	240.52 Cr.
CB	64.64 Cr.	51.68 Cr.
TOR	31.11%	21.49%

12. Expenditure Control: -

Item	2020-21	2021-22
BG in Pink Book	361.00 Cr.	310.00 Cr.
After reduction	224.26 Cr.	212.00 Cr.
PG Utilization	186.75 Cr.	205.01 Cr.

13.0 Stores Transactions during 2021-22

Sl. No.	Main Group	Group Title	OPENING BALANCE	Receipt	Issue	CLOSING BALANCE
1	10-19	DIESEL LOCO	38696695	98602308	119852705	17446297
2	20-29	ELECTRIC LOCO	69028253	453301819	431537048	90793023
3	31,35	EMU ITEMS	724898	4718234	2676672	2766459
4	30,33,36	CARRIAGE ITEMS	184856855	524501834	527380792	181977897
5	37-39	WAGON ITEMS	55401129	256543868	280888640	31056356
6	32,40-49	ELECTRIC STORES	110066912	328439167	354687356	83818722
7	50-59	SIGNALING STORES	2999534	24641078	25196252	2444360
8	60	P-WAY STORES	224847	186872	290683	121036
9	61-69	ENGINEERING MnP	1988098	3460171	2580471	2867798
10	70,72-74	HARDWARE	10876786	11410587	10344273	11943100
11	71	BRUSHES	2258107	3270759	4216187	1312679
12	75	RUBBER	13050486	58970521	57691629	14329377
13	76	ELECTRODES	3465689	5377709	6053193	2790205
14	77	PAINTS	7678604	22682038	26783597	3577046
15	78	CROCKERY	314905	122518	299548	137875
16	79	CLOTHINGS	90386656	13589618	91227991	12748283
17	80	OIL AND LUBRICANTS	15304536	149387843	150821447	13870931
18	82	MEDICINES	0	0	0	0
19	83	STATIONERY	6485682	11727627	12926269	5287040
20	84	REFRATORIES	2181130	4066435	4581949	1665616
21	85	BEARINGS	1780411	6033449	6485182	1328678
22	81,82,86-89	CHEM, MEDS & MISC.	6248510	29132771	30690507	4690774
23	90	METAL FERROUS	7556212	90093364	89767864	7881711
24	91	METAL NON FERROUS	2118818	1057527	2921589	254756
25	92	FUEL	296693	6752043	7033512	15224
26	93	TIMBER	2166019	5426561	6378165	1214415
27	98	SCRAP	10326993	162137715	151951011	20513697
		TOTAL :	646483455	2275634435	2405264535	516853356

MEDICAL DEPARTMENT

1. ORGANIZATIONAL STRUCTURE:

East Coast Railway provides preventive, promotive & curative health care services to its 48520 no. of employees and 27394 no. of RELHS Card Holders and their family members (Total Railway beneficiaries– 248868) through a network of Hospitals - One Central Hospital at BBS, three Divisional Hospitals and 28 Health Units. The Divisional Hospitals are located at Visakhapatnam, Khurda Road and Sambalpur. The Health Units are scattered all over the zone – WAT Divn – 14 nos., KUR Divn – 09 nos., SBP Divn – 04 nos. and, HQ – 01 H.U. Total no. of Beds in Railway Hospitals – 339. Besides Railway beneficiaries, Railway Doctors also attend sick passengers in Trains and Stations on being called.

Name of the hospitals with number of beds:

Divison	Name of the Hospital	No. of Beds
HQ/Bhubaneswar	Central Hospital	110
Waltair	Divisional Railway Hospital	134
Khurda Road	Divisional Railway Hospital	60
Sambalpur	Divisional Railway Hospital	35
	TOTAL	339

Name of health units with location :

Sl. No.	Division	Location	Sl.	Division	Location
1	Waltair	Diesel Loco Shed	15	Khurda Road	Bhadrak
2		Steel Plant Vadlapudi	16		Cuttack
3		Marripalem	17		Paradeep
4		BN1TN	18		Talcher
5		Vizianagaram	19		Puri
6		Srikakulam Road	20		Brahmapur
7		Naupada	21		Palasa
8		Araku	22		Keonjhar
9		Koraput	23		Angul
10		Jagadalpur	24	Sambalpur	Mahasamund
11		Bachheli	25		Kantabanji
12		Kirandul	26		Titlagarh
13		Rayagada	27		Bolangir
14		Laxmipur	28	HQ/BBS	Rail vihar (CS Pur)

2. MANPOWER: CADRE POSITION OF DOCTORS (IRHS & CMPs) :

Place	Sanctioned			On roll IRHS			On-roll CMPs	Vacancy
	Rev	WC	Ex cadre	Rev	WC	Ex cadre		
Head Quarter (PCMD Office)	04	-	-	02	-	-	-	02
Central Hospital / BBS	13	-	05	13	-	-	04 (Ex-cadre at CH)	01
WAT Division	22	-	-	21	-	-	01(Against revenue post)	01
KUR Division	18	-	-	18	0	-	-	Nil
SBP Division	09	-	-	07	-	-	-	02
Total	66	-	05	61	-	-	05	06
Grand Total		71		61			05	06

Honorary Visiting Specialists (HVS) :

Honorary Visiting Specialists (HVS) are engaged in Railway Hospitals by selection from the local market. They work for 2hrs/day for 2days/4days/6days a week, perform surgeries and attend patients in indoor when called.

Place	Sanctioned	Working	Vacancy	Place	Sanctioned	Working	Vacancy
CH/BBS	06	05	01	DRH/KUR	-	-	-
DRH/WAT	01	01	Nil	DRH/SBP	-	-	-
Total	07	06	01	Total	-	-	-

Consultants on case-to-case basis :

Besides IRHS doctors, CMPs, HVS & PTDS, Consultant Doctors are empanelled in all the Railway Hospitals from the local areas and are called for consultation of difficult admitted cases and for difficult surgeries by paying consultation fee and fee for surgeries respectively, which cannot be handled by IRHS specialists & HVS. Part-Time Dental Surgeons (PTDS):01 PTDS working in each Railway Hospital, Total – 04

Number of specialist doctors available in different hospitals :

Sl.No.	SPECIALITY	NO. OF DOCTORS AVAILABLE							
		IRHS				HVS			
		WAT	KUR	SBP	CH	WAT	KUR	SBP	CH
1	General Medicine	01	04	-	01	-	-	-	-
2	General Surgery	02	01	01	01	-	-	-	01
3	Obst. & Gyn.	01	01	01	02	-	-	-	-
4	Pediatrics	01	01	01	01	-	-	-	-
5	Orthopedic	01	01	-	01	01	-	-	01
6	Anaesthesiology	02	01	-	01	-	-	-	-
7	Ophthalmology	01	01	-	01	-	-	-	01
8	ENT	01	01	-	-	-	-	-	01
9	Dermatology	01	-	-	-	-	-	-	-
10	Chest & TB	-	-	01	-	-	-	-	-
11	SPM/Public Health	-	01	-	01	-	-	-	-
12	Cardiology	-	-	-	-	-	-	-	-
13	Gastroenterology	-	-	-	-	-	-	-	01
14	Radiology	01	-	-	01	-	-	-	-
15	Psychiatry	-	-	-	-	-	-	-	-
16	Pathology	01	-	-	-	-	-	-	-
	Total	13	12	04	10	01	-	-	05
No. of Specialists in PCMDs Office :(Paediatric-01)		01							
G.TOTAL		40				06			

Group "B" Officers.			
	Sanctioned	On Roll	Vacant
Astt. Health Officer	02	HQ-Nil, KUR-Nil	02
Astt. Nursing Officer	03	CH-01, WAT-01, KUR-01	NIL
Astt. Pharmacist Officer	01	HQ-1	NIL

Place	Group C: Non-Gazetted			Group D: Non-Gazetted		
	Sanctioned	On Roll	Vacant	Sanctioned	On Roll	Vacant
Head Quarters	17	17	00	12	12	0
WAT Division	143	135	08	366	302	64
KUR Division	91	87	04	81	77	04
SBP Division	39	37	02	23	22	01
CH/BBS	73	72	01	78	62	16
TOTAL	363	348	15	560	475	85

3. MEDICAL FACILITIES PROVIDED IN RAILWAY HOSPITALS:

Railway Hospitals provide Preventive, Promotive & Curative Health Care Services to the Railway beneficiaries.

(I) – Curative Services:

Mostly secondary level of health care is provided in Railway Hospitals. In some Hospitals like, Central Hospital & Divisional Hospital/WAT, some of the Tertiary level health care is also provided.

A) - Casualty services: - Round the clock casualty service is available in Central Hospital & Divisional Hospital/WAT & KUR. In DRH/SBP, Emergency calls are attended by Doctors on call.

B) - OPD Services: - OPD clinics are managed by GDMOs and specialists. **Special clinics** are run by both IRHS & HVSs Doctors during specific days and hours.

Dental OPD: -Separate Dental OPD runs in all the Railway Hospitals by Part-Time Dental Surgeons (PTDS). Dental extraction, Scaling, Filling, RCT etc. are performed.

Pathology Unit:- There is well equipped Laboratory with equipments like Auto-Analyzer, Cell Counter, Immune Assay Analyzer, etc are available and almost all the investigations are performed in-house.

Radiology Unit:-The Radiology unit of all the hospitals has Digital X-Ray as well as conventional X-Ray Machines.

Physiotherapy Unit: - All the Hospitals have Physiotherapy Unit with trained Physiotherapist equipped with all the modern equipments.

Ultrasound & Echocardiography: - Ultrasonography is regularly performed in all the Railway Hospitals and Echocardiography is done in Central Hospital & Divisional Hospital/WAT.

Endoscopy:- Endoscopy is performed in Central Hospital & Divisional Hospital/WAT & SBP.

C) -Ambulance services: - Ambulance service is outsourced in all the Railway hospitals of ECoR.

D) -ICU:- Separate ICU with all the equipments and round the clock paramedical staffs are available in Central Hospital Divisional Hospital/WAT.

E) - Indoor services: -

- Separate Male & Female Medical & Surgical ward, Obstetrics &Gynecology Ward, Pediatric Ward, Orthopedic Ward are available in Central & Divisional Hospitals.
- Indoor wards of Central Hospital are air-conditioned. 10 nos. of AC cabins (single & twin sharing) are available for patients in Central Hospital/BBS.
- Indoor wards of DRH/WAT are air-conditioned, 04 nos. AC Cabin and One ICU are available for patients.
- Indoor wards of DRH/KUR are air-conditioned, 05 nos. AC Cabin and one ICU are available for patients. And Indoor wards of DRH/SBP are air-conditioned, 02 no. AC Cabin, one ICU are available for patients.

Operation Theatres:-Central Hospital-03 OTs, Divisional Railway Hospital/WAT has 02 no. of OTs and Divisional Hospital/KUR & SBP has 01 no. of OT each. The Operation Theatres are well equipped with modern equipments.. Anaesthesia Work station, Harmonic Scalpel, Double Dome OT light with Endo-Vision Camera, , Laparoscope machines, C-Arm, Phaco Emulsification Machine, Hysteroscope, Urology set, Operating Microscope for Eye & ENT Surgeries, etc are available. Construction of Modular OT in Central Hospital has been completed and operational. All types of Major surgeries and Special surgeries are performed in Railway Hospitals. **Labour Room:-**Well equipped Labour Room is available in all the Hospitals.

Kitchen Services: - Kitchen services are outsourced in all the Hospitals. A new Kitchen for Central Hospital has been constructed and is operational.

Linen Cleaning Contract: - Linen Cleaning Contract is available in all the Hospitals.

Bio-Medical Waste Management contract is available in all the Hospitals.

AC Mortuary: - AC Mortuary is available in all the Hospitals of ECoR for keeping dead bodies.

CCTV: - CCTVs are installed in all the Hospitals at strategic locations to monitor the activities of Hospital by the hospital-in-charge.

Fire Safety: - Fire Alarm system has been installed in most of the Railway hospitals.

HMIS: - Hospital Management Information System is being processed over ECoR Zone.

(II) Preventive & Promotive Health Services:**A) - Family Welfare Activities:-**

Sterilization operations (Tubectomy, Vasectomy) are done regularly.

IUCD, Oral Contraceptive Pills (OCP) and condoms are distributed to increase the gap between successive children.

B) - Immunization:-

Under Universal Immunization Programme, all the children under the age of 05 years are immunized against Polio, DPT, Measles, BCG & Hepatitis-B.

TT 2 doses are given to pregnant mothers.

IFA is given to pregnant mothers & Vit.A solution is given to children.

C) - Maternal Health:-

All the pregnant mothers are registered in ante-natal clinic, regular Ante-Natal Checkup (ANC) is done at Hospitals.

TT Inj. is administered and IFA given.

Pregnant mothers are motivated for Hospital delivery, nutrition of self during pregnancy, spacing of 2nd child by using IUCD & other methods of contraception, to adopt permanent method of sterilization if family is completed.

D) - Industrial Health:-

Examination of Candidates: - Candidates in A1, A2 and below medical categories are examined in Railway Hospitals. 580 no. of candidates have been examined during 2020-21.

Periodical Examination of Employees (PME):- 5666 no. of Employees have been examined in different Hospitals & Health Units of ECoR.

Sickness of Employees: - Sickness absenteeism of the employees during the year 2021-22 was 1.04% against the target of 1.5%.

Attending Sick passengers in Trains: - 1389 no. of sick passengers were attended in Trains and Stations during the year 2021-22.

4. MEDICAL FACILITIES PROVIDED IN HEALTH UNITS:

- Primary level health care is provided in Health Units which consists of mainly OPD services and other preventive promotive services.
- Cash imprest of Rs.2000/- to Rs.5000/- is available in every Health Unit for purchase of emergency medicines.

Imprest for Laboratory Investigations: - 21 no. of Health Units of ECoR have imprest for Laboratory investigations ranging from Rs.1000/- to Rs.5000/- for doing routine investigations outside.

Imprest for Road Mobile vans: - 21 no. of Health Units of ECoR have imprest for Road Mobile vans of Rs.5000/-. Doctor visits the line section on specified days of the week.

Equipments: Nebulizer, Suction Apparatus, ECG machine, Glucometer, Oxygen cylinder etc. are available in Health Units.

Referral Services to Private Recognized Hospitals:-

Patients are referred to Private recognized Hospitals and other Govt. Hospitals for mainly tertiary management, the facilities for which are not available in Railway Hospitals. The following private Hospitals are recognized by ECoR for referring Railway cases:-

Sl.	Place	Name of the hospital
1	Bhubaneswar	Apollo Hospital, SUM Ultimate Medicare (For Cancer), Kar Vision Eye Hospital, KIMS Hospital, AMRI Hospitals, IMS & SUM Hospital
2	Visakhapatnam	Seven Hills Healthcare Pvt. Ltd., Apollo Hospital, Care Hospital, Mahatma Gandhi Cancer Hospital & Research Institute., HCG Cancer Centre., KIMS IKON Hospital, Omega Hospital, Queen's NRI Hospital, INDUS Hospitals, Apple International Dental Hospital
3	Bachelli	NMDC Apollo Hospital
4	Kirandul	NMDC Hospital

5	Talcher	Nehru Shatabdi Central Hospital of MCL
6	Secunderabad	Yashoda Hospitals
7	Angul	Surendra Hospital
Sl.	Place	Name of the diagnostic centers
1	Bhubaneswar	Apollo Hospital, Genx Diagnostics, KIMS, Shri Mediscan, Vimtac.
2	Visakhapatnam	Dolphin Diagnostic Center
3	Visakhapatnam	Chaitanya Medical Center

5. M&P PROGRAMME:

Medical equipments have been installed in different Railway Hospitals. The following Medical Equipments have been sanctioned for different Railway Hospitals under M&P Programme under GM /PCME's power.

Sl. No	Description	Qty	Cost in lakhs	Year of sanction	Consignee	Present status
1	Smoke Evacuator	01	5.60	2020-21	CH/BBS	Installed
2	Oxygen Generation Plant	01	73.50	2021-22	CH/BBS	Installed
3	Oxygen Generation Plant	01	47.25	2021-22	DRH/KUR	Installed
4	Oxygen Generation Plant	01	36.75	2021-22	DRH/SBP	Installed
5	Oxygen Generation Plant	01	*	2021-22	DRH/WAT	Installed

* Oxygen Generation Plant of 500 LPM Capacity was donated by M/s Tech Mahendra Foundation, Mumbai to DRH/WAT.

6. PROCUREMENT OF DRUGS & DRUG ANALYSIS:

Procurement status of Drugs & Medical consumables costing above Rs. 1 lakh each in aggregate for which RC/PO issued from Hq. (Stores Department) during Apr'21 to Mar'22

Sl. No.	Description	2020-21	2021-22
1	List of drugs given to stores >1 lakh each for procurement	343	263
2	RC/PO issued for drugs	332 (96.8%)	247(93.9%)
3	List of consumables given to stores >1 lakh each for procurement	66	52
4	RC/PO issued for consumables	65 (98.5%)	46 (88.5)
5	RC/PO value(drugs + consumables) in Rupees.	14.28 Crore	9.97 Crore

Purchase particulars of Drugs costing less than Rs. 1 lakh each procured at hospital level during Apr'21 to Mar'22

Sl.No.	Description	WAT	KUR	SBP	CH/ BBS
1	No. of drugs are to be procured during 2020-21	384	268	150	338
2	No. of drugs procured	164	211	98	188
3	%	42.7%	78.7%	65.3%	55.6%

Purchase particulars of Consumables costing less than Rs. 1 lakh each procured at hospital level during Apr'21 to Mar'22

Sl.No.	Description	WAT	KUR	SBP	CH/ BBS
1	No. of items are to be procured during 2020-21	445	277	139	633
2	No. of consumables procured	108	172	18	135
3	% age	24.3%	62.1%	12.9%	21.3%

Purchase particulars of Consumables costing less than Rs. 1 lakh each procured at hospital level during Apr'21 to Mar'22

Sl.No.	Description	WAT	KUR	SBP	CH/ BBS
1	No. of items are to be procured during 2020-21	445	277	139	633
2	No. of consumables procured	108	172	18	135
3	% age	24.3%	62.1%	12.9%	21.3%

Drug analysis report for the year 2021-22

Description	WAT	KUR	SBP	CH/BBS	2021-22
No. of samples targeted to be tested during 2021-22	22	20	15	25	82
No. of samples sent for analysis	25	20	15	25	85
No. of samples having Non-Standard	0	0	0	0	0

7. BUDGET UTILISATION:**Budget utilization during Apr'21 to Mar'22 (in Rs '000)**

Description	WAT	KUR	SBP	CH	Total
Budget Allocation under Head J-200-28 for 2021-22	BG 36153 RG 56597	BG 28408 RG 33068	BG 9300 RG 18609	BG 70943 RG 73080	BG 144804 RG 181354
Budget Utilization	45163	37799	13786	88094	184842
%age of Budget Utilization	80%	114%	74%	120%	102%

Medical reimbursement and referral bills expenditure during Apr'21 to Mar'22 (in Rs '000)

Description	WAT	KUR	SBP	CH	Total
Budget Allocation under Head J-200-26 for 2021-22	BG 171180 RG 190000	BG 140815 RG 160000	BG 27539 RG 25000	BG 70028 RG 62038	BG 409562 RG 437038
Budget Utilization	198806	167100	16831	86876	439666
%age of Budget Utilization	104.64%	104.44%	67.33%	140.04%	100.61%

8. FOOD ANALYSIS:

- 46 no. of food samples were tested under FSSAI during 2021-22. One food sample found unsafe and Notice has been issued under section 46(4) of FSSA Act, to the Food Business Operator for analysis of one part of the sample. As per FBO's demand one part of the sample sent to the Referral Laboratory and report is awaited.
- 499 no. of samples were tested under Quality control, No sample was found unfit.
- Total 498 Licenses and Registrations under Food Safety and Standards Act, 2006 have been issued online through FoSCoS to the Food Business Operators/Catering Contractors to run Food Business in the Static and Mobile Units over East Coast Railway.

FSSAI Initiatives: Bhubaneswar And Vishakhapatnam Railway Station have been declared as "Eat Right Station" with four star rating under the Eat Right Campus Initiatives in India launched by Food Safety and Standards Authority of India (FSSAI)

9. WATER ANALYSIS:

- Bacteriological:- 1197 no. of samples tested, out of which 1166 no. found fit.(99.16%)
- RCL:- 23018 no. of tested out of which 22900 no. found fit. (98.48%)
- Chemical:- 72 no. of samples tested during 2021-22 and all the samples found fit.(100%)

10. DISASTER MANAGEMENT:

	WAT Division	KUR Division	SBP Division
ARME Scale I (8 in number)	Visakhapatnam Koraput, Rayagada	Khurda Road Palasa, Bhadrak	Sambalpur, Titilagarh
ARME Scale II (13 in number)	Vizianagram, Nuapada, Araku Jagadalpur, Kirandul, Laxmipur	Cuttack, Talcher Berhampur, Keonjhar	Mahasamund Bolangir. Kantabhanjhi
POMKA. (Portable Medical Kit for Accident). (66 in number)	31	19	16
Augmented First Aid Boxes. (06 in numbers)	Nil	05	01
First Aid Boxes. (983 numbers)	421	328	234

11. PERFORMANCES HIGHLIGHTS DURING 2021-22:

Sl. No.	Subject	Achievement
1	No. of OPD patients	94458
2	No. of patients admitted in Indoor	11296
3	No. of Special & Major surgeries	783
4	No. of Minor Surgeries	945
5	No. of cataract Surgeries with IOL	209
6	No. of Deliveries	240
7	BOR%	46.10
8	Pathological investigation	556354
9	CT & MRI	2361
10	Man days loss due to RMC & IOD	254351
11	No. of RMC cases more than 1 year	14
12	Food samples under FSSAI	46
13	Adulterated	01
14	Food Samples under quality control	499
15	No. of unfit Samples	Nil
16	Water sample tested for Residual chlorine	23018
17	No. of sample fit	22900
18	Water samples for Bacteriological Test	1197
19	No. of fit	1187
20	No. of passengers provided Medical Aid during journey at train/stations/ yards etc.	1389
21	No. of drug samples sent for analysis	65
22	No. of Medical Examination (candidate)	872
23	Periodical Medical Examination (PME)	5666

12. HIGHLIGHTS OF MEDICAL DEPARTMENT REGARDING COVID-19 PREVENTIVE AND TREATMENT MEASURES DURING THE PANDEMIC PERIOD 2021-22.**Action taken on COVID-19:**

- Covid Isolation Ward: Total 84 Beds have been identified as Isolation Beds for treatment of COVID-19 patients in all Divisional Railway Hospital of East Coast Railway. (Central Hospital/Mancheswar: 25 Beds, DRH/Waltair: 44 Beds & DRH/Khurda Road: 15 Beds.)
 - Total no. of Covid cases treated in Hospital: 1662
 - Total no. of Covid cases treated in Home-isolation: 6315
 - Total no. of Covid cases treated : 7977
- Covid Help Desk: For screening fever cases were started from the beginning in the month of April 2021 and is continuing till date round the clock in Central Hospital/BBS and all Divisional Railway Hospitals.
- Training programme was organized for paramedical in different categories in Central Hospital and all Divisional Railway Hospitals. Doctors and paramedical staff are updated on guidelines issued from Railway Board regarding management of COVID-19 Pandemic.
- Necessary Medical Equipments, Consumables and Medicines were procured through SPC. Most of the materials like Ventilator, Bi-PAP Non-Invasive Ventilator, PPE kit, Sanitizer, Hand wash, N-95 Masks, Triple layer masks, Gloves, Medicines were procured.
- Oxygen Generation Plant have been installed in Central Hospital/BBS and all 03 Divisional Railway Hospital during the month of October'2021.
- Necessary Manpower (CMPs and Paramedical) through contractual appointment were taken for management of COVID-19 cases over Medical Department of East Coast Railway.
- Vaccination: Precautionary dose (>60 Years), Healthcare and Frontline workers and 1st dose vaccination of (15 to 18 Yrs) started from 01.01.2022.
- COVID-19 Vaccination at Central Hospital/BBS and different Divisional Rly. Hospitals for the year 2021-22, for Frontline health workers, Sr.Citizens, 45-59 years with comorbid condition, RPF

Personnel and age group from 15 to 18 years, 18 Years to 44 years, precautionary dose for Health Care Workers is as follows:

1 st dose	2 nd dose	Precaution Dose	Total Vaccination
38046	39038	2501	79585

9. COVID-19 TEST: The Swab samples collected for Rapid Antigen Test and for RTPCR Test in all Divisional Railway Hospitals and Central Hospital/BBS of East Coast Railway are as follows: .

Rapid Antigen Test	Positive cases	RTPCR Test	Positive cases
20854	5806	9955	1645

13. NEW ACHIEVEMENT:

- In-House out sourced Hemodialysis Unit has been inaugurated at DRH/WAT by DRM/WAT, ADRM in presence of CMS/WAT and other Doctors on 29.01.2022 and it is functional since then.
- New OPD Block: New OPD Block was inaugurated by General Manager of ECoR on 13th August 2021 at Central Hospital, Bhubaneswar and OPD is functioning there presently.
- Bhubaneswar Railway Station is certified as "Eat Right Station" on 3rd December 2021 as per guidelines established by Food Safety and Standard Authority of India (FSSAI)
- Vishakhapatnam Railway Station is certified as "Eat Right Station" on 18.05.2022 as per guidelines of FSSAI.

14. (HMIS) HOSPITAL MANAGEMENT INFORMATION SYSTEM IMPLEMENTATION:

- HMIS has been implemented in 31 Healthcare facilities (04 Hospitals and 27 Health Units) of E.Co.Railway; Software replication is done by Rail Tel.
- Registration of patients and prescription generation facility in OPD is available.
- Configuration of machines in Lab. of CH/BBS, DRH/WAT, and DRH/KUR is under process. One machine each from three Hospitals is integrated in HMIS.
- For HMIS implementation in full at CH/Mancheswar, DRHs- KUR/SBP, and WAT over E.Co.Railway (LAN & Hardware) is under process. Proposal of around Rs. 3.67 Crore is sent to Health Directorate through Northern Railway for sanction under PH-17.

CENTRAL HOSPITAL:

No. of OPD patients treated in Central Hospital: 95213

No. of Indoor patients admitted and treated in CH/BBS: 1844

No. of surgical Operations done: Special: 11, Major: 263 and Minor: 255, Cataract: 32.

PME disposal on Day-1 in percentage: 100%age

No. of Food samples tested under FSSAI: 8, Under Quality Control: 26

- Oxygen Generation Plant of 600 LPM capacity installed on 14.10.21
- COVID Help Desk for screening of fever cases is functioning.
- World AIDS Day observed in 01.12.2021
- International Women's Day observed on 08.03.2022
- World TB Day observed on 24.03.2022.
- National Pulse Polio Immunization drive carried out on 27.02.22, 28.2.2022 and 01.03.2022. Total 337 children below 5 years were immunized.

WALT AIR DIVISION:

No. of OPD patients treated in Waltair Division: 181554

No. of Indoor patients admitted and treated in DRH/WAT: 6796

No. of surgical Operations done: Special: 19, Major: 361 and Minor: 262, Cataract: 148.

PME disposal on Day-1 in percentage: 97%age

No. of Food samples tested under FSSAI: 12, Under Quality Control: 166

- Oxygen Generation Plant of 500 LPM capacity donated by M/s Tech Mahindra Foundation, commissioned on 15.10.2021.
- COVID Help Desk for screening of fever cases is functioning.
- World AIDS Day observed in 01.12.2021
- International Women's Day observed on 08.03.2022
- World TB Day observed on 24.03.2022.
- National Pulse Polio Immunization drive carried out on 27.02.22, 28.2.2022 and 01.03.2022. Total 2058 children below 5 years were immunized.

KHURDA DIVISION:

No. of OPD patients treated in Khurda Division: 167769

No. of Indoor patients admitted and treated in DRH/KUR: 1840

No. of surgical Operations done: Special: 4, Major: 95 and Minor: 395.

PME disposal on Day-1 in percentage: 95%age

No. of Food samples tested under FSSAI: 13, Under Quality Control: 192

- Oxygen Generation Plant of 400 LPM capacity installed on 29.10.2021.
- COVID Help Desk for screening of fever cases is functioning.
- World AIDS Day observed in 01.12.2021
- International Women's Day observed on 08.03.2022
- World TB Day observed on 24.03.2022.
- National Pulse Polio Immunization drive carried out on 27.02.22, 28.2.2022 and 01.03.2022. Total 3509 children below 5 years were immunized.

SAMBALPUR DIVISION :

No. of OPD patients treated in Sambalpur Division: 48107

No. of Indoor patients admitted and treated in DRH/SBP: 799

No. of surgical Operations done: Major: 4, and Minor: 24.

PME disposal on Day-1 in percentage: 100%age.

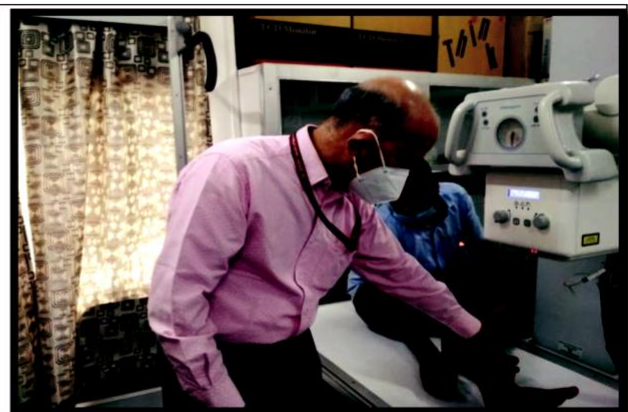
No. of Food samples tested under FSSAI: SBP: 12, Under Quality Control: 56.

- Oxygen Generation Plant of 300 LPM capacity Installed on 06.12.2021
- COVID Help Desk for screening of fever cases is functioning.
- World AIDS Day observed in 01.12.2021
- International Women's Day observed on 08.03.2022
- World TB Day observed on 24.03.2022.
- National Pulse Polio Immunization drive carried out on 27.02.22, 28.2.2022 and 01.03.2022. Total 507 children below 5 years were immunized.

ACTIVITIES OF MEDICAL DEPARTMENT



Sisters handling a 76yrs female undergoing surgery for Fracture Knee at DRH/KUR



DG/RHS examining a patient during inspection



Executive Health Check up Camp at DRH/WAT



School Health Check-up Camp by CH/BBS



**International Nursing Day at DRH /SBP
(Birth day of Florence Nightingale)**



Commendable Gesture of Sisterly Affection



Multipurpose Health Drive by DRH/KUR

Vizag railway station gets 'Eat Right Station' certificate

It is the seventh railway station in the country and only one in the State to get the recognition

SPECIAL CORRESPONDENT

VISAKHAPATNAM
Visakhapatnam railway station has been certified as 'Eat Right Station' by the Food Safety and Standards Authority of India (FSSAI) for providing quality and nutritious food to passengers. It is the 7th railway station in the country and only one in Andhra Pradesh to get this recognition, based on third party audit.

The railway station has 38 catering stalls, a Food Court, a Jan Aashra, one fast food unit and 15 water vending units.

The other railway stations which are ahead of Visakhapatnam to get the 4-Star rating are Chandigarh Railway Station, Anand Vihar Terminal Railway Station (Delhi), Chhatrapati Shivaji Terminus (Mumbai), Mumbai Central Railway Station (Mumbai), Vadodara Railway Station and Bhubaneswar station.



The Jan Aashra outlet at Visakhapatnam railway station

The certification is part of the 'Eat Right India' movement, an effort by FSSAI to promote safe, healthy and sustainable food. Eat Right India adopts a judicious mix of regulatory, capacity building, collaborative, and empowerment approaches to ensure that our food is suitable both for the people and the planet.

Divisional Railway Manager Anup Satpathy said that the 4-Star rating was an indication of the efforts made by the railway authorities in ensuring the availability of safe and hygienic food to passengers.

All the catering stalls at Visakhapatnam railway station are provided with food license certificates. The vendors also have medical fitness certificates and adhere strictly to the norms.

"The coveted certificate

makes us more responsible to ensure this standard of hygiene and food quality in future at the station. Efforts are also being made to improve the food quality at other stations, of the division, and get them included in the 'Eat Right Station' category. The certificate, awarded by FSSAI to railway stations, sets the benchmark for providing safe and wholesome food to passengers," he said. "An FSSAI empaneled third party audit agency conducted a survey at the railway station for seven days in February this year. The parameters chosen include food quality, hygiene and the entire chain including the waste disposal," said Senior Divisional Commercial Manager A.K. Tripathy. The certificate is valid up to May 18, 2024.

Eat Right Station Certificate



**Inauguration of New OPD Complex at
Central Hospital/BBS.**



**Bhubaneswar Railway Station declared as
EAT RIGHT STATION**

PERSONNEL DEPARTMENT

The Personnel Department plays a pivotal role to manage & look after the welfare of the varied mass of people. It handles Personnel Management and Human Resource Development in the zonal railway. It looks after appointments, transfers, postings, promotions, performance assessment management, training, employee payments, retirement benefits, employee welfare activities, manpower planning, industrial relations, implementation and clarification of personnel policy, rules and regulations.

Function & Duties: -

Sl. No.	Designation	Name (Sri /Mrs. /Ms.)	Functions and Duties	Grade
1	PCPO	T.K Mandal	Overall In-charge of Personnel Department, Coordination with PHODs/CHODs of other Departments, Chairman (CSBF).	Gr.A
2.	CPO(A)	Prabhat (Up to 5.10.2021) L. V. S. S Patrudu (From 6.10.2021)	Overall In-charge of Non-Gazetted cadre, Railway Board communication, Training Manager (Non-Gaz), Nodal officer for court cases, Rajbhasa.	Gr.A
3	CPO (IR)	Hafis Mohamed (Up to 20.04.2021) Looking after by L.V.S.S Patrudu w.e.f 6.10.2021	Overall in-charge of Bills (Gaz & Non-Gazetted), Settlement, Industrial relation management, RTI cases, Welfare, Budget, Store procurement.	Gr.A
4	Chairman/ RRC	R.N.A. Parida (Up to 20.7.2021) Looking after by Prakhar Gupta w.e.f 21.7.2022	RTI (CPIO), Recruitment/ empanelment of Level-1 posts, operation of RRB panel, Indents to RRB, Special Quota Recruitment, Engagement of Act Apprentices, Compassionate Ground Appointment, own request transfer cases.	Gr.A
5	Dy. CPO/ HQ	Prakhar Gupta	Bills (Gaz & Non-Gaz), Industrial Relation Management and Welfare, SBF, PNM, Parliamentary Questions, MR/MoSR/MP/MLA's reference/CA-iii, CPGRAM, NIVARAN, Quarter allotment, Monitoring of reply to Rly Board references, Staff matters: Civil, S&T, Mechanical, Electrical	Gr.A
6	Dy. CPO/ Gaz	H.K. Mahanand	Entire Gazetted cadre, Gazetted confidential matters, court cases related to Gazetted matters, confidential & D&A cases of Gaz & NG cadre.	Gr.B
7	APO-II	R.C. Sethy	Bills (Gaz & Non-Gazetted), IPAS, Settlement, RTI Cases, Audit Para, Budget, Imprest, Welfare, Store.	Gr.B

Functions of Personnel Department: -

• Man Power Planning	• Recruitment & Placement
• Training and Development	• Performance Appraisal
• Transfer & Promotions	• Guidance on Disciplinary matters
• Wage and Salary administrations	• Settling Industrial Disputes
• Grievance Redressal	• Incentives and Financial aids
• Settlement and Pension Setting up and maintenance of Welfare Activities	• Arranging Post retirement benefits and Grievance Redressal of Pensioners

Statement of Gazetted Cadre position of East Coast Railway as on 31.3.2022 :-

Department	Sanction			On-roll			Vacancy		
	Gr.A	Gr.B	Total	Gr.A	Gr.B	Total	Gr.A	Gr.B	Total
General Admn	18	4	22	13	8	21	5	-4	1
Misc	8	35	43	1	30	31	7	5	12
Accounts	38	11	49	18	21	39	20	-10	10
Civil Engg	99	60	159	86	51	137	13	9	22
Mechanical	43	11	54	37	14	51	6	-3	3
Operating	37	13	50	29	10	39	8	3	11
Commercial	20	7	27	14	7	21	6	0	6
S&T	47	19	66	38	18	56	9	1	10
Electrical	54	16	70	40	24	64	14	-8	6
Medical	66	0	66	59	0	59	7	0	7
Personnel	20	7	27	10	9	19	10	-2	8
Store	26	3	29	16	9	25	10	-6	4
RPF	15	0	15	15	0	15	0	0	0
Total	491	186	677	376	201	577	115	-15	100

Statement of NG Cadre position of East Coast Railway as on 31.03.2022 :-

Department	Sanction	On-roll	Vacancy
Accounts	949	647	302
Commercial	2833	2374	459
Electrical	14382	13449	933
Engineering	13760	11619	2141
General Administration	367	303	64
Mechanical	7052	5974	1078
Medical	1130	989	141
Operating	9136	6790	2346
Personnel	734	584	150
S&T	2309	2011	298
Stores	377	269	108
RPF	2515	2260	255
Total	55544	47269	8275

Staff Inflow (2021-2022)

Mode of Inflow	RRB	RRC	Comp. Ground appointment	Inter Railway transfer (from other Zone)	Substitutes	Sports, Scouts & Guides & Other mode	Total
Number	1082	59	241	990	42	697	3111

Staff Outflow (2021-2022)

Mode of Outflow	Normal Retirement	Retirement Voluntary	Death	Removal/dismissal	Transfer out of the zone	Promoted to Gr."B"	Others	Total
Number	804	81	174	19	1322	07	717	3124

Position of surrender and creation of posts over ECoR for the period 1.04.2021 to 31.03.2022

Department	Accts	Civil	Comml	Elect	GA	Mech	Med	Optg	Pers	S&T	RPF	Stores	Total
Post created during FY 2021-22	0	0	0	0	0	0	0	0	0	0	0	0	0
Post surrendered during FY 2021-22	9	1	15	793	4	4	0	316	2	0	0	0	1144

PNM Meeting

Division/Unit	Number of Meetings	No of items Discussed	No of items Closed
Head Quarter	03	122	81
Khurda Road	02	60	27
Waltair	03	60	39
Sambalpur	0	0	0
Mancheswar	02	76	41

Details of allotment & expenditure from Staff Benefit Fund 2021-22

During the financial year 2021-22, an amount of ₹ 4,18,34,422/- (Rupees Four Crore Eighteen lakh Thirty four thousand Four hundred twenty two only) had been credited to ECoR Central Staff Benefit Fund as per the codal provision and a sum of ₹ 2,11,73,246/- (Rupees Two Crore, Eleven lakh Seventy-three thousand Two hundred forty six only) has been spent as per details given below.

Sl. No.	Head/Activity	Amount spent during 2021-22
1	Education- Scholarship for higher Technical/Professional education for wards of staff in GP above Rs. 2400/- @ 1500/-p.m	1435791
2	Scholarship for Higher Technical/Professional education for girl child of staff in GP up to Rs. 2400/- @ 1500/- p.m	576705
3	Scholarship for Higher Technical/Professional education for male child of staff in GP up to Rs. 2400/- @ 1500/- p.m	735631
4	Women empowerment activities including seminar, Camps, training programmes and gender sensitization camps etc	600368
5	Recreation other than sports	736188
6	Recreational facilities at Institutes & Clubs etc	3329250
7	Promotion of Cultural Activities	200000
8	Relief of distress sickness etc for staff in GP up to Rs. 4600/-	7003320
9	Sports activities	2585000
10	Scouts & Guides Activities	0
11	Indigenous system of medicine including Homoeopathy	970081
12	Immediate relief on natural calamities	1041500
13	Developing occupational skills of physically/mentally challenged railway employees and their wards including purchase of wheel chair, other aides etc	1068000
14	Miscellaneous	91412
	Total	21173246

Achievements during 2021-22 :

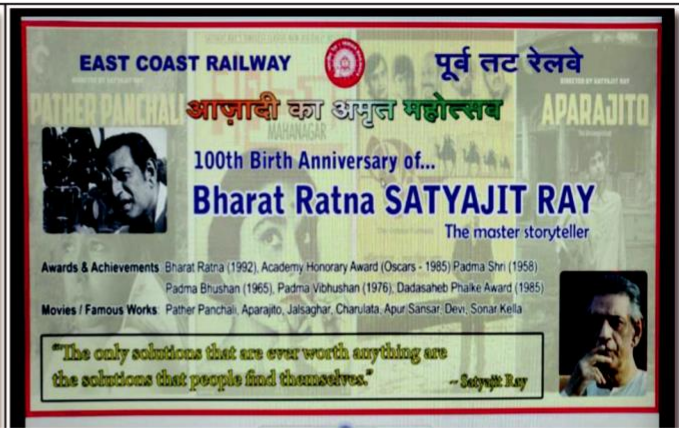
- 90% of court cases (190/212) were disposed of in favour of Railways.
- 100% of staff grievances were disposed 689/689).
- 1171 settlement cases (NR-795 & ONR-376) were finalized.
- 1082 Nos. of candidates were recruited through RRB & 59 candidates were recruited through RRC.
- 78 Medically de-categorised cases were finalized.
- 16805 staff was trained.
- 97% (342/353) selections, suitability & trade tests were finalized.
- 916 RTI cases have been disposed on top priority within target time (100% cleared).
- All 559 Nivaran & CPGRAM cases disposed within target time (100% cleared)
- 10 Ex-gratia settlement were finalized during this period (100% cleared)
- 452 Nos. of IRMT cases were finalized (100% cleared).
- 196 Nos. of COVID Compassionate Ground Appointment finalized (100% cleared).
- 195 Nos. of COVID Settlement were finalized out of 196 cases (99%).
- HRMS successfully implemented over ECoR
 - 5564 Nos. of Office Order issued.
 - 1,45,029 Nos. of Pass & 1,39,306 Nos. PTOs issued.
 - 19382 Nos. of PF loan cases cleared
 - 1276 cases of Settlement processed.
 - 1106 Nos. of PPO generated
 - 43971 Nos. of APAR generated.

Activities

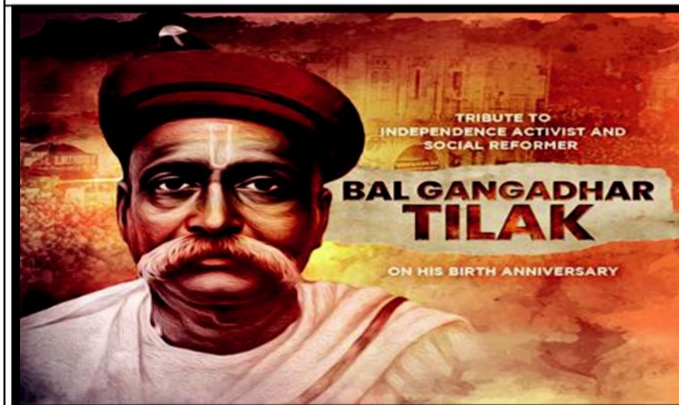
As a part of commemorative activities under the 75th Anniversary of India's Independence "AZADI KA AMRIT MAHOTSAV" Personnel department celebrated anniversaries & centenaries of famous personalities including those connected to the freedom movement. Some of the activities observed in East Coast Railway during 2021-22 are shown below. :



The 249th Birth Anniversary of Shri Raja Ram Mohan Roy was observed by displaying the banners showcasing the contribution of Sri Raja Ram Mohan Roy.



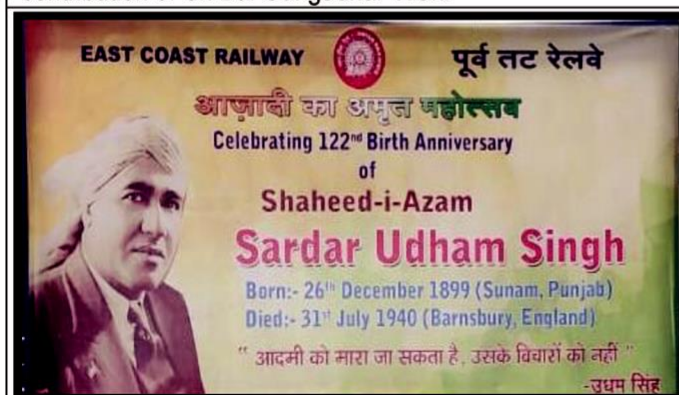
During May'21, the Birth centenary of Satyajit Ray was observed by placing of banners and displaying creations of Satyajit Ray on Televisions at headquarters, divisions and in major stations of ECoR..



The Birth Anniversary of Bal Gangadhar Tilak was observed on 23rd July 2021 by displaying the banner showcasing the contribution of Sri Bal Gangadhar Tilak.



Celebrated 75th Independence Day in all units of ECoR in a grand manner followed by unfurling of National flag, Rastriya Salami, National Anthem, March Past ...



Celebrated Anniversaries and Centenaries of famous freedom fighter Shaheed Udham Singh on 26.12.2021.



For birth anniversary of "Sardar Vallabhbhai Patel", Rastriya Ekta Diwas was observed on 31.10.2021 followed by Bike Rally at HQs and "Walkathon"/"Run for Unity".



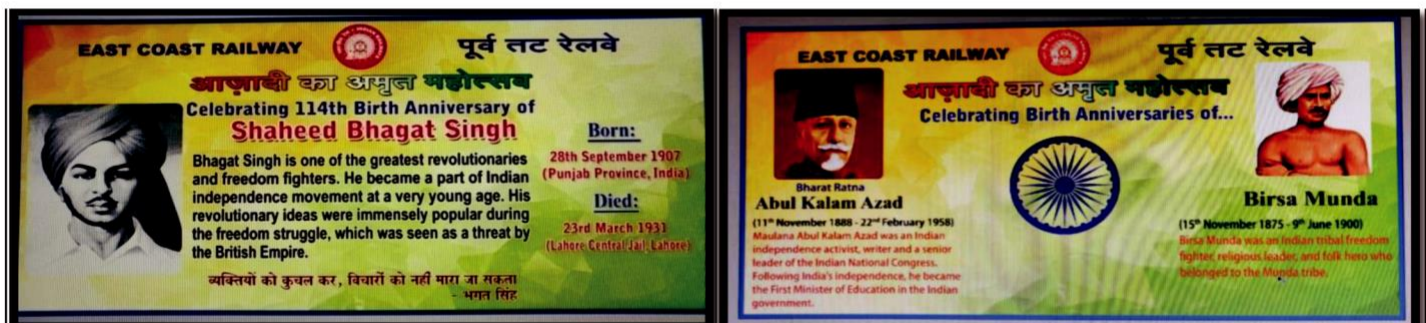
Birth Anniversary of Mahatma Gandhi (Father of the Nation) and Lal Bahadur Shastri (Man of Peace), the greatest revolutionaries and freedom fighter were celebrated on 2nd Oct 2021 at HQs/ECOR.



Celebrated the Birth Anniversaries and Centenaries of famous freedom fighter, Savitribai Phule on 03.01.2022, Swami Vivekananda on 12.01.2022, Subhas Chandra Bose on 23.01.2022 and Lala Lajpat Rai on 28.01.2022

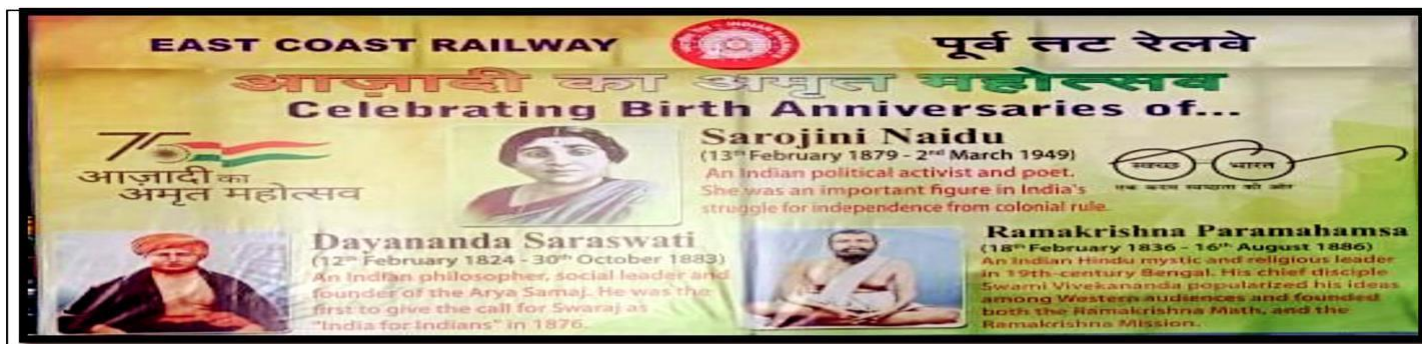


The Birth Anniversaries of famous personalities Aurobindo Ghosh and Vikram Sarabhai was observed by displaying the banners showcasing their contribution to the nation.



114th Birth Anniversary of Shaheed Bhagat Singh was observed on 28th Sep'21 in all the divisions and HQs.

ECOR celebrated the Birth anniversaries of Abul Kalam Azad on 11.11.2021 and Birsu Munda on 15.11.2021.



In the month of February, 2022, the Birth Anniversary and Centenary of Dayananda Saraswati, Sarojini Naidu and Ramakrishna Paramhansa was celebrated.



The National Constitution day was celebrated on 26th Nov. 2021 over ECoR. In Headquarters the preamble was read by officers and staff led by AGM.



WEBINAR on International Yoga Day at Sabha Griha (7th International Yoga Day was observed at all units of ECoR in Virtual manner.)



6th ECoR CSBF e-Summer Camp was organized from 12th to 21st May 2021 through Facebook, Google Meet etc. with participation of 293 children in 5 to 13 years age group.



E-Pass Registration Camp was organized in Waltair division for retired employees on 10.10.2021 & 23.10.2021. Documents of 185 employees were uploaded in HRMS



AchhiAadat activities at ECoR Mixed Higher Secondary School/KUR under Azadi Ka Amrit Mahotsav celebrations



International Women's Day celebrated on 08.03.2022 in East Coast Railway

SAFETY DEPARTMENT

1.0 SAFETY PERFORMANCE (2021-22): -

- There was no MLC or fire incident during the year. No collision also recorded.
- Due to prompt & faithful reporting of accident cases there was an increase in number of accidents in the current year in comparison to previous year.
- Four consequential train accidents were recorded during the year out of which 01 case of goods train is attributed to sabotage & 01 passenger train due to non protection of work site.
- Three SPAD cases, 05 other train accidents & 14 yard accidents were also reported.
- There was no causality or injury to any passenger.

1.1 Accident Per Million Train Kilometers (Consequential):-

Year	Collision	Derailments	Other accidents	Total consequential train Accidents	Total Million Train Km	Accident per MTKm
2020-21	0	01	0	01	44420	0.02
2021-22	0	04	0	04	57883	0.069

1.2 Comparative Figure of Train Accidents for 2020-21 & 2021-22:-

TYPE	Collision		Derailment		Unusual/ Misc		Indicative/ SPAD		Rolling stock/ Equipment Failure		Total		% Variation of 2021-22 over 2020-21
YEAR	2020 - 21	2021- 22	2020 - 21	2021- 22	2020 - 21	2021- 22	2020 - 21	2021- 22	2020 - 21	2021 - 22	2020 - 21	2021 - 22	
Conse quential	0	0	01(G)	04	0	0	0	0	0	0	01	04	300
Other Train	0	0	02	05	0	0	0	0	0	0	02	05	150
Yard	0	0	03	14	01	0	0	03	0	0	04	17	325
Total	0	0	06	26	01	0	0	03	0	0	07	26	271

1.3 Category wise analysis of Train Accidents:-

Category of train accidents	No of accidents	
	2020-21	2021-22
Collision	Nil	Nil
Derailments	01(G)	04 (Goods-3 & Pass-1)
Accident at Manned Level Crossings	Nil	Nil
Fire in trains	Nil	Nil
Miscellaneous	Nil	Nil
	01(G)	04 (Goods-3 & Pass-1)

1.4 Cause wise analysis of Train Accidents:-

Sl. No.	Cause of train accidents:	No of accidents	
		2020-21	2021-22
1	Human failure.		
	a) Failure of Railway staff.	Nil	03
	b) Failure of persons other than Railway staff.	Nil	Nil
2	Equipments Failure.	Nil	Nil
	a) Rolling stock.	Nil	Nil
	b) Track.	1	Nil
3	Sabotage/Miscreant activity.	Nil	01
4	Natural calamity (Boulder fallen on track)	Nil	Nil
	TOTAL	01	04

1.5 Casualties: -

Causalities	2020-21	2021-22
Passengers	Nil	Nil
Railway employees	Nil	Nil
Others	Nil	Nil

1.6 Damage to Railway property:-

Cost of damage to Railway property and duration of interruption to through communication caused by consequential train accidents during 2020-21 & 2021-22 are as under.

Year	Cost of damage in Rs.				Interruption to through communication (Hrs)
	Rolling stock inclusive of engines (Rs.in lakh)	P.way (Rs.in lakh)	OHE (Rs.in lakh)	COM (Rs.in lakh)	
2020-21	37.85	7.95	NIL		57 hrs
2021-22	136.05	137.89	5.24	121.88	142.16

2.0 INITIATIVES TAKEN BY SAFETY DEPARTMENT:

Name of the items	2020-21 (Apr-Mar)	2021-22 (Apr-Mar)	% Variation of 2021-22 over 2020-21
Safety Drive	79	81	2.5
Safety Seminars	992	1445	46
Safety Circulars	43	64	48.83
Public Counselling	2,38,536	2,05,970	-13.65
Staff Counselling	1,09,277	59,004	-46
Ambush Checks	1125	1141	1.42
Inspections	15048	15259	1.4
Refresher	7872	7081	-10.04
Leaflets	273415	282708	3.39
Mock Drill/	105	159	51.42
Nukad Natak	63	84	33.33

NB: - The reduce in activities is due to COVID-19 protocol.

3.0 MAJOR INITIATIVES/ ACTIVITIES/ SPECIFIC ACTION TAKEN/ SYSTEM IMPROVEMENT UNDERTAKEN BY ECoR ON SAFETY ISSUES FOR THE YEAR 2021-22 TO PREVENT ACCIDENTS:**A. Initiatives By The Safety Department:-**

- Total 26 accidents occurred in ECoR during 2021-22 out of which 04 were consequential accidents, 03 SPADs, 05 other train & 14 yard accidents. The following are being ensured to contain accidents:
 - Scheduled inspection of points and crossings by P. Way officials must. Further, deficiencies recorded during these scheduled inspections are being attended immediately and in any case for major deficiencies not later than a quarter.
 - Rules & regulations laid down for shunting operation are being strictly followed. Proper clamping and locking of points during shunting is being ensured.
 - Regular counselling of loco shunter is done for observance of shunting rules & signals in yard during shunting.
 - Proper examination of freight loads is being done at designated locations to ensure safe working of trains.
 - Alertness of staff and officials in crucial situation is being watched to prevent any untoward incident.
 - Special attention is given to ensure adequate working knowledge of staff associated with train operation.

- To contain SPAD; emphasis is given on group LIs doing their assigned job, ensure adequate rest to crew and identify trait of over confidence.
 - At crew lobbies bells have been fixed and every crew who signs on rings the bell and loudly speaks "No SPAD". It is a very good system in which by uttering "NO SPAD" relevant consciousness gets invoked in the mind of the crew after signing on and before taking charge of the train.
 - During point & crossing tamping; S&T staff are advised to open the ground connection so as to ensure improvement in the quality of packing.
 - Improvement in setting of sleepers 06 for conventional & 11 for TWS is ensured at points & crossings.
 - SMS/message campaign was done through officers & supervisors of various departments to reach staff down the line on immediate safety issues.
 - Super checks on joint inspection of points & crossings, point & crossing tamping, work site protection of engineering work, deep screening by BCM & packing by Duomatic, checking examined coaching rakes, checking of CBC coupling of freight trains, joint inspection of traction bonds, isolator handle locking, braided shunt jumper & painting, status of cable, stabling at stations, signal sighting, USFD testing, UNIMATE packing, ambush check of loco, BV & AC coach simultaneously & switching off of mobile phone by LP/ALPs while on run etc. were conducted to see the quality of checks done by concerned supervisors/officers.
2. During the Covid-19 pandemic safety drives were launched & executed from time to time to detect flaws & bottle necks in system and corrective measures were taken as follow up. Total 81 safety drives were launched out of which 12 were ordered by RB & 16 by Zonal railway. Besides the above the following mega drives were also launched & executed:
- Railway Board mega safety drive on "Removal of repetitive & critical deficiencies" in continuation to previous drive on "To remove any gaps in maintenance of fixed assets, locomotive & rolling stock, conformance to procedure and human factors & training" launched & the following achieved:
All officers of HQ & Divisions including PHODs & DRMs conducted inspections on the above subject & irregularities noticed were fed in spread sheet of Railway board. Pending deficiencies are being monitored for early compliance. A total of 1065 inspections were conducted, 4443 irregularities were highlighted out of which 4152 were compiled (93.45%) from 06.03.2022 to 03.04.2022.
 - A special drive was launched for inspection & rectification of defects of all the Points & X-ings, their fittings/maintenance in yards, proper drainage systems & removal of DFWR from track etc. by the officers & supervisors of safety department. Engg. Department conducted inspection of 2015 points & X-ings & 909 were rectified for different defects. Total 424 DFWR have been removed.
 - Regular/Frequent checks on Main line points & crossings at major yards with respect to maintenance of various safety parameters as well as the maintenance practice as a drive "To prevent yard derailments" were conducted. Staff concerned was counselled.
 - A safety drive was conducted at Coaching Depot/BBSR & PUI from 13.01.22 to 19.01.22 for checking fire safety measures, fire fighting equipments and availability of stainless steel dustbins in coaches.
 - One month long mega safety drive from 26.01.22 to 24.02.22 was launched at coaching depot PURI and BBSR. During the drive, all the safety issues related to pit lines/berthing lines, under gear & fire safety equipment's of coaches, rolling-in & rolling-out examination etc. were inspected.
3. A pre winter preparedness drive was made followed by winter precaution drive & the following were ensured:
- Provision of VTO at all stations.
 - Fog affected stations/sections identified (KUR-06, SBP-10 & WAT-10).
 - Rail fracture/weld failure prone sections identified (KUR-01, SBP-03 & WAT-10) & necessary precautionary measures taken.
 - Provision of adequate number of detonators.
 - All signage boards made retro reflective.
 - All over aged AT welds are protected by modified joggled fish plate with far end bolt.

- AT welds on bridge approaches are protected.
 - SAG level safety audit in the identified rail fracture/weld failure prone section between BRGA-BRPL of SBP div was done on 03.12.2021 & SZY-DMK & KKLUGidam section of WAT div on 17/18 Nov & suggestions for necessary remedial measures were given.
 - Regular fog position of each division were taken & monitored.
 - Weather warnings were extracted from bulletins of meteorological departments of VSKP & BBSR and circulated to field staff for necessary precaution.
 - Winter patrolling introduced with provision of GPS based monitoring of patrolling.
 - Footplate inspection by officers & supervisors.
 - Besides the above mid section checkings of patrolmen were conducted by all safety counsellors & officers to ensure proper patrolling by foot plate & also by road/foot.
4. To restrict rail fractures during winter, precautionary measures were taken and the following ensured:
 - Examination & lubrication of fish plated joints.
 - De-stressing of LWR/CWR where due & inspection of LWR/CWRs.
 - USFD testing.
 - Recouplement of missing fittings in fracture prone locations.
 - Close watch kept on rail temperature in particular for the sections where temperature goes below Td-30°C.
 5. Summer precaution drive was made and the following were ensured:
 - Dressing of ballast at LC approaches & cattle crossings.
 - Deficiencies at vulnerable buckling prone locations attended.
 - Hot weather patrolmen nominated & counselled.
 - Availability of patrolling equipments at all SSE/P.Way (IC) units in ECoR.
 6. Sixty four safety circulars were issued during the year out of which 25 were issued by HQ branch. Besides, executive departments issued various instructions/guidelines to staff on working procedures such as EOTT, DPWCS etc.
 7. Six alert messages were issued during the year compiling the analysis of important accidents over ECoR as well as other railways with cause, responsibility & lesson learnt for necessary precautions & action to prevent recurrence of similar accidents. The same were circulated to down the line staff to inculcate safety awareness among the field staff & discussed in safety seminars/safety meetings & during counselling by officers/supervisors. At training centres the same were also discussed among the trainees.
 8. A total of 14 brochures for counselling on "To avoid cable cut", "counselling S&T staff on interlocked LC Gates", "hot weather patrolling", "General instructions for better enginemanship", "Avoid stalling" & "Precautions to prevent SPAD" & 08 more to standardise counselling were issued.
 9. One brochure for "Training in five 'why' root cause analysis & fish bone diagram" was issued for up gradation of accident inquiry reports as per railway Board instructions.
 10. A guided meditation audio in Hindi, English, Odia & Telugu language circulated among running staff & other field staff to do before joining duty. Meditation is supposed to give deep rest and clear any fatigue that might have still remained before joining duty.
 11. One operating Safety Bulletin was issued & circulated in OCT'21.
 12. First monthly safety bulletin in e-format was launched by the AGM & circulated to all concerned to create safety awareness.
 13. Zonal Disaster Management Plan-2022 is uploaded in the SIMS on 30.03.2022 & ECoR website on 31.03.2022.
 14. Safety poster on 'Hot axle' was developed, printed & distributed to all stations & LC gates in SBP & WAT divisions.

15. Working instruction/JPO on EOTT was circulated to the concerned staff.
16. An operating procedure for DPWCS (Distributed Power Wireless Control System) locos was issued by the CELE to facilitate DPWCS working.
17. INMARSAT telephone has been provided at Srikakulam station in WAT.
18. Digital Camera provided in ART/ Kantabanji station on Sambalpur Division.
19. Full scale joint disaster management exercises with NDRF, ODRAF, fire brigade & other civil authorities were conducted at SCM station of WAT division on 16.11.2021, at RGL station of SBP Div. on 26.11.2021 & KURT station of KUR division on 05.03.2022. Readiness & quick action of break down staff of ART, ARME, civil defence staff etc. & their action to mitigate the disaster was found satisfactory. Some shortcomings were noted for necessary remedial action by concerned stake holders.
20. One mock drill on fire was conducted at CTC station of KUR div by creating fire at RRI which was attended by local fire brigade, ODRAF & civil authorities to rescue staff from the building & fight the fire to put it out.
21. Similarly at VSKP & RGDA two mock drills were carried out to observe alertness & readiness of the ART/ARME & brake down staff by declaring derailment of one coaching train at RGDA.
22. Despite the pandemic situation the following safety checks were done by the safety department:
 - Regular/periodical & Frequent checks were done of power cars, generator cars and AC coaches regarding loose fittings of electrical equipments & other equipments at coaching depots, & other locations to ensure safety. The irregularities noticed were highlighted & remedial action taken.
 - In view of the outbreak of COVID-19, safety department of all divisions in co-ordination with other departments counselled the public/passengers to take precaution against CORONA by distributing leaflets, using posters & campaigning through social media & SMS. Thermal screening of passengers at railway stations & patients at the hospitals were conducted by the civil defence staff at major stations/hospitals.
 - SAG level intra safety audits were conducted at BBS, SBP, KRPU & PRDP and irregularities/flaws in the system were highlighted for remedial action. Suggestions were also given for system improvements.
 - A total of 1445 safety seminars & webinars were conducted to inculcate safety awareness among the field staff & to ensure safe train operation.
 - With respect to public awareness campaign, 567 level crossing gates, 224 villages, 169 gram panchayats & 67 market places were covered under public awareness campaign wherein 2,05,970 road/rail users & 59,004 staff were counselled. Total 2,82,708 leaflets were distributed & 15,38,315 SMSs were sent. A total of 84 NukadNataks were performed on "precautions to be taken while passing manned level crossings, crossing railway track & use of foot over bridge". A total of 1,05,888 number of audio visual media advertisements were made.
 - A total of 15,259 safety inspections were carried out at officer's level in ECoR out of which safety department conducted 2156 inspections.
 - Total of 1141 ambush checks were carried out to observe the staff alertness, adoption of short cuts/ bad practices if any & awareness of safety rules etc.
 - ECOR observed International Level Crossing Awareness Day on 10th June'21 with the following activities: Advertisement in leading local & vernacular language news paper -21
News coverage in papers -56
Broadcast on local news channel (cable),Radio , FM & Cinema – 11
TV news coverage – 14
 - Distribution of Safety Posters, Hand bills , Compact Disc (CD), Pamphlets / leaflets etc at Level Crossing -17800
 - SMS campaign to warn the risk at LC. Social media- Face book, Twitter, Instagram, KOO - SMS-3365 (Social media-5 each)

- Interaction with press regarding issues of Level Crossing with special emphasis on the Level crossing accidents in recent years – 16
 - Deployment of Railway Scouts & Guides , Railway Cultural Team , Civil Defence, Sports organization to host safetyDrive at LC , host cultural evening , Nukad Natak , village fairs, Gram Panchayat Sabha, Walkathon (run completion)with motto “ Safety at L/ Crossing”–16
 - Awareness Campaign with NGOs. – 06
 - Special checks at LCs with RTO, local police & RPF – 08
 - Ambush Check with State Authority to curb the incidence of violation of provisions of MV act 1989 & section 161 of IR Act1989 by road users at level Crossings – 01
 - Total no. Inspections Footplate & ambush check conducted-109
 - Total no. of LCs covered -80
 - Total number of villages covered during campaign-23
 - Total number of Panchayats / school/bus stand /Market place covered - 08
 - Number of seminars conducted -39
 - Number of road users counselled -130280
 - Number of LPs & ALPs counselled -912
 - Number of sticker pasted -816
 - Number of road show conducted -1
 - Number of large banner displayed -20
- 23.** Forty safety category staff & 02 groups were awarded for their commendable job during duty for detecting hot axle (08 GK/ Key Man/ Trackman, 05 C&W staff, 02 Station staff), Weld failure/rail fracture/ boulder fallen/SEJ crack etc(10trackmen, 02 LP & 01 Guard), avoid accident by tripping of OHE after SPAD by Station master(02), detecting fire/flame by C&W staff, detecting OHE hanging by LP /ALP (04) & group award for break down staff for accident site management.
- 24.** In view of the Cyclone “YASS” & “JAWAD” on 04.12.2021 and 23.05.2021 respectively, special precautions were taken as under:
- ART/ARME entrance/exit lines were kept free for quick movement during emergency.
 - Securing of stabled loads/vehicles at stations, sidings in KUR & WAT division.
 - Advised all running rooms to preserve sufficient dry food to meet requirement for four to five days.
 - Additional DG sets, generator cars, power cars & extra man powers were kept Crew & Guard were kept on alert.
 - Ready at different stations over KUR division for restoration work if required for prompt resumption of traffic.
 - Engineering department was advised to keep cinder/boulder special ready to face any adverse condition due to cyclone.
- B. Initiatives by Electrical Department:**
1. Provision of CVVRS in 3-phase loco: - Crew Voice Video Recording System is provided in 24 locomotives to enhance vigilance on crew & support better failure analysis during accident.
 2. Anti-Derailment checking (EFC) for 2429 locos were done during the financial year.
 3. Speedometer data of 1372 nos. of Electric / Diesel trains were downloaded and analyzed.
 4. A Technical instruction is issued by the CELE /ECOR to the LPs/ALPs/CLIs of all 03 divisions for EOTT (End on train telemetry)
 5. FOG safety devices have been provided in Crew Control Offices for use by LPs in foggy weather to avoid SPAD by being extra alert. Regular updating & mapping of fog safe devices were ensured & train working was monitored during winter.
 6. Thermal imaging has been carried out for PG clamps, connectors & isolators at different switching posts, stations & sections.

7. The following innovations/modifications were carried out:

- **Remote Monitoring System in 3-phase loco:** - ELS/VSKP has installed "Remote Monitoring System" (RMS) in loco no.30706, WAP-7 locomotive. It is the first locomotive to have Remote Monitoring System; with this modification the online data of locomotive can be checked.
- **Provision of Hotel Load Converter :-** For the first time, ELS/VSKP has provided 'Hotel Load Converter' in WAP7 loco 30726 and 30697 by modifying both power and control circuits, which is normally done at 'Production Units'. With this arrangement, three locos have become fit for working HOG rake. Another locomotive 30701/WAP-7 shall soon get hotel load converter.
- **ELS/ANGL** commissioned Digital wheel distance measuring gauge, which measures the distance between wheels of locomotives precisely within 30-60 sec with clear visibility in pits and other low light conditions with a memory capacity of 50 measured readings.
Special type clamps are made to fix on the rails bonds so as to avoid hole on rail.
To improve night visibility in WAG9 & WAG7 locos 6000 LUX head lamps have been fitted on trial.

C. Initiatives by Mechanical Department:

1. A total of 380 wagons rehabilitated by Powertech till now out of which 188 during current year.
2. Total 1454 unloadable wagons were repaired by Braithewaite.
3. ROH of 7563 wagons & POH of 1518 wagons & Memu were done.
4. Total 2400 unloadable wagons were repaired by M/s Braithwaite.
5. A total of 49 hot axle wagons detected during the year & repaired.
6. CC rake holding was 363 for the year 2021-22.
7. Two WILD/OMRS were commissioned during the year in WAT Division.
8. A total of 373 Non-AC & 178 AC coaches, 20 power cars & 03 pantry cars were provided with smoke detection system & fire extinguishers.
9. Three In Motion Weigh Bridges were installed at PPT yard (Third line, Down line), and ADB Yard (Down line) of PRDP.
10. CCTV installed at weigh bridge locations of Lapanga, Kandel Road and Crew Lobby of Sambalpur division. In KUR division KDJR & BBS are been provided CCTV.
11. The lighting work of IPL-1 of Coaching Depot/BBSR was completed.
12. VDPD wagon workshop started turning out wagons after ROH.
13. Rail Kaushal Vikas Yojna (RKVY) was launched at CRW/Mancheswar.
14. Premium examination of BOXN rakes started at ANGL.
15. Two rakes of 18452-18451 (PUI-HTE) Express, 08525/26 train (VSKP-ARAKU) were converted to LHB rake with 2 Vistadome coaches.
16. To detect hot axle cases in freight trains Hot Box Detection System has been installed at various locations through remote sensing & action to be taken accordingly.
17. On 01.02.2022 a virtual workshop was held with the Safety & Mechanical officers & supervisors of HQ & 03 divisions by PCSO on "CTRB failure in freight stock (Hot axle in Goods train). Reason & prevention thereto were discussed vividly & emphasized on rigorous counselling to field staff for early detection to prevent major accident.
18. The Accident Relief Trains both A-class and B-class are suitably located to reach site at earliest possible time to start relief/restoration work.

The location of ARTs along with 140T & 120T breakdown crane is as under:

Disaster Management Resources Over ECoR at a Glance						
Sl. No.	Assets Qty.	Assets	Div.	Base	Crane No	DOC
1	1	140 T BD Crane (Total-06)	SBP	SBP	144005	05.01.2005
2	2			KBJ	143006	04.12.2002
3	3		KUR	KUR	144034	02.08.2019
4	4			VSKP	144001	21.06.2004
5	5		VSKP	KRPU	144032	30.11.2019
6	6			RGDA	142034	17.11.1994
7	1	120 T BD Crane (Total-03)	VSKP	VSKP	6372	Yr.Blt-1965
8	2			KRPU	6371	Yr.Blt.-1967
9	3			KRDL	10227	Yr.Blt.-1970
10	1	SPARME (Total-08)	SBP	SBP	3-Coach	03.01.2001
11	2			TIG	3-Coach	20.03.2021
12	3		KUR	KUR	3-Coach	Not Available
13	4			BHC	3-Coach	20.03.2021
14	5			PSA	3-Coach	05.10.2021
15	6		WAT	VSKP	3-Coach	25.01.2018
16	7			RGDA	3-Coach	18.01.2000
17	8			KRPU	3-Coach	20.11.2018
18	1	ART 'A' Class	SBP	SBP	With 140 T BD Crane No-144005	
19	2			KBJ	With 140 T BD Crane No-143006	
20	3		KUR	KUR	With 140 T BD Crane No-144034	
21	4			VSKP	With 140 T BD Crane No-144001 & 120 No-6372	
22	5		WAT	KRPU	With 140 T BD Crane No-144032 & 120 T BD Crane No-6371	
23	6			KRDL	With 120 T BD Crane No-10227	
24	7			RGDA	With 140 T BD Crane No-142034	
25	1	ART 'B' Class	KUR	PSA		
26	2			BHC		
27	3			TLHR		
28	1	Mobile Tool Van	SBP	KBJ	One Pickup Van being utilized for MTV.	
29	2		KUR	TLHR	One Six Wheeler Road Truck being utilized for MTV.	
30	3		KUR	PRDP	One Rail Moving Tool Van being utilized for MTV.	
31	4		WAT	VSKP	One Six Wheeler Road Truck being utilized for MTV.	

1. To achieve "Golden hour" during accidents SPARME/ARMEs are suitably located over ECoR with maximum permissible speed. Revised bit chart (sections covered by SPARME/ARME) is as under:

Division	Base	Type of Assets	Scale	Beat/Jurisdiction	KM
Waltair	VSKP	SPARME	Scale-I	VSKP-SGDM (Incl)	104
				VSKP-KMX (Incl)	93
				VSKP-TXD (Incl)	78
	RGDA	SPARME	Scale-I	RGDA-KMX (Excl)	93
				RGDA-LLGM (Incl)	61
				RGDA-LJR (Incl)	92
	KRPU	SPARME	Scale-I	KRPU-LKMR (Incl)	62
				KRPU-DIR (Incl)	48
				KRPU-DPC (Incl)	62
	KUR	SPARME	Scale-I	KUR-PUI (Incl)	44
				KUR-RBA (Incl)	99
				KUR-NGMP (Incl)	97
				KUR-MHDP (Incl)	95

Khurda Road	BHC	SPARME	Scale-I	KUR-NYGT (Incl)	65
				BHC-KIS (Incl)	100
				BHC-TMKA (Incl)	75
	PSA	SPARME	Scale-I	PSA-CAP (Incl)	95
				PSA-PLH (incl)	64
				PSA-SGDM (Incl)	98
Sambalpur	SBP	SPARME	Scale-I	SBP-SRGP (Incl)	96
				SBP-JSG (Excl)	47
				SBP-LSX (Incl)	99
	TIG	SPARME	Scale-I	SBP-LSX (incl)	93
				TIG-DPUR Incl)	65
				TIG-KRAR (Incl)	98
				TIG-BMCK (Incl)	100

The Supervisors and staff are provided with required assets/equipments and proper training was imparted to enhance their skill on operation of these assets/equipments during relief and restoration work.

The following innovations/ modifications were carried out :

Two nos. of Single Car Test Rigs were commissioned at Coaching Depot/BBS on 23.03.2022.

Racks were modified to accommodate equipments of Mech. & Electrical in Coach no. ECo 200098 Auxiliary tool Van of newly acquired SPARME/TIG.

ELS/ANGL commissioned Digital wheel distance measuring gauge, which measures the distance between wheels of locomotives precisely within 30-60 sec with clear visibility in pits and other low light conditions with a memory capacity of 50 measured readings.

Additional hinges provided on doors of BOXN wagons on trial basis to address the problem of closing and locking.

One wire drum made to keep cable of plasma cutter in SPARME/TIG.

Motorized Ladder of Tool Van was modified and fitted in tool van of SPARME/TIG for easy movement of man and materials.

One model for connecting BP & FP air hose with Angle cock has been made by C&W/TIG and kept in Model Room of Crew Lobby/TIG.



(Wire Drum for cable of Plasma Cutter)



(Motorized Ladder)



(Model of BP&FP)

D. Significant safety Related Steps Taken by the S&T Department:

Progress of 130 Kmph work on 'B' route: Provision of Double Distant Signals between BALU-PSA section of KUR division and Ex. PSA-CPP section in main line of WAT division completed at 89 locations (29 EI stations, 06 PI stations, 15 IB and 39 LC gates), thus entire 'B' route on ECoR between Bhadrak-Duvvada section is fit for 130 Kmph from signalling side.

Provision of Intermediate Block Section: total 6 (Six) Intermediate Block Signalling (IBS) at Muniguda-Bissamcuttack, Sompeta-Baruva, Doikalu-Muniguda, Jujomura-Charmal, Charmal-Rairakhol & Talcher Road-Angul (Single line IB) have been commissioned to improve section capacity.

Provision of Electronic Interlocking: Fourteen stations have been commissioned with Electronic Interlocking System. Modifications to EI/ PI was done at 17 stations.

Provision of non interlocked points at Mahanadi Coalfield limited (MCL) siding connected to Talcher (TLHR) station. Nine points installed at Spur 1 & 2 and 5 nos at spur 3 & 4 from Dec-21 to Feb-22. Operation facility has been provided in Porta cabins for smooth and quick operation.

Provision of Panel Interlocking: Existing old SM's Slide has been replaced with Panel interlocking at Barithengarh&Kuhuri stations in Khurda Road Division.

Provision of Sliding Booms: Sliding Booms have been provided at 30 L.C. gates to improve reliability of the system and for better safety to road users.

Interlocking of LC Gates: 03 LC gates i.e. CT-29, L.C-154 & NG-31(>50,000 TVUs) have been interlocked as a safety measure for the road users.

Reliability of block working: Total 75 sets of HASSDAC have been commissioned for block working which shall ensure reliability in safe running of trains and ensure accidents do not happen due to human error in 2021-22.

Provision of Data Logger/RTUs: Total 15 stations/ locations have been provided in 2021-22. **Provision of Electric Lifting Barrier:** 08 L.C Gates have been provided in 2021-22.

Provision of Fire Detection & Alarm Systems: 08 stations have been provided in 2021-22.

Air Conditioning in Relay rooms: Seven stations have been provided in 2021-

E. Significant Safety Related Steps Taken by the Traffic Department:-

- A total of 25 NI work executed in 2021-22 against 17 in 2020-21
- New Line commissioned (13.12 Km)::Mahipur - Nuagoan section of Khurda Road - Balangir new B.G. line project along with electrification
- Doubling commissioned (73.30Km):: WAT Div.=18.08 Kms. & SBP Div=55.22 Kms.
- Yard remodeling in connection with doubling/3rd/4th line works etc. 18 Nos.- KUR=4, SBP=9 ; WAT= 5
- New stations opened: Argul, Haripurgram&Nuagaon in KUR Div.

F. Significant safety Related Steps Taken by the Engineering Department:-

- CTR for 364.95 units was completed comprising of TRR (P) = 313.44 Km, TSR (P) = 284.1 km, TRR(S) = 88.53km & TSR(S) = 43.84km.
- Through fastening renewal of 553.01 km of track was done.
- Through weld renewal for 44.35 kms of track was done.
- Turnout renewal for 518.25 equivalent numbers was done consisting of renewal of 86 nos. of fan shaped turnouts, 14 nos of derailing switches, 271 nos of curved switches, 661 nos of CMS crossings and 465 nos of Thick Web Switches.
- Total 556.84km of track and 842 nos of turnouts were deep screened.
- Tamping of 5702.4 km of track and 2524 nos of turnouts were done by tamping machines.
- Total 23905 kms of track was tested with USFD machines for detection of flaws in Rail & welds.
- Elimination of 15 manned level crossings done(ROB-3, LHS-10 & diversion-2)
- Total 4499 corroded channel sleepers were renewed.
- A total of 723.32 thousand cubic meter of ballast was inserted in track.
- Distressing of 1060.34 kms of CWR/LWR track was done.
- Formation treatment of 2.55 km of track was done.
- Total 1528.58 kms of rail and 102875 welds were painted with anti corrosive painting. Greasing of ERC for 2465.83 kms and sealing of liner contact area for 1411.68 kms of track was done to prevent rail foot corrosion.
- One hundred bridges were rebuilt/rehabilitated.
- A total of 232 nos. of seminars/workshops on safety precautions & safe maintenance of track have been organised to disseminate knowledge among the staff.
- Total 2359 staff completed refresher & 808 staff completed PME.
- There were 5363 DFWR as on 01.04.21 with accrual of 1841 during 21-22, summing to 7204 DFWR out of which 6752 DFWR were removed during the year and 452 are now on track.
- Quality of AT welds has been improved. Percentage defect of new AT welds has reduced to 3% during 2021-22 against 5% during 2020-21.
- Cases of Rail fractures/weld failures have been reduced by 25% in 21-22 over 20-21. (84 nos during 21-22 against 112 nos during the last year).
- The health of track is being regularly monitored by OMS-2000 machines. Track monitoring for 55632 tkm of track was done during the month & all peaks more than 0.2g were attended.
- Shoulder Ballast cleaning for 645.442 km of track was carried out during 2021-22
- TTR for 518.25 eq units was done during the financial year in different yards.
- At 338 level crossings, luminous glow sign indicators for road users have been provided in 2021-22.
- Toe load measurement of ERC for 1391.79 km & greasing of ERC for 2465.83 km of track was done during the month.

SAFETY WORKS PROGRESS REPORT - 2021-22

Sl.No.	Deptt./Item	Unit	Total Scope	Target for F.Y.	Cumulative Done this year	Balance in respect of target for F.Y.	% completed over Target
ENGG:							
1	Overdue CTR (P+S)	T Kms.	672.00	358.00	364.95	-6.95	101.94
2	Overdue TRR (P+S)	T Kms.	566.00	392.00	401.97	-9.97	102.54
3	Overdue TSR (P+S)	T Kms.	778.00	325.00	327.94	-2.94	100.90
4	Overdue TFR	T Kms.	472.00	400.00	553.01	-153.01	138.25
5	Overdue TWR	T Kms.	68.00	68.00	44.35	23.65	65.22
6	Turnout Renewal	Nos.	1418.00	500.00	518.15	-18.15	103.63
7	Provision of Thickweb Switches	Nos.	1676.00	650.00	465.00	185.00	71.54
8	Deep Screening (Plain Track)	T Kms.	1469.00	663.00	556.88	106.12	83.99
9	Deep Screening (Points &Xings)	Nos.	1469.00	637.00	842.00	-205.00	132.18
10	Tie Tamping	T Kms.	7055.00	7055.00	5702.30	1352.70	80.83
11	Points & Crossings Temping	Nos.	4000.00	4000.00	2524.00	1476.00	63.10
12	Vehicular USFD Testing	T Kms.	21278.00	21278.00	23905.29	-2627.29	112.35
13	Elimination of MLC by Grade seperator / Closure / Merger	Nos.	177.00	61.00	15.00	46.00	24.59
14	Under Water Examination of Bridges	Nos.	6.00	6.00	0.00	6.00	0.00
S&T:							
1	Replacement of overage Signalling Gears:						
a)	Mechanical Lever frames	Nos.	4.00	3.00	2.00	1.00	66.67
b)	Other SignalingGears (PI/EI/RRI)	Nos.	7.00	3.00	0.00	3.00	0.00
2	Provision of Sliding Boom at LC Gate	Nos.	211.00	40.00	30.00	10.00	75.00
3	Safety Integrity Test for EI/PI	Stns.	32.00	32.00	46.00	-14.00	143.75
4	Interlocking Manned LC's (on BG) :						
a)	>=50000 TVU's	Nos.	8.00	8.00	2.00	6.00	25.00
b)	<50000 TVU's	Nos.	42.00	21.00	1.00	20.00	4.76
5	Provision of BPAC	Block Sections	0.00	0.00	0.00	0.00	0.00
6	Replacement of token block instrument	Nos.	0.00	0.00	0.00	0.00	0.00
7	Provision of Fire Alarm in Relay Rooms	Kms.	20.00	20.00	8.00	12.00	40.00
8	Commissioning of TCAS	Kms.	0.00	0.00	0.00	0.00	0.00
ELECT:							
1	Elimination of Critical Implantation (OHE masts)	Nos.	156.00	136.00	19.00	117.00	13.97
2	Air conditioning of Running Rooms	Nos.	0.00	0.00	0.00	0.00	0.00
3	Air Conditioning of Driver's cab in locos	Nos.	0.00	0.00	0.00	0.00	0.00
4	Provision of simulators in training institutes	Nos.	2.00	1.00	0.00	1.00	0.00
5	Provision of Crew Voice & Video Recording system	Nos.	884.00	400.00	24.00	376.00	6.00

Sl.No.	Deptt./Item	Unit	Total Scope	Target for F.Y.	Cumulative Done this year	Balance in respect of target for F.Y.	% completed over Target
MECH:							
1	Master Switches in SLRs	Nos.	0.00	0.00	0.00	0.00	0.00
2	Provision of Smoke detection system in coaches	Nos.	370.00	222.00	178.00	44.00	80.18
3	Provision of Smoke detection & suppression system in Pantry & Power Cars	Nos.	6.00	4.00	3.00	1.00	75.00
4	HOG conversion of LHB rakes	Nos.	0.00	0.00	0.00	0.00	0.00
5	No. of Non AC coaches with Fire Extinguishers other than SLRs/ Pantry cars	Nos.	520.00	520.00	373.00	147.00	71.73
6	No. of coaches with Bio toilets	Nos.	0.00	0.00	0.00	0.00	0.00
7	Commissioning of WILD/OMRS	Nos.	4.00	4.00	4.00	0.00	100.00

The following Zonal Safety Circulars are issued during year 2021-22.

Sl. No.	Circular No.	Date Issued	Subject
1	01/2021	03.06.21	Periodic testing of Sliding boom operation.
2	02/2021	17.06.21	Securing of vehicles/load/trains/locomotives while stabling at stations.
3	03/2021	18.06.21	Special Audit of Emergency Crossover operation.
4	04/2021	02.07.21	Closing and securing of doors of good stock at station/yard/siding.
5	05/2021	27.07.21	Maintenance of sidings.
6	06/2021	28.07.21	Covering of open wagons with tarpaulins.
7	07/2021	30.07.21	Exchange of signals between crew, guard at station/section.
8	8/2021	04.08.21	Prevention of uneven loading.
9	9/2021	10.08.21	Tightness of connections/contactors of control panel to prevent fire in coaches.
10	10/2021	17.08.21	Procedure of cab changing in electric locomotive.
-	10/2021 Revised	08.10.21	Procedure of cab changing in Electric Locomotive.
11	11/2021	13.09.21	Working Light Motor Trollies
12	12/2021	07/08.10.21	Fouling Mark
13	13/2021	11.10.21	Soundness of earthing connections at TSS & switching station (SP&SSP)
14	14/2021	28.10.21	Precautions for live OHE over passengers platform /platform shed, near signal post, over LC gate surface & for working on LT power lines running parallel to OHE
15	15/2021	11.11.21	Tamping of turnouts
16	16/2021	12.11.21	Working of ballast train(BOBYN)
17	17/2021	19.11.21	Maintenance of Secondary Cell
18	18/2021	22.11.21	Safety aspects of S&T installation.
19	19/2021	22.11.21	Securing of P.Way materials, Traction materials & mechanical (Loco/ Coach/Wagon/Tower wagon/Track machine) parts on/side by the track.
20	20/2021	01.12.21	Entry of two wheelers and other road vehicles to the platform.
21	21/2021	03.12.21	Working of Rail dolly& Lorry/Material Trolley.
22	22/2021	09.12.21	Training and handling of fire fighting by on-board staff.
23	01/2022	10.01.22	GDR Check (Guard & Loco Pilot Joint Check)
24	02/2022	10.01.22	Working of Gate keeper & Visibility at Level Crossing.
25	03/2022	04.03.22	Precautions to be taken by staff while working in electrified section.

The following RB Safety Drives are launched during 2021-22

Sl. No.	Type	Subject of Safety Drive	Period
1	RB	Implementation of recommendations on findings of Roll-down of train no. 05326 Delhi- Tanakpur dated 17.3.2021 in Izzatnagar Division/NER.	Three weeks, from 10.04.21 to 30.04.21
2	RB	Summer Precautions	15 days, 30.04.21 to 14.05.21
3	RB	To prevent derailments on stations yards	15 days, 24.05.21 to 07.06.21
4	RB	To prevent SPAD	15 days, 15.06.21 to 29.06.21
5	RB	Special emphasis on inspections & maintenance of points & crossings to prevent derailments	15 days, 15.07.21 to 29.07.21
6	RB	To ensure safe train operations	15 days, 11.08.21 to 25.08.21
7	RB	Pre- winter drive on preparedness on track, availability of VTO in fog affected areas and locomotives based in their territories	10 days, 08.10.21 to 18.10.21
8	RB	Train operation during Foggy & inclement weather- Precautions	15 days, 18.10.21 to 02.11.21
9	RB	Securing of stabled loads	15 days, 10.11.21 to 24.11.21
10	RB	To ensure Safe Train operations	15 days, 14.01.22 to 28.01.22.
11	RB	To remove any gaps in maintenance of fixed assets, Locomotives & Rolling stock, conformance to procedures and human factors & training	01 month 26.01.22 to 24.02.22.
12	RB	"For removal of repetitive and critical deficiencies" in continuation of the month- long RB mega safety drive vide RB letter no. 2022/SAFETY-I/3/2 dated 25.01.2022	01 month 06.03.22 to 05.04.22.

The following Zonal Safety Drives are launched during 2021-22

1	HQ	To ensure personal safety of Trackman on duty	10 Days from 07.06.21 to 16.06.21
2	HQ	Safe securing & packing of steel consignments in rakes while loading.	10 Days from 16.06.21 to 25.07.21
3	HQ	To check looseness of electrical connection in panel & equipment in coaches.	10 Days from 24.06.21 to 03.07.21
4	HQ	Monsoon precautions	01 month from 08.07.21 to 07.08.21
5	HQ	Correctness of SWR.	01 month from 16.08.21 to 15.09.21
6	HQ	To check Mechanical & Electro Mechanical Interlocking including point Layout & Mechanically operated LC gate.	One month from 01.09.21 to 30.09.21
7	HQ	Safety Precautions at Bridge.	One month from 20.09.21 to 19.10.21
8	HQ	To prevent train parting.	One month from 20.10.21 to 19.11.21
9	HQ	To prevent incident of fire in view of Deepavali festival.	15 days from 23.10.21 to 06.11.21
10	HQ	Proper fixing of chequer plates with verification and replacement of one's in girder bridges to avoid entanglement with train.	15 days from 26.10.21 to 09.11.21
11	HQ	To check efficacy of fire alarm & SMS alert to all concerned in case of fire incident of station.	One week from 07.11.21 to 14.11.21
12	HQ	Precautions during foggy & inclement weather.	From 12.11.21 to 11.12.21 & 12.12.21 to 11.01.2022.
13	HQ	Identification & correction of X-over length.	01 month 15.11.21 to 14.12.21
14	HQ	To ensure safe working Rail drolley	15 days 05.12.2021 to 19.12.2021
15	HQ	Ensuring no live conductors on platform	01 month 06.01.22 to 05.02.22
16	HQ	Summer precautions	03 months 15.03.22 to 14.06.22

SAFETY ACTIVITIES:-



GM's INTERACTION WITH TRACKMEN KR LINE



Push trolley inspection during annual inspection of the GM in KR line on 28.02.2022



Counselling & inspection at LKMR station by PCSO



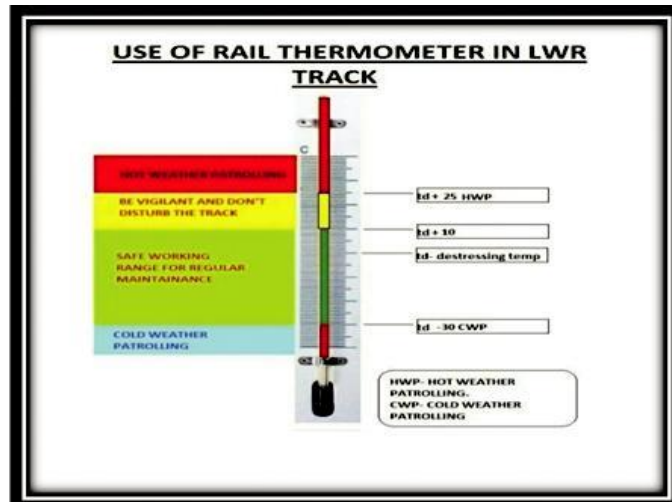
Danger lamps provided at the entrance of the Pit Lines for safety of staff during under gear examination work at night time.



Safety Inspection in Pantry Car



Gap Measurement of SEJ



Safety Seminar by PCSO at KRPU/ WAT



Ambush Check at IB Signal by making danger on approach of train to observe Crew action by Sr.DSO/SBP



SR DSO WAT inspecting Brake Van of ARC 51/ G9 On R/3 of JRT Station in KK Line.



Public Awareness Campaign by Safety Counselors And Civil Defence Staff.

CHAPTER-XII

ENGINEERING AND CONSTRUCTION WORKS

1.0 Track Renewals

During 2021-22, 364.95 kms of track renewals CTR units were carried out in East Coast Railway. The track renewals done and expenditure incurred are as under:

Year	Gross expenditure (Rs in Crore)	Renewal done (in kms) CTR UNIT	Year	Gross expenditure (Rs in Crore)	Renewal done (in kms) CTR UNIT
2003-04	193	215	2013-14	160	154.17
2004-05	232	234	2014-15	157	59.17
2005-06	192	123.51	2015-16	299.90	116.271
2006-07	210	115.31	2016-17	281.74	118.88
2007-08	178	117.44	2017-18	562.70	276.327
2008-09	200	83.145	2018-19	625.27	297.308
2009-10	146	54.775	2019-20	713.51	456.737
2010-11	188	36.381	2020-21	** 1016.65	465.37
2011-12	167	44.319	2021-22	1199.56	364.95
2012-13	165	90.357	Total	6887.33	3423.42

** Revised

2.0 During the year 2021-22, the highest ever progress in comparison to the last 5 years has been recorded for the following items.

Item of work	Total progress during 2021-22	Previous best total progress
Sleeper Renewal (P) (Km)	284.097	192.062 (2020-21)
Rail Renewal (S) (Km)	88.526	49.975 (2019-20)
Sleeper Renewal (S) (Km)	43.835	19.241 (2020-21)
Deep screening of turnouts (No)	842	821 (2019-20)
Shoulder Ballast cleaning (Km)	645.442	633.561 (2020-21)
Ballast Supply (Th Cum)	740.324	670.891 (2018-19)
Ballast Insertion (Th Cum)	723.321	644.753 (2018-19)
Through Fastening Renewal (TFR) (Km)	553.011	519.317 (2017-18)
Channel sleeper renewal (No)	4499	4435 (2020-21)
Sealing of liner contact area (km)	1411.682	1261.17 (2017-18)
Painting of rails (km)	1528.579	1493.039 (2019-20)
Earnings (Rs in Lakhs)	10696.581	9249.776 (2017-18)
Production of PSC sleepers (Nos)	981823	817909 (2020-21)

3.0 Level Crossings

As on 01.04.2021, there were 742 level crossings (Manned LC=742 & Unmanned LC=0) on ECoR. Following progress have been achieved during 2021-22:

Closure of Manned LCs: 15 manned level crossings were eliminated during the year.

Upgradation of LCs: 85 nos. of manned LCs were upgraded from lower class to higher class during the year.

4.0 Track Modernization :

Track Modernization relating to works done with Track Machines for the year 2021-22 is as follows:-

- Total Plain track tamping:-**5702.40 Km.**
- Total Turn out tamping: - 2524 **T/Os.**
- Total Track Deep screening by BCMs:- **229.04 Km.**
- Total Turn out Deep screening by BCMs: - 18 T/Os.
- Total Track renewal by PQRS :- **36.73 Km.**
- Total Turn out renewal by T-28:- **59 T/Os.**(49 nos for RVNL &Con.line + 10 nos for Open line)
- Total turn out Correction by T-28:- **06 T/Os.**
- Total turn out TBR by T-28:-**07 T/Os**
- Total track profiled by RGM: **168.45 Km**

5.0 Bridge

I. **BRIDGES:**

There are 39 important bridges, 985 major bridges and 11,280 minor bridges i.e. total 12,304 bridges on ECoR as on 31.03.2022. In the year 2021-22, 100 bridges were rehabilitated /rebuilt.

II. **ROB/RUB**

To ensure safe running of trains and to facilitate road users for a safe crossing, the existing level crossings are being replaced with Road Over/ Road Under bridges in a phased manner. 01 no. of ROB has been commissioned during the financial year 2021-22.

01 No of ROB were completed during 2021-22 on Accommodation basis.

iii) **LHS**

To replace the existing manned/unmanned level crossings, Limited Height Subways are being constructed on Railway's cost. **12**nos such LHSs have been completed in 2021-22. Further **96** no. of Limited Height Subways (LHSs) sanction available which are at different stages of planning and execution.

6.0 Land Management

East Coast Railway owns about **22964.678** hectares of land, which is mainly used for operational infrastructure such as track, stations, workshops, staff colonies etc.

The break-up of the land is as follows:-

					<u>Area (in Hectares)</u>
Sl.No.	Description	KUR	SBP	WAT	TOTAL
1	Track and structures including workshops, station, staff colonies etc.	4673.366	5185.579	9569.910	19428.855
2	Afforestation	256.00	399.286	373.93	1029.216
3	Grow more food scheme	19.640	0.000	0.809	20.449
4	Commercial licensing	72.774	32.930	79.900	185.604
5	Other uses like pisciculture	14.160	0.000	0.000	14.160
6	Under encroachment as 31.03.16	11.802	0.00	1.2398	13.0418
7	Vacant land	1108.5260	886.7296	225.9665	2221.2221
8	Land under any other use	22.188	21.9774	7.9647	52.1301
	TOTAL	6178.456	6526.502	10259.720	22964.678

7.0 Passenger Amenities:**Achievement during 2021-22**

a) <u>Provision of FOBs:</u> Additional FOBs / extension of FOBs have been provided at 14 stations this year viz. SPSR, MACR, SQQ, CBT, SJDR, JPI, KIS GJTA, JKDP, HPGM, SLRD, CHAR, NWP, GIZ		
b) <u>Provision of Lift at stations:</u> Lifts have been provided at 4 no. of stations over this Railway during the year viz. Khurda Road (KUR), Palasa (PSA), Bhadrak (BHC) and Jajpur-Keonjhar Road (JJKR).		
c) <u>Additional Platform Sheds:</u> Additional platform sheds have been provided in 14 stations this year viz. JPI, PTAB, PURI, TIG, BRGA, LSX, CHAR, JUJA, BLGR, BRPL, JSRD, DIR, KDPA and CJS.		
d) <u>Improvement to Waiting Halls at stations:</u> Waiting halls have been improved at 15 stations this year viz. PSA, PTAB, BRST, TMKA, KBJ, BWIP, BRGA, KSNG, BRPL, HKG, BLGR, DFR, VZM, JDB and LKMR.		

e) <u>Improvement to Circulating Area at stations:</u> Circulating areas have been improved at 17 stations this year viz. NGMP, KPJG, KAPG, HMA, JPI, GTA, KBJ, BWIP, JUJA, HKG, BRPL, LSX, BLGR, BUDM, VSKP, VBL and LKMR.		
	Kaluparaghat (KAPG)	Newgarhmadhpur (NGMP)
f) Provision of additional benches on platforms: 670 numbers of additional benches are provided viz. ANGL- 38, KDJR- 20, HCNR- 10, TMKA- 20, BGPL- 20, KRIH- 18, GRKN- 12, RHMA- 6, RCTC-6, MMS- 45, TIG- 240, LSX- 16, JUJA- 10, BLGR- 14, DFR- 18, ANMD- 6, BMKJ- 8, ARN- 6, BLSN- 8, KMK- 8, CJS- 13, KPRR - 13, AGB- 7, KDPA - 33, DIR- 33, JYP- 7, DSI- 9, KBM - 10 and TIU - 10.		
g) Concreting of PF surfaces: Concreting of PF surfaces were done at 31 platforms at different stations over this Railway during the year viz. HCNR - 1, BSDP - 1, JPI - 3, BGPL- 1, TMKA - 1, NKP- 1, MMS- 3, TAP - 2, JEN-1, HPGM-2, BRGA goods PF-1, CHAR-1, ARN-2, MRBL-1, BLSN-2, KMK -2, BMKJ-1, NML- 1, NWP-1, KBM - 2 & TIU -1.		
	Harichandanpur (HCNR)	Nirakarpur (NKP)
h) Raising of platforms: Raising of Platforms to High level has been done at 22 no. of stations viz. BSTP, TMKA, JEN, KRIH, BUDR, JPI, NKP, MMS, SQQ, HPGM, CHAR, JUJA, ANMD, BLSN, ARN, BRPL, KMK, MRBL, KBM, NML, SPRD and JDB.		
	Salegaon (SQQ)	Jhadupudi (JPI)
i) Construction of Staff Quarters: 179 nos. (Ty-II: 130, Ty-III: 29, Ty- IV: 6 & Ty-V: 14) of staff quarters has been constructed at different viz. Type-II at BHC - 12, JJKR -6, CTC - 8, MCS-12, BHPI -8, BLGR -16, MANE -10, SBPY - 22, BRGA -10, KDPA - 8, KMEZ -2, DWZ -2, PVP -10, VBL-4 , Type-III at JJKR -2, SBP- 10, BLGR -13, BRGA-4, Type- at SBP-6 and Type-V at KUR- 4, BBS-8 & VSKP-2.		
	Type-V Quarters at Khurda Road Station	

j)	Divyang Friendly Toilets: Divyang Friendly Toilets were provided at 37 no. of stations this year viz. Bhadrak (BHC), Salegaon (SQQ), Budhapank (BDPK), Tomka (TMKA), Bhubaneswar (BBS), Lakhna (LKNA), Harishankar Road (HSK), Mahasamund (MSMD), Turekela Road (TRKR), Jujumura (JUJA), Godbhaga (GBQ), Attabira (ATS), Boinda (BONA),Komatipalli (KMX), Garudubilli (GRBL), Garividi (GVI), Sigadam (SGDM), Pundi (PUN), Urlam (ULM), Dusi (DUSI), Sitanagarm (SNM), Donkinavalasa (DNV), Mallividu (MVW), Shrungavarapukota (SUP), Boddavara (BDVR), Shimiliguda (SMLG), Karakavalasa (KVLS), Dilmili (DMK), Badearpur (BDXX), Silak-jhori (SZY), Kumar Sadra (KMSD), Kaklur (KKLU), Gidam (GIZ), Dantewara (DWZ), Bacheli (BCHL), Kirandul (KRDL) and Gorapur (GPJ).
k)	Adarsh Stations: 3no. of stations have been developed as Adarsh Stations in this Railway during the year viz. Jagdalpur (JDB), Chipurupalli (CPP) and Damanjodi (DMNJ).
l)	Ramp at entrance of Station Building: Ramps have been provided at entrances of 11 no. of Railway Stations during the year viz. Palasa (PSA), Arand (ARN), DeoganRaod (DFR), Sikir (SFK), Titlagarh (TIG), Deobahal (DOBH), Bargarh Road (BRGA), Balangir (BLGR), Badmal (BUDM), Manabar (MVF) and Bobbili (VBL).
m)	Roof Top Rain Water Harvesting: Roof Top Rain Water Harvesting systems have been provided at 33 locations during the year viz. Talcher (TLHR)-1 , NarajMarthapur (NQR)-1, Kendujhargarh (KDJR) -3, Bhadrak (BHC) -1, Cuttack (CTC) -1, Mancheswar (MCS)-1, Bhubaneswar New (BBSN)-1, Sambalpur (SBP) -4, Balangir (BLGR)-2, Bargarh Road (BRGA) -1, Sikir (SFK) -1, Rairakhol (RAIR) -1, Bichhupali (BHPI) -1, Maneswar (MANE)-1, Komakhan (KMK) -1, Visakhapatnam (VSKP) -2, Duvvada (DVD) -2, Rayagada (RGDA)-1, Tikiri (TKRI) -1, Bhalumaska (BLMK) -1, Naupada (NWP)-1 and Laxmipur Road (LKMR) -1.
n)	Water Audit: Water Audit has been done at 7 major water consumption stations of this Railway during the year viz. Balangir (BLGR), Bargarh Road (BRGA), Kantabanji (KBJ), Araku (ARK), Simhachalam (SCM), Jagdalpur (JDB) and Srikakulam (CHE).
o)	Water Recycling Plants: 1 no. of Water Recycling Plant has been commissioned at Visakhapatnam (VSKP).
p)	Toilets in circulating area (Through CSR Fund): Toilets in circulating area through CSR of MCL have been provided at 27 no. of stations year viz. Jharsuguda Road (JSGR), Brundamal (BXQ), Hirakud (HKG), Rairakhol (RAIR), Maneswar (MANE), Sambalpur (SBP), Jarapada (JRPD), Boinda (BONA), Deogan Road (DFR), Jujumura (JUJA), Sason (SSN), Rengali (RGL), Kantabanji (KBJ), Khariar Road (KRAR), Rayagada (RGDA), Singapuram Road (SPRD), Bhalumaska (BLMK), Kakiriguma (KKGM), Keutguda (KTGA), Laxmipur Road (LKMR), Tikri (TKRI), Sigadam (SGDM), Paliba (PBV), Damanjodi (DMNJ), Koraput (KRPU), Silakjehori (SZY) and Machhkunda Road (MKRD).

Construction Organization:-

1. New Line : Commissioned – 13.05 Km

- Mahipur- Nuagaon electrified section (13.05 Km.) in Khurda Road - Bolangir New Line project was commissioned on 25.03.2022

2. Doubling : Commissioned - 75.305 Km

- Dabpal - Gidam (10.99 Km.) electrified section of Jagdalpur-Kirandul doubling project commissioned on 26.06.2021.
- Jujumara – Charmal - Rairakhol (31.92 Km) electrified section of Sambalpur - Talcher Doubling project was commissioned on 25.08.2021.
- Jeyapore – Chattariput (7.09Km) electrified section of Jagdalpur – Koraput Doubling Project was commissioned on 03.12.2021.
- Khurda Road Bypass (Argul - Haripurgram) 3.099 Km completed & CRS authorization received on 29.03.2022.
- Arang Mahanadi - Belsonda (9.186Km) electrified section of Raipur – Titlagarh Doubling Project commissioned on 08.07.2021. **(by RVNL).**
- Arang Mahanadi - Lakholi (5.770Km) electrified section of Raipur – Titlagarh Doubling Project commissioned on 05.08.2021. **(by RVNL).**
- Sambalpur - Hirakud (7.25Km) electrified section of Sambalpur – Titlagarh Doubling Project commissioned on 14.12.2021. **(by RVNL).**

3. Works completed and ready for NI works/CRS inspection. (106.54 Km.)

- i) Salegaon- Charbatia- Gurudijhatia- Machhapur- Rajathagarh section (45.50Km) of Salegaon - Budhapank via Rajathagarh 3rd & 4th line project.
- ii) Maneswar- Hatibari- Jujumura (24.0Km) section of Sambalpur- Talcher doubling project.
- iii) Budhapank – Talcher 3rd line (9.0Km) and Budhapank – Talcher Road 4th line (6.61Km) of Jarapada-Budhapank 3rd & 4th line with flyover at Talcher Road.
- iv) Machkund - Bheja – Padua (21.43Km) of Kottavalasa –Koraput doubling project.

4. Other Works Commissioned/ Completed:

- i) Longer loop at Handapa station in Sambalpur division commissioned on 28.06.2021.
- ii) Electrification of Talcher - NTPC Kania siding completed for 31.09 Tkm from NH Gate (Km: 06/22) to MGR Yard loading/ Up line on 01.11.2021.

5. Road Over Bridge (ROB)/ Road Under Bridge (RUB)/ Limited Height Subway (LHS) : Commissioned/Completed.

- i) ROB in lieu of LC No.RV-159 in between Titlagarh and Muribahal was commissioned on 09.04.2021 and opened to traffic.
- ii) ROB No.729 on NH completed by box pushing for double line in Jeypore – Chatariput section of Koraput-Jagdalpur doubling project in April' 2021.
- iii) ROB No.38 in between Maneswar&Hatibari in Sambalpur- Talcher doubling project completed for doubling line in Mar'22.
- iv) 09 nos. RUB completed in Khurda Road –Bolangir new line project.
- v) 04 nos. RUB completed in Jagdalpur –Koraput doubling project.
- vi) 01 no. RUB completed for double line in Kottavalasa – Koraput doubling project.
- vii) 01 no. LHS completed in Talcher –Bimalagarh new line project.
- viii) 02 nos. LHS completed in Jagdalpur –Koraput doubling project.
- ix) 01 no. LHS completed in Kottavalasa – Koraput doubling project.

6. Tunnelling Work :

Break through achieved in 840m long tunnel in Talcher-Bimalagarh new line project on 26.11.2021.

7. Digital Initiatives :

Drones are being used for surveying works.

System Improvement by Divisions :**Khurda Road Division :**

- 3 manned level crossings are closed.
- Conversion of 39 nos of stone slab bridges into RCC Box in NRG-TLHR & KUR-PSA sections.
- 11 FOBs on platforms are constructed during the year against annual target of 10 stations.
- 3 additional platform sheds are constructed. Improvement to circulating area of 6 stations is done.
- Improvement to Waiting Halls of 3 stations is done.
- An airport style modular toilet is constructed and completed at Bhubaneswar station
- 185 Nos of additional benches are constructed on platforms at various stations.
- 13 Nos of platforms have been raised to High Level at 10 stations during the year.
- 6 stations are provided with passenger Lift during the year.
- Ramp at entrance of station building at Palasa is done for Divyangjan passengers.
- Concreting of platform surface on 16 platforms (at 10 stations) is done during the year

Waltair Division : -

- Escalators provided on platform No. 4/5 of Visakhapatnam railway station. Twin escalator on Platform No.8 of VSKP near Gate No.4 opened for public usage.
- Retiring room and dormitory inaugurated at Jagdalpur.
- Prepaid AC waiting lounge Inaugurated at Vizianagaram
- India's first stainless steel foot-over-bridge at Naupada Railway station.
- Construction of Ramp to facilitate transportation of Liquid Medical Oxygen (LMO) is done at VSPS.
- Replacement of Roller Rocker bearings is done in place of Elastomeric bearing for Br.No.1433 UP.
- Permanent closure of Manned Level crossing No ML 438 in lieu of ROB, ML 431, 451, 452, 454, 464, 467 and 482 in lieu of Limited height subways has been done.
- Bridge rebuilding/rehabilitation of 27 Nos. of bridges completed during 2021-22.
- 31nos Major bridge approaches have been strengthened in 8 Nos. in PSA-VSKP section, 4 Nos. SPRD-VZM section, 2 Nos. KRPU-SPRD section and 17 Nos. in KTV-KRDL section.
- Provision of concrete PF surface has been done at 4 stations viz Nellimarla, Tilaru, Kotabommali&Naupada.
- Provision of Additional PF sheds at 3 stations i.e.Dhanpur, Khadapa, Charamulakusumi
- Circulating area has been improved at 3 stations i.e. Visakhapatnam, Bobilli, Lakshmipur Road.
- 4 Stations viz, Jagdalpur, Araku, Chipurupalli, Damanjodi have been developed as Adarsh stations.
- Ramp at entrance of station building has been provided at Bobbili.
- Standard Tectile flooring on Platform has been provided at Jagdalpur.
- Toilets in circulating area through CSR funds have been completed at 14 on KR line and on KK line through CSR funds of MCL.
- 1st time in the history of WAT division, an amount of Rs.86.48 Crores earnings from land resources has been achieved against the target of Rs.40 Cores.
- Upgradation of existing RPF Barrack at Vizianagaram has been done.
- The Sagar Rail Vihar Park has been developed in about 2178Sqm in Visakhapatnam.
- 20 Nos. of Track Maintainer Restrooms provided in PSA-VSKP main line section.
- Improvements to The Vana Vihar Railway Park at Marripalem Railway Colony have been done.

SBP Division : -

- Deep screening of plain track by BCM of 84.446 km is done.
- CTR of 42.875 TKM is done.
- 22 nos. of Bridge Rebuilding have been done during 2021-22.
- Through Weld Renewal (TWR) –27.247 Tkm with 4184 Nos. of FB welding by MFB plant was done.
- Deep screening of Turnouts -167 nos. were done.
- Ballast supply for 158117 cum & Insertion of 181224cum was done.
- USFD scanning of Rail and welds – 6657.162km was done.
- Glued joints - 60 nos. of defective Glued joints have been replaced.
- Wayside lubricators have been installed at 03 nos. of curve.
- 79 nos. renewal of Ordinary/ overriding switches with thick Web Switches at different yards have been done for enhancement of safety.
- SEJ Replacement - 64 sets of ordinary SEJ by improved SEJ in LWR track.
- Tree Plantation – 86873 trees have been planted.
- Roof Top Rain Water Harvesting-02 nos. (at DETS / SBP & RV-II/2/1-6/SBP) .
- Water level Monitoring have been provided at Bridge Nos. 299, 406 & 588.
- CMS Renewal of 183 nos. of worn out CMS Xing & Through turnout sleeper renewal 6 sets have been done.
- 37 km Toe load measurement of Track has been done during this period.
- OMS -2000 recording for 4508 kms was done & peaks are being attended regularly.
- 6670 nos. of visual Inspection & greasing of Fish plate joints at yards & Major/Important bridges to control Rail Fractures.

SECURITY DEPARTMENT

“With growing professionalism and use of modern technology, RPF is able to discharge their duties even better by coping with the emerging challenges”.

1.1 General :

Security Department of East Coast Railway, Bhubaneswar is headed by the Principal Chief Security Commissioner and assisted by CSC, Dy.CSC, Staff Officer- cum- ASC (HQ), ASC (Pro) & ASC (PS) for the year 2021-22.

Gazetted officers (Actual Strength)

Designation	Hd. Qrs.	KUR Divn	WAT Divn	SBP Divn
PCSC	01	-	-	-
CSC	01	-	-	-
SC	01	-	-	-
Dy.CSC/Sr.DSC	-	-	01	-
DSC	-	01	-	01
ASC	03	02	02	01
Total	06	03	03	02

N.B: 01 PCSC/Construction/BBS is posted w.e.f.15.04.2021

1.2 Staff Strength :

Non- gazetted executive staff (Actual Strength) for the year 2021-22.

Strength	IPF	SIPF	ASI	HC	Con.	Driver	Ancillary	G/Total
HQ	19	26	39	56	116	03	03	262
KUR	22	42	52	266	441	02	17	842
WAT	19	39	55	216	382	00	19	730
SBP	14	22	32	59	245	01	07	380
Total	74	129	178	597	1184	06	46	2214

1.3 Training :

During the year 2021-22, 956 officers and staff of RPF had undergone various training sessions to sharpen their professional skill and to equip them so as to thwart any type of security threats to Railway installation and passengers. These training programmes were conducted at various training centres of RPF as well as at central Intelligence units.

2.1 Performance under RP (UP) Act.

Year	2020-21	2021-22
No of Cases Registered	155	183
Value of property Recovered(in Rs)	**Rs. 11,80,165/-	Rs. 44,08,859/-
No of Persons arrested	**275	357

**– Revised

2.2 Performance of RPF under Rly. Act.

During frequent drives, many offenders are arrested & prosecuted within 24hrs under different sections of Rly Act. The apprehension of such anti social elements under Railway Act helps in controlling crime in railway premises and in trains.

Year	2020-21	2021-22
No of Persons Arrested	**2452	9672
Fine realized (in Rs.)	**Rs. 8,90,990/-	Rs. 21,19,095/-

**– Revised

3.1 Escorting:

Constant efforts are made to provide escorts to maximum number of trains by identifying vulnerable trains/stations by RPF personnel. During the financial year 2021-22, **35,762 Mail/ Express trains** were escorted by deploying **1,34,507** RPF including **9,183** lady RPF personnel.

3.2 Action against Alarm chain pulling:

Punctuality had improved by arresting **unauthorized alarm chain pullers**. During the period 2021-22, total **1,292** persons were arrested U/S 141 Rly Act and fine realized **Rs.5,83,950/-**.

3.3 Good and smart detection by RPF (Passenger crime offence)

During the period 2021-22, RPF had successfully arrested 160 criminals who were found involved in various crimes against passengers. Following offenders were caught and handed over to local police for further action;

- 137 theft of passenger belonging offenders,
- 20 offenders of robbery,
- Human trafficker and
- Drugging offenders.

3.4 Drive against touts.

During the period 2021-22, drives were conducted at various PRS/Reservation counters/Internet points over East Coast Railway, in which 123 touting cases were registered U/S 143 Railway Act with arrest of 130 offenders, 5005 Railway journey tickets valued Rs. 63,03,027/- were seized and 1235 IDs blocked by using Cyber Skill.

4.1 Outstanding detection and good work done by RPF in the financial Year- 2021-22.

1. **304** minor children, **58** men and **58** women were rescued by RPF from various stations of ECoR& handed over to their respective parents/ Social Organizations through Child Help Desks/ Child Welfare Committee.
2. Intensive drives were conducted by RPF officers and staff and recovered **contraband goods** worth **Rs. 1.66 Cr** with the arrest of **156 criminals** and handed over to concerned departments for legal action.
3. **597** passengers left behind luggage valued **Rs.3,11,25,540** /- were retrieved and handed over to owners.
4. The project **"MeriSaheli"** has been launched in ECoRw.e.f 17.10.2020. Total **73** trains are adopted under this project. Out of this, 19 trains are originating and 18 trains are terminating in ECoR and remaining 36 trains are passing through over ECoR. The Meri Saheli teams are rendering assistance to lonely lady passengers from originating station to en-route till destination to ensure their safety and security.
5. On 03.04.2021, on receipt information about a pregnant lady seeking emergency medical treatment due to miscarriage of twin issues in Train No.02888, officer and staff of RPF Post Muniguda, attended to the pregnant lady and immediately shifted her to Christian Hospital, Bisamacuttack, Rayagada and to this immediate and timely action of RPF, the life of said lady was saved.
6. On 10.04.2021, officer and staff of RPF Post, Visakhapatnam apprehended a lady offender namely Kumari Pradhan with recovery of one stolen bag containing 01 Mobile Phone, gold ornaments and cash of Rs. 35,000/- total valued at Rs.3,30,000/-.The above arrested lady offender with recovered materials was handed over to GRPS/Vijayawada who in turn connected to case in crime No. 45/ 2021, U/S- 379 IPC



7. On 11.04.2021, officer and staff of RPF Post, Bhadrak had apprehended two TOPB offenders namely 1) Raju @ Rajesh Behera, & 2) Jitendra Singh when they de-boarded from running Train No- 02250 (New Tinsukia-KSR Bangalore city) Express in Bhadrak Yard and recovered 06 stolen mobiles phones valued Rs.1,40,000/- from them. During interrogation both confessed that, they had stolen said mobiles from passengers. On leading confession, another 08 mobile phones including one I-Phone valued at Rs.1,15,000/- were recovered (total valued Rs. 2,55,000/-). GRPS/ Bhadrak connected both the accused in their case in crime No. 56/2020 dtd.24.11.2020, U/S 380 IPC, 5/2021 dtd.14.01.2021 U/S-380 IPC and GRPS/Baleswar crime No.92/2020 dtd.28.12.2020, U/S 380 IPC.



8. On 14.05.2021, officer and staff of RPF Post Bhubaneswar, RPF STF Team, Khurda Road and GRP/Bhubaneswar apprehended 06 criminals armed with deadly weapons near Kalpana over bridge of Bhubaneswar Railway Station while preparing to commit dacoity. In course of further raid and search 03 laptops, one hard disk, 07 mobile phones and 01 tablet total valued Rs.1,30,000/- were seized from their residences. In this connection GRP/Bhubaneswar has registered a case vide No.40/2021 dtd.14.05.2021 U/S-399/402 IPC and also arrested/ made recoveries connected with previous case No.39/2021 dtd.12.05.2021 U/S-380 of IPC.



9. On 21.05.2021, a joint team of RPF Post Sambalpur & GRP/Sambalpur apprehended three persons namely (1) Shiva Munda, (2) Arun Sahu, & (3) Kanha Naik with recovery of one necklaces, Two gold chains, Four ear-rings, one maang Tikka, two blankets & four sarees, total valued Rs.2,22,000/-. The arrest and recovery has connected with GRPS/Sambalpur Case No.10/2021 dtd.17.05.2021 U/S 379 IPC.



10. On 24.05.2021, officer and staff of RPF Post, Khurda Road rescued a baby girl aged about 5-6 months from coach-S/5 of Train No.02704 at Khurda Road Railway station. The rescued baby was handed over to Child help line SOCH/ Khurda Road under proper acknowledgement for further action.

11. On 30.06.2021, officer and staff of RPF Post, Vizianagaram recovered two nos. of left behind bags containing gold ornaments (02 Tolas), one mobile phone, cash Rs. of 1350/- and old clothes total valued Rs.1,05,000/- from PF.No-1 of Vizianagaram railway station and handed over to its' owner under proper acknowledgement.

12. On 10.07.2021, on the basis of information, LSI/Sachala Pradhan of RPF/Post/Bhubaneswar and Meri Saheli team promptly attended a pregnant lady passenger in coach S-4 of train No-0224 and rendered assistance by isolating and helped her to give birth to a male baby. After that, Railway Doctor attended the passenger and the lady (mother) and new born baby were sent to Capital Hospital Bhubaneswar by 108 Ambulance. The prompt work of Meri Saheli team was widely appreciated by public.

13. On 11.08.2021, a lady passenger namely Lisa Singh delivered a male baby in Train No-03352 (Alleppey-Dhanbad) Special train and on duty train escorting RPF staff called 108 Ambulance and immediately the lady with new born baby were shifted to Govt. Hospital Rayagada for further treatment. The prompt action of RPF was highly appreciated by the passengers.

14. On 22.09.2021, RPF escorting party rescued a lady passenger in a state of semi-unconscious from locked wash room of Train No-03352 (Allepey- Dhanabad) Exp. Railway doctor attended the lady and shifted to Railway Hospital, Titlagarh for further treatment.

15. On 06.11.2021, officers and staff of RPF/Post/Rayagada, CIB & SIB Rayagada rescued 34 labourers from general compartment of Train No. 02888 (Nizzammuddin - Vishakhapatnam) Spl. at Rayagada and apprehended the trafficker namely MaheswarBhati. In this connection, GRPS Rayagada registered a case vide No.18/2021, dtd. 06.11.2021,U/ S- 374 IPC.
16. On 20.11.2021, SI Veenita Sharma, L/C-Linki Behera, L/C-Swarna Prabha Sethi & L/C-G.Yeranamma "Meri Saheli" team of RPF/Post/Puri rendered medical assistance to one lady passenger with labour pain and immediately shifted to District Hospital, Puri where she delivered one male child safely.
17. On 08.12.2021, ASI T.C.Pradhan with staff of RPF Post, BBS while escorting Train No. 22811(BBS-NDLS) Exp. Ex. Bhubaneswar to Bhadrak detected 04 bags containing huge cash of value Rs. of 24,50,000/- and able to apprehend its owner Arun Kumar Swain who failed to produce any authority for carrying such huge amount. After observing all legal formalities, the apprehended person with recovered cash was handed over to Asst. Director of Income Tax/Bhubaneswar for further action.
18. On 18.12.2021, rescued a kidnapped minor girl and apprehended the kidnapper. In this connection a case has already been registered at LPS/Jharsuguda vide Crime No. 92/2021, U/S-363 IPC, dt. 19.02.2021.
19. On 05.01.2022, officer and staff of RPF Post Puri retrieved a left behind bag containing 01 Laptop, wrist watch, Sunglasses with total valued Rs.1,26,500/- from Train No. 18451 Tapaswini Express at Puri and handed over to the owner under proper acknowledgement.
20. On 05.01.2022, one lady passenger in Train No. 20837 (Bhubaneswar-Junagarh) Express from Bhubaneswar to Bhawanipatna shouted for sexual harassment by a co-passenger. On-duty train escort party of RPF/Out Post/GhantikhalNidhipur swung into prompt action and caught the offender namely Md. Aquil, aged-34yrs, P.S-Sasaram Town, Bihar-821115 and handed over to GRPS/Khurda Road, where a case vide crime No. 03/2022 dtd.06.01.2022 U/S 376(1)/354A(1)(i) IPC was registered against him, based on written complaint by lady passenger.
21. On 10.01.2022 at about 07.00hrs, LSIPF Priyanka of RPF/Post/Bhubaneswar with Meri Saheli team, LC M. Meena and LC M.Behera, apprehended 02 persons with 04 nos. of bags containing 46.8Kgs Ganja, valued Rs. 4,68,000/- from Train No. 12880 (BBS-LTT) Express at Bhubaneswar Railway station. And handed over to GRPS/Bhubaneswar, where a case vide No. 02/2022 dated 10.01.2022 U/s 20(b)(ii)(C) NDPS Act 1985 has been registered.
22. On 15.01.2022, a joint team consisting of officer and staff of RPF Post Bhubaneswar & GRPS/Bhubaneswar arrested two wanted drugging criminals namely i) Susanta Rout & ii) LaxmidharAlitia, of Dist- Nayagarh, Odisha, and recovered two air bags, two mobile phones, Money purse, ATM card, Adhar card, Ceiling fan, Cash of Rs 12,500/-, Blue tooth, Canara bank Passbook, Cheque Book, one golden colour wrist watch, used clothes, Ativan Tablet-04 strips. The seized items and arrested persons were brought to GRPS/Bhubaneswar and connected with GRPS/BBS case No-07/2022 dated 13.01.2022 U/S 328/379/34 IPC.
23. On 08.02.2022, STF team of RPF Post Puri and GRPS/Puri apprehended one male outsider namely Sudarsan Mohanty aged-32 years of Puri, (Odisha) for extortion of money at the point of a knife, from the Passengers/Auto staff at circulating area of Puri Railway station. During personal



search, one knife, cash of Rs, 3,000/- and two nos. of stolen Mobile phones were recovered from him. In this connection GRPS/Puri has registered cases vide No.09/2022 dtd. 09-02-2022 U/S- 294/385/353/506/379/411 IPC & 146 Railway Act. On investigation it is revealed that the arrested person was involved in 10 other criminal cases.

24. On 13.02.2022, STF Team of RPF/Post/Bhubaneswar apprehended one ToPB offender namely Nagu Das of Dist- Puri, (Odisha) at Bhubaneswar Railway Station with recovery of one stolen vanity bag containing gold, silver ornaments, one mobile phone & Cash of Rs. 8,000/- (Total Valued Rs. 2,38,000/-). The apprehended person along with recovered stolen properties was handed over to GRPS/Bhubaneswar. On the basis of FIR of the victim, GRPS/Bhubaneswar has registered a case vide Crime No.23/2022 dtd. 13.02.2022 U/S 379 IPC.



25. On 13.02.2022, on duty staff of RPF/Post/Bhubaneswar recovered one left behind bag containing one lap top (Dell) with accessories, one Titan wrist watch & Cash of Rs.60,000/- (Total Valued Rs.1,30,000/-) from Train No.12504 (Agartala-Bengaluru Cantt) Humsafar Express at Bhubaneswar Railway Station. The recovered bag with all the items was handed over to its owner under proper acknowledgment.



26. On 14.02.2022, RPF STF team/hubaneswar apprehend one habitual offender namely Abhaya Pradhan, Dist- Dhenkanal, Odisha, at old PRS area of Bhubaneswar Railway station. On interrogation, he admitted that he had stolen mobile phones from the passengers in the last few days and kept at his native place. On 15.02.2022, a joint team consisting of officer and staff of GRPS/ Bhubaneswar & RPF STF team of Bhubaneswar conducted search in his house and recovered 5 mobile phones valued Rs. 96,000/-. After observing all legal formalities, the arrested person was forwarded to the Hon'ble court of SDJM/ Bhubaneswar who remanded him to judicial custody.



27. On 29.03.2022, LSI/ Priyanka along with the STF team of RPF/Post/ Bhubaneswar arrested two male persons namely i) Rajeswara Bhuyan, aged-28yrs & ii) Gobinda Mandala, aged-19yrs and one female Kalima Karada, aged-35yrs of Dist- Gajapati, Odisha from PF-03 of Bhubaneswar railway station with the seizure of 104.9Kg Ganja, valued Rs.10,49,000/- and handed over to GRPS/ Bhubaneswar. In this connection, GRPS/Bhubaneswar registered a case vide no. 53/2022 dtd. 30.03.2022 U/S 20(b) (ii) (C) NDPS Act 1985.

राजभाषा विभाग

संगठन :

पूर्व तट रेलवे का राजभाषा विभाग, मुख्य राजभाषा अधिकारी के प्रशासनिक नियंत्रण में कार्य करता है। राजभाषा विभाग में कोई पूर्णकालिक विभागाध्यक्ष का पद न होने के कारण महाप्रबंधक महोदय की सिफारिश से रेलवे बोर्ड द्वारा किसी अन्य विभाग के विभागाध्यक्ष को एक वर्ष के लिए मुख्य राजभाषा अधिकारी नियुक्त किया जाता है। दिनांक 09.06.2021 से 31.03.2022 तक श्री देवेन्द्र प्रताप लाल, मुख्य प्रशासनिक अधिकारी (निर्माण), पूर्व तट रेलवे के मुख्य राजभाषा अधिकारी के रूप में कार्य कर रहे थे।

मुख्य राजभाषा अधिकारी की सहायता के लिए मंडलों व कारखाने में अपर/उप मुख्य राजभाषा अधिकारी तथा उनकी सहायता के लिए पूर्णकालिक राजभाषा अधिकारी होते हैं। प्रधान कार्यालय में मुख्य राजभाषा अधिकारी की सहायता के लिए एक उप मुख्य राजभाषा अधिकारी को भी नामित किया गया है। श्री देबराज नायक, उप मुख्य परिचालन प्रबंधक (सामान्य), दिनांक 06.01.2022 से उप मुख्य राजभाषा अधिकारी/मुख्यालय के रूप में कार्य कर रहे हैं।

मुख्यालय, मंडलों तथा कारखाना के लिए मुख्य राजभाषा अधिकारी द्वारा नामित अपर मुख्य राजभाषा अधिकारी एवं उप मुख्य राजभाषा अधिकारी संबंधी विवरण इस प्रकार हैं :-

क्रम सं.	कार्यालय का नाम	नामित अधिकारी	नाम तथा पदनाम
1	प्रधान कार्यालय	उप मुख्य राजभाषा अधिकारी	श्री देबराज नायक, उप मुख्य परिचालन प्रबंधक(सामान्य)
3	खोरधा मंडल	अपर मुख्य राजभाषा अधिकारी	श्री अशोक कुमार अपर मंडल रेल प्रबंधक(अवसंरचना)
4	वालतेरू मंडल	अपर मुख्य राजभाषा अधिकारी	श्री सुधीर कुमार गुप्ता, अपर मंडल रेल प्रबंधक(इंफ्रा)
5	संबलपुर मंडल	अपर मुख्य राजभाषा अधिकारी	श्री आनंद सिंह, अपर मंडल रेल प्रबंधक
6	मंचेश्वर कारखाना	उप मुख्य राजभाषा अधिकारी	श्री आर.आर.मिश्रा सहायक कर्म प्रबंधक (यांत्रिक)

प्रधान कार्यालय में मुख्य राजभाषा अधिकारी/उप मुख्य राजभाषा अधिकारी एवं मंडलों, कारखानों व अन्य कार्यालयों में अपर मुख्य राजभाषा अधिकारी/उप मुख्य राजभाषा अधिकारी की सहायता के लिए हिंदी के निम्नलिखित पूर्णकालिक पद हैं:

कार्यालय	वरिष्ठ राजभाषा अधिकारी		राजभाषा अधिकारी		वरिष्ठ अनुवादक		कनिष्ठ अनुवादक	
	स्वीकृत	रिक्त	स्वीकृत	रिक्त	स्वीकृत	रिक्त	स्वीकृत	रिक्त
मुख्यालय	01	01	01	0	03	02	04	04
खोरधा रोड मंडल	0	0	01	0	02	0	03	03
वालतेरू मंडल	0	0	01	01	02	0	03	03
संबलपुर मंडल	0	0	01	01	02	01	02	01
मंचेश्वर कारखाना	0	0	0	0	01	0	0	0
रेलवे भर्ती बोर्ड	0	0	0	0	0	0	01	01
रेलवे दावा अधिकरण	0	0	0	0	0	0	01	01
कुल:	01	01	04	02	10	03	14	13

कार्य :

राजभाषा विभाग की गतिविधियों को मुख्यतः निम्नलिखित बिंदुओं में विभाजित किया जा सकता है:-

1. हिंदी भाषा, हिंदी आशुलिपि व टंकण प्रशिक्षण
2. राजभाषा नीति का कार्यान्वयन
3. अनुवाद

1. हिंदी भाषा, हिंदी आशुलिपि व टंकण प्रशिक्षण

भारत सरकार की राजभाषा नीति के अनुसार, सभी पदाधिकारियों को हिंदी भाषा में प्रशिक्षित करने के उद्देश्य से, हिंदी शिक्षण योजना, राजभाषा विभाग, गृह मंत्रालय के सहयोग से हिंदी भाषा प्रशिक्षण, हिंदी टंकण प्रशिक्षण और हिंदी आशुलिपि प्रशिक्षण की कक्षाएं चलाई जाती हैं।

पूर्व तट रेलवे के अधिकारियों एवं कर्मचारियों की हिंदी भाषा, आशुलिपि व टंकण प्रशिक्षण की वर्तमान स्थिति :-

(क) हिंदी भाषा प्रशिक्षण**i) अधिकारियों के हिंदी प्रशिक्षण की स्थिति:**

	खोरधारोड	वालतेरू	संबलपुर	मंचेश्वर कारखाना	मुख्यालय	कुल
अधिकारियों की कुल संख्या	111	120	61	15	270	577
हिंदी में प्रवीणता प्राप्त अधिकारी	27	64	34	7	58	190
हिंदी में कार्यसाधक ज्ञान प्राप्त अधिकारी	84	56	27	8	212	387
हिंदी प्रशिक्षण के लिए शेष	0	0	0	0	0	0

ii) कर्मचारियों के हिंदी प्रशिक्षण की स्थिति:

	खोरधारोड	वालतेरू	संबलपुर	मंचेश्वर कारखाना	मुख्यालय	कुल
कर्मचारियों की कुल संख्या	9089	17649	7276	1596	2272	37882
हिंदी में प्रवीणता प्राप्त कर्मचारी	501	4633	2596	302	369	8401
हिंदी में कार्यसाधक ज्ञान प्राप्त कर्मचारी	6082	6323	3188	608	1324	17525
हिंदी प्रशिक्षण के लिए शेष कर्मचारी	2459	6548	1481	670	574	11732

(ख) हिंदी टंकण एवं आशुलिपि प्रशिक्षण**i) हिंदी टंकण प्रशिक्षण की स्थिति:**

	खोरधारोड	वालतेरू	संबलपुर	मंचेश्वर कारखाना	मुख्यालय	कुल
कुल टंकक/लिपिक	58	208	66	81	367	780
हिंदी टंकण में प्रशिक्षित	58	164	66	50	228	566
हिंदी टंकण प्रशिक्षण हेतु शेष	0	44	0	31	139	214

ii) हिंदी आशुलिपि प्रशिक्षण की स्थिति:

	खोरधारोड	वालतेरू	संबलपुर	मंचेश्वर कारखाना	मुख्यालय	कुल
कुल आशुलिपिक	19	20	7	2	119	167
हिंदी आशुलिपि में प्रशिक्षित	0	5	7	2	53	67
हिंदी आशुलिपि प्रशिक्षण हेतु शेष	19	15	0	0	66	100

2. राजभाषा नीति का कार्यान्वयन

राजभाषा नीति के कार्यान्वयन को बढ़ावा देने के लिए राजभाषा विभाग समय-समय पर अनेक कार्यक्रम आयोजित करता है। इसके लिए प्रधान कार्यालय, मंडलों, कारखाना व प्रमुख स्टेशनों तथा अन्य कार्यालयों में राजभाषा कार्यान्वयन समितियां गठित की गई हैं तथा इसकी तिमाही बैठकें नियमित रूप से आयोजित की जाती हैं। मुख्यालय स्तर पर महाप्रबंधक/पूतरे की अध्यक्षता में क्षेत्रीय राजभाषा कार्यान्वयन समिति गठित है, इसकी तिमाही बैठक में सभी प्रधान/समन्वय विभागाध्यक्ष, मुख्य राजभाषा अधिकारी, अपर मुख्य राजभाषा अधिकारी, उप मुख्य राजभाषा अधिकारी तथा राजभाषा अधिकारी भाग लेते हैं। इन समितियों की तिमाही बैठकों में राजभाषा विभाग, गृह मंत्रालय द्वारा राजभाषा कार्यान्वयन की विविध मदों के लिए निर्धारित लक्ष्य के अनुसार बैठक की पिछली तिमाही के दौरान हुई प्रगति की समीक्षा की जाती है तथा अगली तिमाही हेतु कार्य-योजना बनाई जाती है।

वर्ष 2021-22 के दौरान राजभाषा की प्रगति व प्रचार-प्रसार की दिशा में पूतरे द्वारा किए गए कुछ महत्वपूर्ण कार्य :

1. **अप्रैल-2021**-खोरधा रोड मंडल द्वारा माखनलाल चतुर्वेदी जी की जयंती का आयोजन किया गया।

2. **मई-2021**-मुख्यालय द्वारा ऑनलाइन माध्यम से लघु लेख प्रतियोगिता का आयोजन किया गया।
3. **जून-2021**-मुख्यालय द्वारा क्षेत्रीय राजभाषाकार्यान्वयनसमिति की 46वीं बैठक का आयोजन किया गया, खोरधा रोड मंडल द्वारा मंडल में कार्यरत ग्रुप 'सी' एवं ग्रुप 'डी' श्रेणी के कर्मचारियों के लिए ऑनलाइन हिन्दी संवाद लेखन प्रतियोगिता का आयोजन किया गया।
4. **जुलाई-21**-खोरधा रोड मंडल द्वारा मंडल में कार्यरत ग्रुप 'सी' एवं ग्रुप 'डी' श्रेणी के कर्मचारियों के लिए ऑनलाइन हिन्दी वीडियो समीक्षा प्रतियोगिता का आयोजन किया गया। संबलपुर मंडल द्वारा रेल अधिकारियों/कर्मचारियों के बच्चों के लिए 'चित्र देखो और कहानी लिखो' एवं हिन्दी सुलेख प्रतियोगिता का आयोजन किया गया।
5. **अगस्त-21**- खोरधा रोड मंडल द्वारा महान साहित्यकार मुंशी प्रेमचंद जयंती का आयोजन किया गया।, आज़ादी का अमृत महोत्सव के महोत्सव के उपलक्ष्य में राजभाषा विभाग/खोरधारोड द्वारा हिन्दी पीपीटी प्रस्तुतीकरण प्रतियोगिता, हिन्दी निबंध, टिप्पण व प्रारूप लेखन, वाक् प्रतियोगिता का आयोजन किया गया। वालतेरु मंडल द्वारा चित्र देखो कहानी लिखो और अनुवाद प्रतियोगिता का आयोजन किया गया एवं संबलपुर मंडल द्वारा तिमाही रिपोर्ट से संबंधित समस्या निराकरण हेतु हिन्दी कार्यशाला का आयोजन किया गया।
6. **सितंबर-21** - क्षेत्रीय राजभाषा कार्यान्वयन समिति की 47 वीं बैठक का आयोजन किया गया, मुख्यालय एवं मंडल द्वारा हिन्दी सप्ताह/पखवाड़ा का आयोजन, हिन्दी निबंध, हिन्दी टिप्पण एवं प्रारूप लेखन, वाक् प्रतियोगिता श्रुतलेख, कहानी समीक्षा प्रतियोगिता, हिन्दी फिल्म समीक्षा प्रतियोगिता, रेल कवियों द्वारा कविता पाठ कार्यक्रम, ऑनलाइन हिन्दी मुहावरे/लोकोक्ति प्रतियोगिता, ऑनलाइन माध्यम से मंडल में कार्यरत महिला कर्मचारियों के लिए योग कार्यक्रम, ऑनलाइन हिन्दी शब्द ज्ञान प्रतियोगिता, ऑनलाइन माध्यम से हिन्दी और तकनीकी विषय पर हिन्दी कार्यशाला, ऑनलाइन माध्यम से सामान्य ज्ञान संबंधी क्विज़ प्रतियोगिता, ऑनलाइन संस्कृत-हिन्दी सूक्ति समीक्षा लेखन प्रतियोगिता, नेमी टिप्पणियों के पॉकेट डायरी का विमोचन, हिन्दी कार्यशाला तथा हिन्दी अंताक्षरी, देश की एकता में राजभाषा की भूमिका नामक नाटक का मंचन, कार्गिल युद्ध पर आधारित हिन्दी फिल्म शेरशाह का प्रदर्शन।
7. **अक्टूबर-21**- मुख्यालय द्वारा क्षेत्रीय स्तर पर हिन्दी वाक् प्रतियोगिता, टिप्पण व प्रारूप लेखन प्रतियोगिता एवं निबंध लेखन प्रतियोगिता एवं खोरधा रोड मंडल द्वारा मंडल के विभिन्न विभागों में कार्यरत अंशकालिक हिन्दी लिपिकों के लिए संरक्षा व सतर्कता स्लोगन अनुवाद सह स्लोगन सृजन प्रतियोगिता का आयोजन किया गया।
8. **नवंबर-21** - मुख्यालय द्वारा हिन्दी निबंध प्रतियोगिता एवं हिन्दी कार्यशाला का आयोजन किया गया एवं संबलपुर मंडल द्वारा मंडल रेल प्रबंधक कार्यालय के कर्मचारियों के लिए हिन्दी प्रश्नोत्तरी (क्विज़) प्रतियोगिता का आयोजन किया गया।
9. **दिसंबर-21** - मुख्यालय द्वारा ऑनलाइन माध्यम से हिन्दी स्वरचित कविता पाठ प्रतियोगिता का आयोजन किया गया।
10. **जनवरी-22**- के दौरान- संबलपुर मंडल द्वारा विश्व हिन्दी दिवस के उपलक्ष्य में एक अनुष्ठानिक आयोजन किया गया।
11. **फरवरी-22**- क्षेत्रीय राजभाषा कार्यान्वयन समिति की 48 वीं बैठक का आयोजन किया गया।
12. **मार्च-22**- के दौरान- होली की पूर्व संध्या पर मुख्य अतिथि श्री शरद कुमार श्रीवास्तव, अपर महाप्रबंधक, पूर्व तट रेलवे की उपस्थिति में राजभाषा विभाग, मुख्यालय के तत्वावधान में हास्य कवि सम्मेलन का आयोजन किया गया, हिन्दी प्रशासनिक शब्द स्मरण प्रतियोगिता का आयोजन किया गया, खोरधा रोड मंडल द्वारा महादेवी वर्मा जयंती एवं कविता पाठ, वालतेरु मंडल द्वारा हिन्दी कार्यशाला का आयोजन किया गया, संबलपुर मंडल द्वारा मंडल के रेल कर्मचारियों के लिए 'तिमाही प्रगति रिपोर्ट को तैयार करने में आनेवाली विभिन्न समस्याओं एवं यूनिकोड टंकण' से संबंधित विषय पर एक हिन्दी कार्यशाला का आयोजन, मंचेश्वर कारखाना द्वारा हिन्दी श्रुतलेख, हिन्दी निबंध हिन्दी टिप्पण व प्रारूप लेखन एवं वाक् प्रतियोगिता का आयोजन किया गया।

हिन्दी सप्ताह/पखवाड़ा:

हिन्दी के प्रचार-प्रसार को बढ़ावा देने के लिए वर्ष 2021-22 में प्रधान कार्यालय समेत सभी मंडलों, कारखाना व अन्य कार्यालय में सितंबर माह के दौरान हिन्दी सप्ताह/हिन्दी पखवाड़ा मनाया गया तथा इस दौरान विभिन्न हिन्दी प्रतियोगिता, कहानी समीक्षा प्रतियोगिता, हिन्दी फिल्म समीक्षा प्रतियोगिता, रेल कवियों द्वारा कविता पाठ कार्यक्रम, ऑनलाइन हिन्दी मुहावरे/लोकोक्ति प्रतियोगिता, ऑनलाइन माध्यम से मंडल में कार्यरत महिला कर्मचारियों के लिए योग कार्यक्रम, ऑनलाइन हिन्दी शब्द ज्ञान प्रतियोगिता, ऑनलाइन माध्यम से हिन्दी और तकनीकी विषय पर हिन्दी कार्यशाला, ऑनलाइन माध्यम से सामान्य ज्ञान संबंधी क्विज़ प्रतियोगिता, ऑनलाइन संस्कृत-हिन्दी सूक्ति समीक्षा लेखन प्रतियोगिता, नेमी टिप्पणियों के पॉकेट डायरी का विमोचन, हिन्दी कार्यशाला तथा हिन्दी अंताक्षरी, देश की एकता में राजभाषा की भूमिका नामक नाटक का मंचन किया गया।

टेबुल प्रशिक्षण:

दैनिक कार्यालयीन कामकाज में हिन्दी का अधिकाधिक प्रयोग सुनिश्चित करने के लिए हिन्दी कार्यशालाओं के आयोजन के अलावा हिन्दी में प्रशिक्षित/हिन्दी में प्रवीणता प्राप्त कर्मचारियों के साथ नियमित संपर्क स्थापित किया गया है और उनकी सीट पर जाकर उन्हें उचित मार्गदर्शन और प्रशिक्षण दिया गया है ताकि वे दैनंदिन कार्यालयीन कामकाज में हिन्दी का अधिकाधिक प्रयोग कर सकें।

हिन्दी पत्रिकाओं का प्रकाशन:

पूर्व तट रेलवे में हिन्दी के प्रचार-प्रसार के लिए प्रधान कार्यालय तथा मंडल आदि द्वारा हिन्दी पत्रिकाओं का नियमित प्रकाशन किया जाता है। आलोच्य अवधि में निम्नलिखित हिन्दी पत्रिकाओं का प्रकाशन किया गया :

क्र.सं.	मंडल/कार्यालय का नाम	प्रकाशित हिंदी पत्रिका का नाम
1	मुख्यालय	उत्कलिका
2	खोरधा रोड मंडल	रेल रागिनी
3	वालतेरू मंडल	विशाखा भारती
4	संबलपुर मंडल	हीराखण्ड
5	मंचेश्वर कारखाना	रोशनी

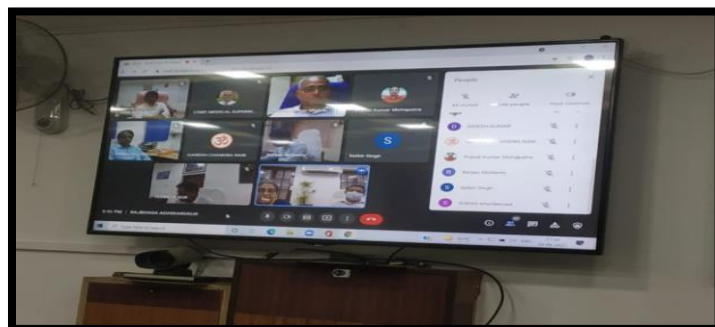
1. दिनांक 14.09.2021- मुख्यालय में महा प्रबंधक के द्वारा हिंदी सप्ताह का शुभारंभ।



2. दिनांक 27.09.2021 – क्षेत्रीय राजभाषा कार्यान्वयन समिति की 47वीं बैठक तथा हिंदी सप्ताह के समापन समारोह का आयोजन। ई-पत्रिका 'उत्कलिका' का विमोचन तथा पुरस्कार वितरण



3. दिनांक 30.09.2021 -खोरधारोड मंडल में अपर मुख्य राजभाषा अधिकारी एवं अपर मंडल रेल प्रबंधक (अवसंरचना) की अध्यक्षता में मंडल राजभाषा कार्यान्वयन समिति की 138वीं ऑनलाइन बैठक का आयोजन एवं हिंदी पखवाड़ा का समापन।



4. दिनांक-06.09.2021 - वालतेरु मंडल में हिंदी सप्ताह का उद्घाटन और मं.रा.भा.का.स. बैठक का आयोजन।
हिंदी नेमी टिप्पणियों की पॉकेट शब्दावली का विमोचन।



- 5.दिनांक-14.09.2021 - वालतेरु मंडल में हिंदी सप्ताह समापन समारोह के अवसर पर विशाखा-भारती पत्रिका का विमोचन एवं 'देश की एकता में राजभाषा की भूमिका' नामक नाटक का मंचन।



- 6.दिनांक 03.09.2021 - संबलपुर मंडल में राजभाषा कार्यान्वयन समिति की 70वीं बैठक का आयोजन।



- 7.दिनांक-17.03.2022 - होली की पूर्व संध्या पर वृहद हास्य कवि सम्मेलन का आयोजन।



INFORMATION TECHNOLOGY ORGANISATION

“Software is a great combination between artistry and engineering”. — Bill Gates

Under the overall administrative Control of PFA and technical control of FA&CAO (W&S) –cum-Chief Manager (IT), IT set up of this Railway has been functioning from the south block of Rail Sadan. Day to day work is being directly overseen by Sr. Systems Manager (IT), assisted by Jr. Systems Manager (IT), the support staff and supervisors in technical, ministerial.

IT organization of ECoR has adopted the Data Centre concept approach bypassing the conventional EDP Centres. It has an inherent advantage of on-line data processing. Web based IPAS applications hosted on centralized servers is considered more advantageous. As Railway Board decided to roll out IPAS on PAN India basis, ECoR also migrated to IPAS (AIMS) applications like all other Railway zones. The IPAS (AIMS) is conglomerate of various modules and sub modules developed and customized to the needs of Railways.

In an all India panorama, selected Rlys have been nominated by Rly Bd to act as the nodal Rlys who are to act as the interface between the users and the developer, i.e. CRIS. So this Rly has the privilege to act as the nodal Rly for Cash and Pay Module and Stores A/c Module. This Rly has fulfilled its obligations in this regard and both the modules have now gone live.

Besides, the following web-enabled e-applications and mention worthy developed either in house or outsourcing basis is running successfully. These e- applications are –

1. **BEST- (Blank Paper Ticket and Excess Fare Ticket System for Traffic A/s)**-The earlier systems developed on outsource basis has been revamped with a new look system. The (BEST) software developed in house for Traffic Accounts deploys Oracle 10g at the database end and HTML/CSS/JAVA at the front end. BPT issued to Station Managers and EFT to TTEs check the correctness of the Railway fares/fines collected from the train travelers. The revenue thus generated above is credited to Rly A/cs.
2. **BTS (Bill Tracking system)**: To bring in more transparency and to enhance the image of working culture in ECoR, an innovative idea in the form of BTS, has been developed by this Railway. BTS is related to the payments related to works contract. The contractor makes the request for measurement and release of payment. The system captures all the events from measurement of works till check preparation. The SE(Works), AEN, OS(Bills), SSO(A)/WORKS Budget have to update details concurrently. Thereafter, CO6, CO7 & Check details are to be updated by the dealing assistants of the Associate Accounts.
3. **Drivers Unsatisfactory Management System (DRUMS)**: The system shall facilitate the Crew Controllers to lodge Drivers Unsatisfactory reports through SMS. System generated SMSs will be sent to the respective SSE/SEs for resolving the issues. The System will escalate the problems to the next higher up in a scheduled manner if the problem not resolved within the specific time. The closing of the complaints are to be done by the departmental controllers. This will facilitate the management to monitor and take up the administrative decisions.
4. **ORH (Officers Rest House) allotment System**-This provides on-line applications for allotment of Officers Rest Houses available at BBS, NDLS, Howrah and Purl. An officer can see the vacancy position by clicking on the VACANCY POSITION TAB. On allotment of ORH, the concerned officer will be informed through SMS. He also can view the allotment status by clicking on the respective tab after putting his application id.

5. **GMDB (General Manager Dash Board)**-This web application has been designed for effective monitoring and controlling the progress of various tasks assigned by GM to PHODs. It has submenus like **MR Items, GM Items, Other Items** and **Wednesday Meeting Items**. In the report segment detailed information like Task Description, Target Date, Action Performed and Status are available.
6. **Railway Internship Portal for Students** - Online portal has been developed to facilitate students interested for Summer Internship in Railways. This portal helps the students to apply online and to upload required documents. Based on the number of applicants for each subject, the concerned authorities have the privilege deciding timings and venue. This has saved a lot of man hours as the receipt of manual applications, its verification and transferring the same to the concerned departments is a huge task.
7. **E-receipts and Dispatch Software (Accounts)** - The a-applications captures the details of letters /documents received or dispatched with system generated number. This has done away with the manual entry of details in DAK section. Further, the receipt and dispatch dates can be retrieved easily.
8. **FPMS (Financial Proposal Monitoring System)** -This e-applications keeps *track of all financial proposals received, processed, vetted or returned. This software is implemented in all divisions and headquarters. Ten days managerial report greatly serves the management to watch the pending proposal if any department wise, category wise also. The efficiency of the dealing official can be ascertained.*
9. **SIAS** - Signal Incidences and Analysis System (SIAS) developed in house with Oracle10 g XE at the database level and HTML/CSS/JAVA at the front end provides the users interface i.e., the forms, where users have to input the relevant data. Upon processing of the data, various managerial reports like month and year wise, gear wise, cause wise, punctuality lost, station wise, route wise, make wise etc are generated from it.
10. **CHITHI (Computerized Handling of Internal Telecommunications via Internet)** - The software developed in house deploys Oracle 10g at the data base end and HTML/CSS/JAVA at the front end besides using Tomcat server. This enables uploading and viewing of various circulars and transfer orders relating to Gaz and Non-Gaz staff issued by this Railway. This also shows events like Republic Day Celebration, Independence Day Observation organized by this Railway.
11. **RPF Grievances Redressal System** - The individual users belonging to RPF cadre, after logging into the system can put his grievances. The grievances thus entered are monitored by the higher ups. The party is apprised about the outcome of his grievances
12. **e-APARS** - In Annual Performances and Appraisal Reports (e-APARS), employees can view their annual working performances which help them to be more concerned about their working and refocus on the fields which have hitherto missed their attentions.
13. **Data pulling from CMS System** - In SBP Divn data from Crew Management System (CMS) portal is being uploaded in IPAS(AIMS) duly calculating the KMA, ALK etc for loco pilots. Earlier WAT Divn and KUR Divn were pulling the data from CMS and SBP Divn was left out. Now all the three Divns of ECoR have joined the mainstream.
14. **Incentive Module** - Duly developed by CRIS it has been implemented in the lone workshop Mancheswar of ECoR and it is running successfully.
15. **On line NPS family pension bill-It is being generated and processed on line for the beneficiaries of NPS staff -**

New look website of the Railway i.e. www.eastcoastrail.indianrailways.gov.in is being regularly up-dated with current events and features.

STATISTICAL ORGANISATION

Statistics is the study of the collection, analysis, interpretation, presentation and organization of data.

One of the most dramatic reasons statistics is important in decision-making is it can help us see the future. Though all forecasting efforts are subject to certain limitations, predictive analytics has proven to be a helpful way for decision-makers to arrive at truly informed assumptions about future events and trends.

Organizational Set up: - Statistical organization headed by Data Analytical Officer (JAG/SG) is functioning under the administrative control of FA&CAO(T). Works of the Statistical branch are being looked after by S&AO along with 01 Senior Inspector and 18 ministerial staff.

Objective: -The main objective of the Statistical organization is to appraise the top management at specific time intervals regarding factual position of current period progress compared to that of previous period achievements. This comparison enables the management to make better and efficient future planning. Statistical data compiled in a systematic manner are of great importance for exercising proper managerial control and formulation of policy.

Activities: - To highlight the comparative performance vis-à-vis target and pinpoint the areas of deterioration for the purpose of appraisal of top management and to help them to monitor the performance in a better way, the Statistical organization is involved in compilation of various statistical statements periodically, monthly, quarterly and annually. In spite of lock down, shut down & roster duty (50% attendance) due to COVID-19 pandemic, the compilation work of all the annual statistical statements along with periodical, monthly and quarterly statements during the year 2021-22 have been executed at Statistical Branch at Head Quarters office/ ECoR successfully in time.

For Goods service, this office captures the data for compilation of various operating statistics from FOIS reports. While the same for Coaching Services are being compiled by capturing the running particulars of coaching trains from ICMS every day and processing in in-house built Excel programme.

Besides the regular compilation activities as stated above, this organization brings out the following publications too for general and managerial information within the time frame.

- a) General Manager's Annual Narrative Report.
- b) Pocket Book on Financial Results and Important Statistical Highlights.

“Statistics is a science of estimates and probabilities.” Boddington.

“The scientific technique employed in the process of collection, compilation, presentation, comparison, measurement of variations, co-relation, analysis and interpretation of the data is known as Statistics.”

MISCELLANEOUS

A. PUBLIC GRIEVANCES REDRESSAL MECHANISM OVER ECoR

- A. East Coast Railway has set up complaints Redressal System with the overarching objective of improving the quality of public service delivery in its jurisdiction. 'Public Grievance Redress' requires a good grievance redress system operating in a manner that leaves the citizen more satisfied with how the organization responds to complaints/grievances with 'Excellence in Service Delivery'. Further, assessment is made periodically for tuning up the PG Cell and go for system development in order to keep pace with the emerging social media like Twitter and FaceBook. Regular interaction with all Departments and Divisions are held with an aim for identifying focus areas of improvement for them to have better service delivery system.
- B. **HQs Level** – Public Grievance Redressal Machinery has been set up in East Coast Railway to provide high level satisfaction to the Rail Users. Addl. General Manager who has nominated as a Director of Grievances for looking after the Public Grievance Cases at Zonal level. Dy. General Manager and Deputy Secretary (Public Grievances) assist him to redressing the cases timely. A Public Grievance Cell has been set up to look after these Public Grievance cases.
- C. **Divisional Level** – To ensure smooth functioning of the machinery at the Divisional level, each Divisional Headquarters of East Coast Railway has a Divisional Public Grievances Cell. Addl. Divisional Railway Manager of the Divisions is the Director of Public Grievances mechanism of the Divisions. To assist him, Sr. Divl. Commercial Manager/Divl. Commercial Manager is the in-charge of Divisions. The names and telephone numbers of the Addl. General Manager of Zonal Headquarters and Addl. Divisional Railway Managers of all the Divisions of East Coast Railway are available at important stations, Railway Time Tables, website etc.
- D. **Sources of the complaints received** – Lodging of complaint can be registered at different stations. Enquiry cum Reservation offices, Goods Shed, Parcel Offices, Refreshment Rooms, Catering Stalls. Complaint-cum-suggestion books are available with Guards of trains carrying passengers including Mail/Express Trains and also with the Conductors and Pantry Car Manager of the trains. After enquiry/investigation is completed by the concerned Department, reply is given to the complainant.
- E. **Lodging of complaints by the General Public** – Complaints are also received in PG Cell of General Manager's office directly or through e-mail, which are up-loaded in CPGRAMS locally for quick transferring and solving of the cases by the concerned PG Officials for at their level early. Replies/ reports have been up-loaded in CPGRAMS portal for verifying at this end. Complaints are also acknowledged and after necessary enquiry/investigation replies are sent to the complainants. Adding this, other sources through which complaints/grievances received are from (i) President of India, (ii) Grievances Cell of Prime Minister's Office, (iii) Department of Administrative Reforms and Public Grievances, (iv) Department of Pensioners & Pensioner's Welfare (v) Directorate of Public Grievances (DPG) and (vi) Railway Board. These complaints are also registered and sent to the concerned units and after investigation replies are sent to the complainants by the parent units. User-friendly Public Grievance portal called **Centralized Public Grievance Redress and Monitoring System (CPGRAMS)** has been in use through the website of **pgportal.gov.in** which facilitates public to lodge their complaints and to receive replies through it. After due examination of the matter by the department concerned, replies are sent to the complainant by that grievance redressal authority through CPGRAMS.
- F. **Appeal against the reply**- Ministry of Personnel, Public Grievances & Pensions has newly introduced an appeal portal, which is used in a single window of CPGRAMS portal. The petitioner has facilitated to load their appeal against un-satisfactory disposal of grievances by the Grievance Officers. Addl. General Manager is the competent authority for monitoring the appeal and disposes through speaking order within the stipulated period. On receipt of the appeal reply, Dy. Secy. (PG) prepares a speaking order note and submits to AGM for kind approval.

G. Lodging on-line complaints through RAIL MADAD – A new Portal Complaint Management System **RAIL MADAD** has been launched since 15th July' 2019. Through this passenger can lodge their complaint through web, App, SMS, helpline, social media. Complaint received through Rail Mada are promptly attended and disposed to the utmost satisfaction of passenger on a time bound manner.

H. The statistical figures on receipt and disposal of the PG cases during the period of April'2021 to March' 2022 handled by Zonal and Divisional Headquarters are appended below:-

Period	OB	Received	Total	Disposed	Pending
2021-22	01	26724	26725	26722	03

B. VIGILANCE ORGANISATION

1. Activities of Vigilance Organisation:

Vigilance Department has the following core areas of activities:

Prompt investigation of authenticated complaints with follow up investigations on cases of irregularities. Ensure speedy processing of vigilance cases arising out of complaints and preventive checks at all stages till the case reaches its logical end.

- Maintain close liaison with CBI with regard to sharing of intelligence and watch over officials of doubtful integrity.
- Undertake review of existing rules and procedures, with a view to plug loopholes and suggest system improvement to curb corruption.
- Disseminate awareness about vigilance through vigilance bulletin, seminars, workshops and lectures etc.
- Surveillance on vulnerable and corruption prone areas by deputing vigilance watchers and analyzing CCTV footages.
- Scrutinizes transactions of movable and immovable property transactions (Property Return) under Rules 13 & 18 of employees as per Railway Servants Conduct Rules, 1966.

1.01 Vigilance branch has undertaken qualitative and quantitative preventive checks in all aspects/areas throughout the year. As a result of these checks, substantial amount was earned as penalties, undercharges, overpayments. Similarly, a number of complaints were also investigated after verifying their genuineness.

1.02 Disciplinary actions were taken against a number of employees for cases arising out of the checks and investigations conducted by the vigilance.

1.03 Brief particulars of preventive checks, complaints, officials punished, earnings and prevention of leakage of revenue are given below.

Year	Preventive checks conducted	Complaints		D&A/ Admn Action	Leakage of Revenue in lakh				
		Received	Investigated		Traffic	Payment to staff	Scrap	Others (Technical)	Total
2020-21	464	227	44	178	1623.82	1.14	00	10.04	1635.00
2021-22	518	236	42	133	638.98	2.08	00	75.06	716.12

1.04 Besides periodic checks, ECoR vigilance has also undertaken (a) intensive checks on the areas identified by Board as 'Thrust Areas', (b) special drives directed by Board during peak seasons/rush periods viz. summer rush, puja rush etc., to curb malpractices in trains and other public interface like parcel, booking and reservation offices.

1.05 Complaints received under Public Interest Disclosure and Protection of Informers (PIDPI) are also investigated by Vigilance branch, without disclosing the identity of the complainant. Whistle blowers are thus encouraged to lodge complaints on corrupt practices in sensitive areas.

1.06 There is a 24X7 active vigilance mobile helpline (8455885031) to receive complaints instantly. This is immensely helpful for rail users encountering corrupt activities at Booking Offices, Reservation Offices, Parcel Offices and trains etc.

- 1.07 As a result of these facilities a number of complaints have been received through mobile helpline. Genuine complaints attracting vigilance angles are investigated and action taken according to the merit of the individual case. Complaints which need administrative action are forwarded to concerned departments for necessary action. Some of the mobile complaints which have to be resolved instantly have been taken up on priority basis and the same have been resolved effectively.

2. Seminars and Awareness Programs:

- 2.01 Educative and preventive vigilance was encouraged through organizing seminars and workshops during the year. In the seminars, vigilance officers educated the staff & officers on the role of preventive and punitive vigilance in a interactive mode through important case studies based on their past experiences. During the year 2021-22, due to Covid situation 08 seminars/workshops were conducted on virtual mode and 07 were conducted physical mode. A number of officers and staff participated in these seminars/workshops.

- 2.02 Vigilance Awareness Week - 2021 was observed from 26th October to 1st November 2021 at the Zonal Headquarters, all the three divisions (KUR, WAT & SBP) and Carriage Repair Workshop at Mancheswar. The theme was "Independent India @ 75: Self Reliance with Integrity".

During the week various programmes like administering integrity pledge, seminars at HQ and Divisions were organised by the vigilance department.

Stake holders meet was also held during the week wherein purchasers, suppliers and contractors of the railway participated. In the meet their problems were addressed by the Railway officers. Programs such as essay, drawing, slogan competitions etc were organized on this occasion amongst the employees, their wards and school students in ECoR/BBS/HQ and Divisions. Successful participants were awarded by Addl. General Manager and Divisional authorities.

In a measure to sensitize public, appeal/messages were published in leading newspapers, describing the menace of giving & taking of bribes and requesting them to refrain from such practice. Banners and posters were also displayed at all major stations & offices.

Caller tunes in three languages i.e. Hindi, Odia and Telugu related to fight against corruption was set to all CUG holders of this Railway during the week. Daily SMS promoting integrity and eradication of corruption was sent to all CUG members during the week on daily basis.

18th issue of Vigilance Bulletin "Satyanishtha" was released by the Addl. General Manager/ECoR/BBS. Activities conducted during vigilance awareness week was published in print media and uploaded on facebook and twitter account of East Coast Railway.

3. System Improvements:

As a policy of educative and preventive vigilance, the department has stressed on improvement in the system rather than finding the persons guilty. As a result, a number of advices on important system improvements and advisories were issued on various areas of the Railway's working to reduce opportunities of corruption. Total 29 system improvements were issued in 2021-2022. Some of those are listed below –

- 3.01 Provision of in IPIS contracts for OEM to share system information to S & T maintenance staff for minor changes.
- 3.02 Employees absented for more than one month should be kept under STOP SALARY option in IPAS.
- 3.03 Contractor to submit evidence for payment of wages to labourers through bank.
- 3.04 Introduction of machine numbered record for issue of materials to prevent manipulation of documents.
- 3.05 Efforts to achieve minimum passenger complaints by targeting bottom performing trains in Rail Madad.
- 3.06 Evaluation of OBHS performance at nominated intermediate stations in co-ordination with other Railways.
- 3.07 For major yard remodeling or new signaling installations estimates should be prepared after receipt of approved and frozen ESP, approved SIP or at least, a tentative SIP with traffic requirement for estimation purpose.
- 3.08 Maintenance of mandatory field records as per defined proforma during execution of work.

- 3.09 Devising timelines for finalization of drawings of various categories including field testing materials.
- 3.10 Physical dimensional check of important P. Way store materials even if it is certified from RITES/RDSO at Zonal Level.
- 3.11 Detailed description and specification of NS items to be included as special condition in contracts.

4 Achievements:

- 4.01 4725 Vigilance clearance request was received out of which approximately 98% cases was disposed of within 48 hours of receipt, with exception in case of officials working outside Railways Viz – RVNL etc, where it takes 2-3 weeks.
- 4.02 Vigilance Audit of this Railway was undertaken by SDGM/West Central Railway & his Officers as per Railway Board's directive on 05.08.2021 and 06.08. 2021. The statistical information covering all the aspects as directed by Railway Board was provided for audit and important case studies was presented as sharing of information.
- 4.03 With a view to speedy disposal of disciplinary cases periodical meetings are held with inquiry officers and every case is monitored with executives, as a result, during the year 2021- 2022, 66 minor penalty cases, 31 major penalty cases and 43 administrative cases arising out of vigilance investigation were finalized.
- 4.04 Vigilance Audit of West Central Railway was undertaken by SDGM/ East Coast Railway & other vigilance Officers as per Railway Board's directive on 14th and 15th December 2021 at Jabalpur. An audit report was furnished to Railway Board covering all aspects as directed by Rly. Board.
- 4.05 12 Immovable Property Returns of various officials were scrutinized during 2021-2022.
- 4.06 As measure to curb malpractice and corruption in major public interfaces, preventive checks were conducted in trains, in such a check in the Train No. 12843 Exp. in between TIG – KRAR by joint team of vigilance officials and Squad TTE, 103 passengers were detected with either having PF ticket or without ticket in the train. A fine of Rs 71,735/- was collected from the irregular passengers.
- 4.07 As a part of Hon'ble Prime Minister's Digital India initiative, online application has been made mandatory by Railway Recruitment Cell and Railway Recruitment Board. To maintain transparency, online examinations are also being conducted for all recruitments, where surprise checks are conducted by vigilance officials.
- 4.08 CCTV surveillance in departmental examination has been made mandatory. On this aspect on scrutiny of CCTV footage by vigilance 16 staff were detected to have involved malpractice in a departmental written examination. All these staff and the invigilators were taken up under Major/Minor penalty action.
- 4.09 In a preventive check conducted on the aspect of timely collection of detention charge for adjustment of over loaded wagons at en-route stations. The monthly summary of such rakes undergoing load adjustment for over loaded wagons, as prepared by Divisional Wagon Controller and Commercial Inspector (FOIS) was collected and cross checked with load adjustment registers as maintained at en-route stations. It was found that 111 rakes, which had undergone adjustment for overloaded wagons during the period from June -2020 to December-2020 were not recorded at Division office due to the failure of DWC and CCI/FOIS. It was also found that the Commercial Circular No. 38(G)/2014 of 01.04.2014 regarding responsibility of the load adjustment stations for bill raising to the originating stations was not strictly complied. As a result of this check an amount of Rs 47,73,616 was realized from 44 load adjusted rakes. The DWC & CMI (FOIS) were taken under minor penalty action.
- 4.10 A vigilance check was conducted for non-realisation of stabling charges from the parties for stabling of private rakes in Railway system for reasons such as diversion of rake to another loading point, for want of line at exchange yard of private siding, for want of indent by the party and siding problem. In this check an amount of Rs 97,63,836 for 39 rakes was collected from the parties. It was also advised to the Divisions to develop a system so that all cases of stabling of privately owned rakes including containers are promptly communicated to commercial department for raising & realizing the stabling charges. The same has been implemented by the Divisions.

- 4.11 In a complaint investigation on delay in passing bills pertaining to stores department, it was found that bills received were not recorded in chronological order in the register, CO 6 were generated for a few specific firms before receiving the bills and passed on same day but others were delayed for months, some bills were returned with vague remarks while some were found accepted without any remarks for similar deficiencies, bills were returned without consent of the competent authority and the SSO was found to have signed for Sr. DFM without the latter's knowledge and returned bills without approval of the competent authority.
- 4.12 Vigilance officials also conducted checks at SSE/OHE/HARD & CBS office /HARDA of West Central Railway on the aspect of maintenance of DMTR, staff attendance and cancellation of tickets in PRS. Various irregularities were detected in these fields and WCR was intimated to take necessary action in the matter.
- 4.13 In a vigilance investigation it is found that, CCTV surveillance systems have to be installed at 24 locations over East coast Railway for monitoring of touting activities at PRS counters mainly during tatkal period and monitoring of cleaning activity at stations. The work was awarded at a cost of Rs 1,16,57,288/- and to be completed within a period of six months. Out of total schedule amount of Rs 1,16,57,288/-, contractor had received Rs. 9303480/- (80%) through on account bills out of which total Rs. 11,51,878/- excess payment had been done to contractor without installation testing and commissioning of the materials. The work was supposed to be completed within six months; however it was not completed after expiry of sixty six months. Though RDSO specifications were available for schedule items, non RDSO items had been indented causing failures of CCTV surveillance system. Railway staff were utilized for the instant work as materials which were supposed to be issued and transported by the contractor were issued to the railway staff. The inspection clause had been changed from RITES to Railway authority without proper justification and without protecting railway interest. No deduction of inspection charges had been made from contractor's bill. Procurement had been done in full quantity initially and most of the materials were issued to the contractor without verifying execution site and progress of work which was against the finance observation at the time of concurrence of Material intensive tender. Degree and diploma engineer was not engaged by the contractor. Penalty for non engagement of degree and diploma engineer for supervision of the instant work for 66 months amounting to Rs. 26,40,000/- and Rs. 16,50,000/- respectively (total Rs. 42,90,000/-) was not deducted from on account bills. Non deployment of engineer by the contractor was also a reason for slow progress of work. No work progress register and hindrance register was available for the work. There was gross negligence, recklessness in decision making and blatant violations of systems and procedures in working of the concerned officials. Major/Minor penalty actions have been taken against the 03 officials and recorded warning has been issued against 02 officials responsible for the irregularities.
- 4.14 CMS crossing, 1 in 12.52kg supplied by Vendor M/s Jupiter Wagons Ltd. at various depots of ECoR were verified jointly by vigilance official, firm's representatives and RDSO officials for dimension tolerance and surface irregularities were found as against specific standards of RDSO drawing. Top table depression and depression of flange of the crossing are noticed during joint verification. The case is being referred to Railway Board Vigilance and RDSO for further investigation/action PCE/CTE has been advised to nominate Railway officials to check the dimensional tolerance and visual inspection for surface defects before dispatch of the material and effect recovery for the unsatisfactory materials.
- 4.15 In preliminary investigation into finalization of tender in engineering department it is found that the TC members have not considered the credentials of the lowest bidder for the financial year 2017-2018 (which should have been considered as per NIT) and bypassed it on the criteria of non-fulfillment of financial eligibility criteria as per clause 10.2 of the NIT in a tender. Also in the TC minutes the consideration of reasonability of rate quoted by the lowest bidder has not been discussed, whose rate was almost close to the updated LAR rate in the earlier discharged tender for the same work. The TC members have also bypassed the lowest offer in the earlier discharged tender for the same work due to non-submission of Annexure in defined format in NIT without discussing the attached credentials certificates qualifying the tenderer in the requisite criteria.

However, in NIT, it entitles for liable rejection and not summarily rejection for such non-submission of the defined annexure. Connecting both the cases, intentional bypassing has been done by the TC members and the TAA in both the tenders to favour the 2nd lowest tenderer at a higher rate causing loss to railway exchequer. Vigilance angle has been established & case has been registered against the officers concerned. Detailed investigation in under progress.

C. FUNCTIONING OF RTI CELL

PG Cell of Zonal Headquarters also deals with RTI matters which came in to force w.e.f. 2005. The new RTI law empowers Indian citizen to acquire information from a Public Authority, thus making the government and its functionaries more accountable and responsible. The Act has now been in operation for over thirteen years with the objective to empower the citizens, promote transparency and accountability in the working of the Government, contain corruption, and make our democracy work for the people in real sense. It goes without saying that an informed citizen is better equipped to keep necessary vigil on the instruments of governance and make the government more accountable to the governed. The Act is a big step towards making the citizens informed about the activities of the Government. Use of RTI by the citizens and system building by the government and its instrumentalities facilitating disclosure of information-suo motto and on demand-has the potential to bring about the paradigm shift in the relationship between the citizens and the government and its instrumentalities.

In East Coast Railway, RTI application from citizens are received by this cell and after receipt, same are registered in the RTI register book. This register number is maintained for all future correspondences. After registration RTI applications are up-loaded in web-site RTI Online and forwarded to the concerned units through RTI Online for providing information to the citizen directly by registered/speed post or in person within the specific time limit.

If the application is not satisfied with the information provided to him/her, he/she may prefer an appeal to the 1st. Appellate Authority of that Department to decide the matter further. After the case is decided by the concerned Appellate Authority, necessary decisions are communicated to the Appellant within the specific time limit as laid down under the provision of the Act.

For the smooth functioning of RTI Cell at Zonal level, Dy. General Manager is designated as the nodal Central Public Information Officer (CPIO) and to assist him, Asst. Secy. (Public Grievance) is designated as Asst. Public Information Officer of this Zone. To make the working easier, each Department is having one PIO, and APIO each. Each Department is having one Appellate Authority. Appellate Authority is the competent authority for disposing the appeal cases within the prescribed time limit. If it is feels that the supplied information is not correct or un-satisfactory, quality information will be called for from Public Information Officer and supply to the applicant for disposes the appeal at disposes at their level.

In Divisional level, Addl. Divisional Railway Managers are designated as Appellate Authority, Sr. Divl. Personnel Officers act as the Public Information Officer of the Divisions. Updated names, addresses and Phone Numbers of the concerned RTI officials are available in East Coast Railway website.

Applicant preferred a second appeal before the Hon'ble Central Information Commissioner against supplied information, if he feels unsatisfactory information. Departmental RTI Officials may also be attended video conferencing second appeal hearing with Hon'ble Central Information Commissioner when it is required.

In addition, this, Railway Board has give latest instruction/Guidelines in this regard.

The statistical figures on receipt and disposal of the RTI cases during the period of April'2021 to March' 2022 handled by Zonal and Divisional Headquarters are appended below.

STATUS OF RTI CASES FROM APRIL-2021 TO MARCH- 2022

OB as on 01.04.2021	Case received during the period	Case disposed off during the period	Closing balance as on 31.03.2022
101	3207	3073	235

D. INDUSTRIAL RELATION CELL

Highlight: As per Board's guideline four numbers of PREM meetings are to be conducted in a calendar year in the Zonal level. Accordingly, all the scheduled four PREM meetings were conducted during all calendar year 2021 on date 22.03.2021, 22.07.2021, 24.09.2021 & in the year 2022 on date 22.03.2022 & 26.07.2022.

E. EFFICIENCY ORGANISATION

The aim of the cell is to promote productivity by reorganizing manpower resources through work studies. The efforts of the cell are to identify redundant posts and surplus manpower, due to implementation of advanced technology.

139 surplus posts identified through various work studies have been surrendered/re-deployed during the year "2021-22" with a savings of Rs. 2.26 crores (approx).

F. CELL FOR PARLIAMENTARY MATTERS & CONSULTATIVE COMMITTEES

In this cell replies to Parliament Questions, references from Hon'ble Ministers, MPs, MLAs and VVIPs, questions from State Assemblies, Parliamentary Committees, Divisional Committee meetings, ZRUCC meetings are attended to.

During this financial year 2021-2022, this section has received 355 no. of Parliament Questions, 01 No. of Assembly Question with replies communicated to concerned officials in the stipulated time.

89 No. of MP/MLA & VIP references have been dealt by this section.

Three Parliamentary Committees i.e.

- (i) Visit of Committee on Govt. Assurance dated 20.09.2021.
- (ii) Parliamentary Standing Committee on Railways on dated 12.10.2021.
- (iii) Parliamentary Standing Committee on Labour on dated 17.11.2021.

Hon'ble MR's Visit to ECoR

- (i) From 19.08.2021 to 23.08.2021
- (ii) On 10.09.2021
- (iii) From 08.11.2021 to 09.01.2021
- (iv) From 06.01.2022 to 07.01.2022

There were about 08 No. of GM Inspection notes, 05 No. of Annual Inspection notes circulated to all concerned and remarks thereto were collected, compiled and put up before GM.

Compiling the compliance of Memoranda received from various Organisations, representatives during Hon'ble Minister's visit, GM's Annual Inspections at various locations and reply sent to respective organizations/representatives/Rly. Bd. Compiling the compliance of items contained in CRB Inspection Notes, Video conferences & Performance Review Meetings of CRB & Board Members along with ECoR officials and forwarding the compliance report to Railway Board on regular basis.

G. LAW ORGANISATION

Successful management of court cases is very much essential and one of the key activity of legal Department of Railway Administration. Law office at HQrs. Keep on monitoring all legal subject and constantly coordinate with the respective unit as well as with the counsels engaged in the court case matters. The work of the Law Office is not only limited to deal with the court cases matters but also other assignments such as vetting of legal documents, tendering opinion on issues of Land, Consumer, Workmen's Compensation, Labour & Industrial cases, Arbitration, Eviction Cases, etc. The number of court cases dealt by Law Office during year **2021-22** including the number of court cases filed and disposed of during the year **2021-22** are furnished below:

1. No. of cases filed and disposed of during the year 2021-22:									
(a) Total No. of cases pending at the beginning of April' 2021	-								= 3748
(b) Total No. of cases filed during the year 2021-22									= 0416
						Total	-		= 4164
2. No. of cases disposed of during the year 2021-22:									
(a) In favour of Railway	-	-	-	-	-	-	-		= 423
(b) In against of Railway	-	-	-	-	-	-	-		= 254
						Total	-		= 677
3. Total No. of Cases pending at the end of March 2022:									
(i) Supreme Court	-	-	-	-	-	-	-		= 0013
(ii) High Court	-	-	-	-	-	-	-		= 1320
(iii) CAT	-	-	-	-	-	-	-		= 0612
(iv) Others / CDs	-	-	-	-	-	-	-		= 1542
						Total	-		= 3487
4. Total No. of Eviction cases pending	-	-	-	-	-	-	-		= 0143
Total No. of RPUP Cases pending	-	-	-	-	-	-	-		= 1840
Total No. of Cases pending in RCTs	-	-	-	-	-	-	-		= 0525
5. No. of references received from Division / Units (Other than court cases):									
(i) Received	-	-	-	-	-	-	-		= 345
(ii) Disposed of	-	-	-	-	-	-	-		= 345
6. Contempt cases position:									
a) Opening balance	-	-	-	-	-	-	-		= 28
b) Received	-	-	-	-	-	-	-		= 26
c) Dropped	-	-	-	-	-	-	-		= 10
d) Closing balance at the end of March 2022:	-	-	-	-	-	-	-		= 44
(i) Likely to be dropped	-	-	-	-	-	-	-		= 23
(ii) Stay obtained in the High Court	-	-	-	-	-	-	-		= 07
(iii) SLP/Writ/Review pending but stay not obtained	-	-	-	-	-	-	-		= 14
						Total	-		= 44

H. SPORTS

Sports persons of East Coast Railways have excelled their performances at International, National, State levels as well as Inter Railways Championships held during the year 2021-22.



Amit Rohidas sports officer east coast railway awarded (Arjuna award) by Honl. President of India for outstanding contribution in the game of India hockey as well as bronze medal in Tokyo Olympics 2020.



Miss Jhilli Dalbehera Jr Clerk secured silver medal in Asian weightlifting championship at Taskhent 16th to 25th April 2021 and secured silver medal in Commonwealth weightlifting championship from 7th to 17 dec 2021 Taskhent Uzbekistan.



Miss Manisha Panna, Tech-I has been selected for 4 nations International Women Football tournaments at India 25th & 28th Nov and 01.12.2021



ECoR Three Ball Badminton player has represented In-dian Railway Sr National Ball Badminton Champion-ship 2022 from 6th to 9th March 2022

I. TRAFFIC COSTING

In East Coast Railway, Zonal Traffic costing cell functions under FA & CAO(Traffic) and is involved with the task of compiling various cost data which are used in fixing rates, carrying out profitability analysis, creating cost consciousness, assisting in cost control and facilitating project appraisals and evaluation of capital investment.

The following reports pertaining to the financial year 2020-21 were prepared and sent to Railway Board during the year 2021-22.

1. Escalation Factor of ECoR for the year 2020-21 (RE) and 2021-22 (BE) over 2019-20 (Actual).
2. Proforma V – Bifurcation of expenses into Freight and Coaching services.
3. Goods Unit Cost
4. Coaching Unit Cost
5. Incremental Cost
6. Economics of the movement of Iron Ore for Export on KK Line.
7. Cost-study and Cost Analysis of Coal Movement of Talcher originating coal loading point.

Apart from the above, the following works were undertaken as internal exercise.

1. Profitability study of KK Line.
2. Train Costing of following 12 pair of Special Trains run during 2020-21:
 - i) 02801/02 Puri-New Delhi –Puri Special.
 - ii) 02805/06 Visakhapatnam-New Delhi-Visakhapatnam Special.
 - iii) 02073/74 Bhubaneswar-Howrah-Bhubaneswar Jansatabdi Special.
 - iv) 08493/94 Bhubaneswar-Bolangir-Bhubaneswar Special.
 - v) 08447/48 Bhubaneswar-Koraput –Bhubaneswar Special.
 - vi) 02829/24 Bhubaneswar-New Delhi –Bhubaneswar Rajdhani Spl.
 - vii) 08401/02 Puri-Okha –Puri Special.
 - viii) 08405/06 Puri-Ahmedabad-Puri Special.
 - ix) 08425/26 Puri-Durg –Puri Special.
 - x) 02815/16 Puri-New Delhi –Puri Special.
 - xi) 02827/28 Puri-Surat –Puri Special.
 - xii) 02843/44 Puri-Ahmedabad –Puri Special.

GLOSSARY

ACCOUNTS

Capital-at-charge: Book value of the capital assets of Railways.

Gross earnings: The true or accrued traffic earnings in an accounting period whether actually realized or not.

Gross Traffic Receipts: Earnings actually realized during an accounting period.

Net Earnings: Difference between the Gross Earnings and the Working Expenses, excluding suspense but including Appropriation to DRF & PF.

Net Revenue: Difference between the Gross Earnings and the Working Expenses after the payment of dividend to General Revenues, payment to worked lines and other net miscellaneous expenditure.

Operating ratio: The ratio of Working Expenses (excluding Suspense but including Appropriation to DRF & PF) to Gross Earnings.

Suspense: The difference between true earnings/working expenses in an accounting period whether or not actually realised/ disbursed and earnings/working expenses actually realised/dispensed during an accounting period.

Working expenses: Expenditure incurred in connection with the administration, operation, maintenance and repairs of lines opened for traffic. This also includes Appropriation to PF & the contribution made to the DRF to meet the cost of replacements & renewals.

STATISTICAL

Density: The volume of traffic moving between any two points on the railway system. It is expressed in terms of “passenger kilometres or net tonne kilometres and train kilometres per running track kilometre or route kilometre”.

Engine Kilometre: Movement of an engine under its own power over a distance of one Km.

Gross tonne kilometre: Unit of measure of work which corresponds to the movement over a distance of one Km of one tonne of vehicle/ wagon and contents.

Average Lead: The average distance each passenger or tonne of goods transported.

Loaded Wagon Kilometre: Movement of a wagon loaded with goods over one kilometre.

Net load or net tonnage: The weight of passengers, baggage or goods conveyed by a vehicle (coach, wagon etc.) or by a group of vehicles (trains).

Net tonne kilometre: 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 Km.

Non-revenue traffic: Traffic conveyed by rail for the working of Railway and for which commercial tariffs are not charged.

Number of Staff: No of all employees paid directly by the Railway administration.

Passenger Kilometre: Unit of measure of passenger traffic corresponding to the conveyance of a passenger over a distance of one Km.

Revenue earning traffic: Traffic conveyed by rail and for which commercial tariffs are applied, i.e., for transportation of which the Railway is paid by either the consignor or the consignee.

Route Kilometre: Distance of each gauge owned by a railway including its worked lines treated as a single line.

Running track kilometre: In addition to the route kilometrage, the extra distance of multiple tracks i.e., double, treble etc., tracks shall be treated as two or three or more tracks but shall exclude the track in sidings, yards and crossings at stations.

Smalls: Goods consignments whose weight and dimensions do not require the exclusive use of a wagon. Several smalls consignments may consequently be loaded in the same wagon.

Store: Supplies of materials or parts whether purchased externally or manufactured in railway workshops required for working the railway.

Kilometre: Distance of each gauge owned by a railway including its worked lines treated as a single line and the extra distance due to double, treble etc., tracks, as also the length of sidings, etc.

Tractive Effort: Load hauling capability of a locomotive expressed in terms of force exerted by the locomotive at wheel.

Train Kilometre: Unit of measure of distance which corresponds to the movement of a train over one kilometre.

Vehicle/Wagon Kilometre: Unit of measure of distance which corresponds to the movement of a vehicle/wagon over a distance of one km.

Wagon turn-round: The time interval in days between two successive loadings.

Last Nineteen Years' Statistics

Item	Unit	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
Route Km (BG+NG)	Km	2512.48	2512.48	2521.63	2520.12	2567.82	2567.82	2572.30	2646.40	2676.65
Route Km Electrified	Km	1116.50	1197.00	1291.48	1293.05	1304.64	1419.65	1423.62	1509.12	1509.12
Train Kilometre	000'Km	30681	30860	31181	32270	37526	37145	37634	40158	42543
GTKM All Services (incl. Eng. Wt& Dept.)	Million	73252	75902	78876	81148	89309	94762	108473	112728	115586
Engine Kilometre	Million	50.45	51.20	51.73	56.00	62.02	68.16	61.21	65.67	81.89
Vehicle Kilometre (TB)	Million	326.74	326.58	355.95	359.72	406.01	443.33	483.59	546.19	581.55
Wagon Kilometre	Crores	94.06	91.40	92.97	94.49	114.22	121.83	118.69	122.32	129.05
Loaded Wagon Km	Crores	58.56	59.18	60.04	61.04	79.00	85.22	82.40	87.04	87.69
Engine Hours (goods)	Lakhs	20.38	20.07	20.02	21.52	24.06	28.33	24.70	26.14	31.20
Effective Wagon Holding										
Including Surplus Empties	Crores	NA	0.48	0.50	0.50	0.54	0.54	0.59	0.66	0.71
Excluding Surplus Empties	Crores	NA	0.47	0.50	0.49	0.54	0.53	0.59	0.66	0.70
Wagon Turn Round										
Including Surplus Empties	in days	NA	2.93	2.97	2.75	2.68	2.56	2.51	2.69	2.75
Excluding Surplus Empties	in days	NA	2.91	2.93	2.72	2.66	2.53	2.50	2.67	2.74
No. of Staff	000'	43.985	44.450	44.920	45.510	46.120	43.430	42.610	41.530	41.220
Cost of Staff (Rs.)	Crores	413.16	413.75	523.20	590.61	648.14	1025.25	887.40	970.47	1633.93
Stations incl. PH	No.	314	322	333	310	323	318	321	327	335
Capital at Charge (Rs.)	Crores	2533.45	2719.00	2870.00	3012.00	3233.00	3494.00	3922.00	4373.00	4717.00
Gross Revenue (Rs.)	Crores	2996.06	3312.00	3942.00	4425.00	5457.00	6638.00	7024.00	8888.00	9013.00
Working Expenses (Rs.)	Crores	2008.87	2045.00	2129.00	2347.00	2632.00	3272.00	3389.00	3806.00	4026.00
Net Revenue (Rs.)	Crores	987.19	1267.00	1813.00	2078.00	2826.00	3366.00	3635.00	5082.00	4987.00
Operating Ratio	%	67.05	61.75	54.01	53.03	48.22	49.30	48.25	42.82	44.67
Gross Org. Revenue (Rs.)	Crores	2971.95	3421.43	3988.47	4647.79	5445.94	6248.68	6957.00	8072.27	9015.01
Net Revenue per Train Km	Rs.	321.76	410.58	581.45	644.01	753.01	906.18	965.84	1265.50	1172.23
Working Expenses per TKM	Rs.	654.76	662.73	682.89	727.16	701.28	880.87	900.54	947.46	946.27
No. of Passenger Originating	Million	37.20	40.99	44.77	51.37	58.07	64.24	71.17	79.37	86.01
No. of Passenger Carried	Million	43.45	53.97	51.85	60.99	67.36	74.51	82.32	91.96	99.76
Passenger Kilometers (Carried)	Million	10123	8945	9886	11546	10188	11248	12556	13955	15421
Avg. Revenue per PKM	Paise	28.78	33.56	33.69	34.50	46.05	46.69	46.37	46.46	48.47
Originating Loading (Rev.)	Mt. Tonne	64.06	70.46	78.05	83.92	93.19	95.60	104.05	108.99	120.77
Originatin loading (Revenue + Non Revenue)	Mt. Tonne	67.39	70.61	78.13	85.44	93.21	95.68	104.37	109.13	121.07
Freight Tonne (System)	Mt. Tonne	88.99	98.91	106.77	114.33	131.63	137.83	154.99	161.95	169.85
NTKM (Rev.+Non Rev.) Booked Route/ RR based	Million	35745	38444	39877	40909	47480	49647	54155	57979	59004
Revenue from Goods carried	Crores	2655.56	2956.27	3520.79	3922.08	4835.41	5913.35	6302.39	8024.29	8040.86
Avg. Revenue per NTKM (Carried Traffic)	Paise	74.80	77.34	88.10	96.18	101.89	119.57	116.64	138.48	136.28

**- Revised.

Last Nineteen Years' Statistics

Item	Unit	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22
Route Km (BG+NG)	Km	2654.89	2678.87	2678.87	2722.65	2745.45	2756.51	2771.09	2800.11	2801.49	2817.59
Route Km Electrified	Km	1546.57	1572.24	1563.03	1657.19	1835.04	2107.81	2538.20	2708.15	2774.91	2817.59
Train Kilometre	000'Km	43836	47314	47491	48310	50972	50552	54182	55643	44420	57908
GTKM All Services (incl. Eng. Wt& Dept.)	Million	117486	127420	127987	131370	139222	147526	156018	160003	146215	176819
Engine Kilometre	Million	96.71	106.10	106.88	118.71	128.67	139.88	143.32	146.03	141.03	150.19
Vehicle Kilometre (TB)	Million	591.24	650.55	677.77	703.98	742.44	696.26	793.67	788.36	221.13	627.57
Wagon Kilometre	Crores	134.47	149.21	144.11	146.63	157.17	163.99	168.44	176.24	184.18	200.73
Loaded Wagon Km	Crores	88.59	94.91	93.88	96.63	104.28	113.55	117.66	124.48	126.46	143.80
Engine Hours (goods)	Lakhs	40.05	43.53	42.64	44.45	48.37	60.93	67.50	80.30	79.95	82.57
Effective Wagon Holding											
Including Surplus Empties	Crores	0.74	0.76	0.74	0.82	0.83	0.87	0.83	1.01	1.04	0.99
Excluding Surplus Empties	Crores	0.72	0.75	0.73	0.80	0.81	0.85	0.82	0.99	0.97	0.96
Wagon Turn Round											
Including Surplus Empties	in days	2.72	2.58	2.36	2.41	2.26	2.26	2.10	2.45	2.31	2.06
Excluding Surplus Empties	in days	2.67	2.54	2.33	2.37	2.22	2.23	2.08	2.41	2.16	1.99
No. of Staff	000'	42.890	44.970	47.905	47.822	47.689	47.464	46.901	48.260	48.260	47.895
Cost of Staff (Rs.)	Crores	1933.31	2258.94	3039.61	3541.31	3891.02	4108.74	4311.40	4612.39	4775.05	5199.89
Stations incl. PH	No.	334	334	336	338	341	346	348	351	351	352.00
Capital at Charge (Rs.)	Crores	5247.63	5851.23	6432.10	6959.75	8095.28	9043.90	10143.69	11659.98	**12413.47	14971.79
Gross Revenue (Rs.)	Crores	10513.00	12338.84	12774.54	13805.67	14879.45	16836.54	17671.17	17722.65	17472.11	19967.08
Working Expenses (Rs.)	Crores	4678.00	5964.24	6585.57	6979.82	8002.77	8751.89	9257.36	9125.05	8272.12	10897.26
Net Revenue (Rs.)	Crores	5834.00	6374.60	6188.97	6825.77	6876.68	8084.65	8413.81	8597.60	9199.99	9069.82
Operating Ratio	%	44.50	48.34	51.55	50.56	53.78	51.98	52.39	51.49	47.34	54.58
Gross Org. Revenue (Rs.)	Crores	11639.25	13554.37	15350.20	17588.33	17733.73	19023.67	19569.63	21426.08	20446.98	24663.40
Net Revenue per Train Km	Rs.	1330.91	1347.30	1303.19	1412.91	1349.11	1599.27	1552.88	1545.12	2071.14	1566.25
Working Expenses per TKM	Rs.	1067.24	1260.57	1386.70	1444.80	1570.03	1731.26	1708.57	1639.91	1862.25	1881.82
No. of Passenger Originating	Million	88.58	88.83	89.84	92.97	95.71	95.96	99.68	97.37	9.73	34.45
No. of Passenger Carried	No.	103.92	104.96	101.65	103.00	112.05	117.80	139.40	148.03	19.40	63.24
Passenger Kilometers (Carried)	Million	16732	18258	20141	21356	22915	24608	29246	31166	5860	17208
Avg. Revenue per PKM	Paise	50.57	53.76	57.33	58.34	57.00	57.35	51.66	48.43	65.59	65.94
Originating Loading (Rev.)	MT. Tonne	133.41	149.50	161.91	173.49	177.43	182.73	191.74	200.95	204.90	232.13
Originatin loading (Revenue + Non Revenue)	MT. Tonne	133.63	149.82	162.51	174.36	178.07	183.34	192.61	201.55	204.90	232.13
Freight Tonne (System)	MT. Tonne	181.52	200.26	211.61	227.93	248.00	256.16	263.26	278.16	301.93	323.08
NTKM (Rev.+Non Rev.) Booked Route/ RR based	Million	58984	63510	62746	64686	68426	77831	80666	85096	88302	100346
Revenue from Goods carried	Crores	9345.26	11087.96	11275.76	12152.68	13099.02	14954.33	15681.97	15690.32	16726.49	18338.72
Avg. Revenue per NTKM (Carried Traffic)	Paise	158.44	174.59	179.70	187.87	191.43	185.97	178.61	**191.46	**196.04	192.33

** - Revised.

PHOTO GALLERY



Celebration of RPF Raising Day on 07-10-21.



Inauguration Children's park by GM at BRGA during insp on 16_03_2022.



Inauguration of Green Gallery Park by G.M, ECoR during Annual Inspection Waltair Division on 28-02-22.



Inauguration of Crew and Guard locker room at TIG by GM.



Sri Rinkesh Ray, DRM/ KUR is receiving the "Eat Right Station" Certificate for Bhubneswar Rly Station on 23.12.21



Inauguration of Zonal Disaster Management Plan 2022 by AGM, Shri Sharad Kumar Srivastav on 30.03.22

PHOTO GALLERY



On Mahaparinirvan Diwas 06.12.2021, Shri Sudher Gupta, AGM is paying floral tribute to the Bharat Ratna Dr. B. R. Ambedkar



View of shields awarded to SBP Division.



Observation of Vigilance Awareness Week (26.10.2021 to 01.11.2021) in WAT division



Distribution of uniform to Coolie in SBP division by ECoWWO



In House Dialysis Unit has been inaugurated at DRH/WAT by DRM/WAT, ADRM in presence of Dr. M. K. Ramakrishna, CMS/WAT and other doctors on 29.01.2022.



Toy Train made by DLS/VSKP for Kalinga Museum.

EAST COAST RAILWAY DENSITY STATEMENT FOR THE YEAR 2021-22 KHURDA ROAD

Sl. No.	Section From - To	Route	Route KMs of Section	Whether the section is Single/ Double/ Triple line etc	Whether the section is Electric	Avarage Daily no. of Coaching train run on the Section		Avarage total Daily no. of vehicles (in terms of 8 wheelers) run on the Section		Avarage Daily no. of Goods train run on the Section		Avarage total Daily no. of Wgns (in terms of 8 wheelers) run on the Section		Net tonne KMs Per route km per day			Gross tonne KMs Per route km per day (incl Wt of Eng & dept.) for Goods incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching & Goods service Combined		AVERAGE NET LOAD PER GOODS TRAIN							
						UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	DIESEL		ELECTRIC	
																											UP	DN	UP	DN
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17														
1	RLJC-BHC	M/Line	5.05	DL	Elect.	39	38	783	761	23.19	22.17	1182.85	1122.64	32099	68306	100405	68417	102036	26190	25454	94607	127491	3057	3115	3057	3115				
2	BHC-JKPR	M/Line	51.39	DL	Elect.	40	40	805	805	27.80	29.79	1446.91	1567.90	47057	80696	127753	87248	121108	26926	26926	114174	148034	3245	3173	3245	3173				
3	JKPR-HDS	M/Line	23.53	TL	Elect.	41	44	821	846	35.40	36.89	1903.53	1948.38	79669	109328	188997	131538	159799	27461	28297	158999	188096	3431	3236	3431	3236				
4	HDS-NRG	M/Line	29.92	DL	Elect.	45	45	862	862	27.50	25.32	1470.19	1317.49	64005	71965	135970	103588	105985	28832	28832	132420	134818	3372	3210	3372	3210				
5	CTC-NRG	M/Line	10.69	DL	Elect.	52	50	924	894	41.04	43.93	2263.36	2423.17	69205	136227	205432	135049	202394	30906	29903	165955	232296	3189	3491	3189	3491				
6	CTC-BRAG	M/Line	11.41	DL	Elect.	54	50	962	900	15.72	17.42	772.99	856.94	37299	48148	85447	58720	71404	32177	30103	90897	101507	3129	3061	3129	3061				
7	BRAG-MCS	M/Line	9.51	DL	Elect.	58	57	1020	1008	26.89	25.56	1431.41	1310.41	74533	55852	130385	114425	93164	34117	33716	148543	126880	3327	3110	3327	3110				
8	MCS-BBS	M/Line	6.61	DL	Elect.	56	57	990	1008	26.91	25.58	1432.48	1311.83	73763	57393	131155	115421	95924	33114	33716	148535	129640	3335	3104	3335	3104				
9	BBS-KUR	M/Line	19.06	TL	Elect.	60	61	1032	3054	26.91	25.58	1432.48	1311.83	73763	57393	131155	111877	93167	34519	102151	146396	195318	3335	3104	3335	3104				
10	KUR-BAM	M/Line	146.79	DL	Elect.	33	36	662	720	29.25	27.26	1543.68	1402.75	78449	60410	138859	117867	97444	22143	24083	140010	121527	3348	3103	3348	3103				
11	BAM-PSA	M/Line	73.91	DL	Elect.	32	35	644	708	27.55	26.03	1444.13	1325.25	75368	57200	132568	112255	92346	21541	23681	133796	116027	3344	3057	3344	3057				
12	ANGL-TLHD	B/Line	12.00	SL	Elect.	21	21	388	388	20.00	17.50	1151.62	987.38	20928	54696	75625	55292	81451	12978	12978	68270	94429	3285	3520	3285	3520				
13	TLHD-BDPK	B/Line	6.62	SL	Elect.	22	22	400	400	7.52	11.41	401.67	624.88	20864	32869	53733	32541	51006	13379	13379	45921	64385	3291	3471	3291	3471				
14	TLHR-BDPK	B/Line	10.60	DL	Elect.	22	22	400	400	49.30	43.55	2927.80	2535.31	180074	1605	181679	258986	80620	13379	13379	272365	93999	3653	3648	3653	3648				
15	TLHR-TLHD	B/Line	5.90	SL	Elect.	22	22	400	400	6.09	12.48	362.56	741.32	21827	128	21956	32442	23284	13379	13379	45822	36664	3584	0	3584	3210				
16	KPJG-ANGL	B/Line	13.51	DL	Elect.	20	20	372	372	24.53	19.98	1399.68	1109.64	32484	62207	94691	73610	91897	12443	12443	86053	104339	3430	3452	3430	3452				
17	RJGR-SQQ	B/Line	22.97	DL	Elect.	14	14	254	254	36.75	37.29	2135.15	2202.71	129871	54953	184824	184303	118550	8496	8496	192798	127046	3596	3596	3596	3596				
18	SQQ-NRG	B/Line	2.56	DL	Elect.	9	9	195	195	28.25	28.01	1647.30	1655.10	101304	34538	135842	160284	88778	6522	6522	166806	95300	3619	3524	3619	3524				
19	KIS-SQQ	B/Line	4.30	DL	Elect.	5	5	59	59	11.48	8.49	678.75	481.88	29402	28183	57585	50534	43168	1973	1973	52508	45142	3712	3475	3712	3475				
20	RJGR-BRAG	B/Line	25.30	DL	Elect.	15	14	293	272	11.69	8.69	686.62	484.21	39032	8281	47314	56730	22594	9800	9098	66530	31692	3552	3422	3552	3422				
21	BDPK-RJGR	B/Line	61.91	DL	Elect.	22	22	400	400	51.91	56.91	3022.80	3324.01	180459	69205	249664	255449	165531	13379	13379	268828	178910	3588	3500	3588	3500				
22	CTC-PRDP	B/Line	82.92	DL	Elect.	5	5	48	48	31.50	26.95	1825.41	1576.39	104770	29659	134429	150282	75640	1606	1606	151887	77246	3638	3382	3638	3382				
23	MZY-RQP	B/Line	1.54	DL	Elect.	3	3	50	50	0.40	0.17	21.30	8.12	1348	514	1862	2305	897	1672	1672	3978	2570	3370	3210	3370	3210				
24	TMKA-SKND	B/Line	17.00	TL/SL	Elect.	3	3	44	44	14.40	14.29	847.76	821.87	52000	32227	84227	73967	55094	1472	1472	75439	56566	3678	3268	3678	3268				
25	SKND-JKPR	B/Line	7.39	DL	Elect.	3	3	44	44	15.99	15.81	952.05	895.40	57713	35565	93279	84578	61745	1472	1472	86050	63217	3728	3201	3728	3201				
26	SGDP-TMKA	B/Line	26.88	SL	Elect.	3	3	44	45	13.30	12.91	791.54	750.01	48533	33190	81723.34	68511	53378	1472	1505	69983	54883	3716	3535	3716	3535				
27	SGDP-PRNR	B/Line	89.92	DL	Elect.	3	3	44	46	13.06	13.30	758.83	791.68	33704	48533	82236.919	53695	67895	1472	1539	55167	69434	3537	3716	3537	3716				
28	NYG-PRNR	B/Line	14.02	SL	Elect.	2	2	32	32	12.46	12.71	738.95	729.95	45259	36143	81402.352	64651	55988	1070	1070	65722	57059	3707	3509	3707	3509				
29	SKND-JJKR	B/Line	15.24	SL	Elect.	0	0	0	0	1.38	1.90	79.76	113.69	3659	2696	6356	5820	6030	0	0	5820	6030	3588	3745	3588	3745				
30	DATR-TMKA	B/Line	8.00	SL	Elect.	0	0	0	0	1.15	1.27	67.48	73.83	4173	0	4173	6037	2310	0	0	6037	2310	3597	0	3597	0				
31	KUR-PURI	B/Line	43.55	DL	Elect.	37	35	666	622	0	0	0	0	0	0	0	0	0	22277	20805	22277	20805	0	0	0	0				
32	KUR-NUAGAON	B/Line	90.50	SL	Elect.	3	3	24	24	0	0	0	0	0	0	0	0	0	803	803	803	803	0	0	0	0				
33	TLHR-SUNAKHANI	B/Line	17.64	SL	Elect.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
34	HPGM-ARGL	B/Line	3.23	SL	Elect.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

EAST COAST RAILWAY
DENSITY STATEMENT FOR THE YEAR 2021-22

WALTAIR

Sl. No.	Section From - To	Route	Route KMs of Section	Whether the section is Single/ Double/ Triple line etc	Whether the section is Electric	Avarage Daily no. of Coaching train run on the Section		Avarage total Daily no. of vehicles (in terms of 8 wheelers) run on the Section		Avarage Daily no. of Goods train run on the Section		Avarage total Daily no. of Wgns(in terms of 8 wheelers) run on the Section		Net tonne KMs Per route km per day			Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Goods incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching & Goods service Combined		AVERAGE NET LOAD PER GOODS TRAIN			
						UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN
1	2	3	4	5	6	7		8		9		10		11		12	13		14		15		16		17	
1	PSA-NWP	M/Line	26.20	DL	Elect.	14.80	14.95	302.07	305.66	27.18	26.65	1440.50	1412.50	85333	55993	141326	123720	97153	31087	31456	154807	128609	3694	3461	3694	3461
2	NWP-VZM	M/Line	116.20	DL	Elect.	13.93	14.08	293.11	296.65	27.32	26.84	1448.00	1422.60	85989	56772	142761	123356	97392	30165	30529	153521	127920	3700	3468	3700	3468
3	VZM-KTV	M/Line	34.60	TL	Elect.	18.22	18.36	388.30	392.51	45.03	45.79	2386.70	2427.10	128262	123526	251788	192975	190242	39961	40394	232935	230636	3501	3595	3501	3595
4	KTV-SCMN	M/Line	16.80	QL	Elect.	18.93	19.07	393.03	396.28	56.27	54.93	2982.50	2911.10	168517	118127	286644	250722	203794	40448	40782	291169	244576	3520	3575	3520	3575
5	SCMN-GPT	M/Line	2.60	DL	Elect.	18.93	19.07	393.03	396.28	1.51	1.70	92.80	90.00	5151	4495	9647	8505	7731	40448	40782	48953	48513	0	0	4154	3842
6	VSKP-GPT	M/Line	6.52	DL	Elect.	39.68	39.55	841.38	838.60	0	0	0	0	0	0	0	0	0	86588	86302	86588	86302	0	0	0	0
7	GPT-DVD	B/Line	10.30	DL	Elect.	23.09	23.10	497.98	498.45	1.75	2.85	90.50	162.80	6302	692	6995	8769	6191	51248	51296	60017	57488	0	0	3643	3845
8	SCMN-DVD (By Pass)	B/Line	2.58	DL	Elect.	1.25	1.22	26.64	26.23	16.35	6.52	865.20	323.60	56962	15563	72524	88630	27196	2742	2699	91371	29895	0	0	3760	3398
9	SCMN-WMY	B/Line	8.25	SL,DL	Elect.	0	0	0	0	15.61	16.41	813.20	894.70	46164	49851	96014	69888	76035	0	0	69888	76035	4021	3963	4021	3963
10	SCMN-JGPM	B/Line	2.30	TSL	Elect.	0	0	0	0	20.51	18.78	1140.90	1055.90	78186	40335	118521	121788	78803	0	0	121788	78803	4098	4038	4098	4038
11	JGPM-DVD	B/Line	1.10	SL	Elect.	0	0	0	0	9.66	7.76	531.00	438.60	36080	4029	40109	64384	20155	0	0	64384	20155	0	0	3510	3731
12	VDPD-DVD	B/Line	2.60	SL	Elect.	0	0	0	0	3.54	7.61	175.50	414.10	12255	4138	16393	18687	18439	0	0	18687	18439	0	0	3200	3979
13	GPT-JGPM	B/Line	4.30	SL	Elect.	0	0	0	0	2.65	4.09	134.90	233.30	3650	1727	5377	8130	9639	0	0	8130	9639	3510	0	3510	3924
14	DVD-STDV	B/Line	12.00	SL	Elect.	0	0	0	0	6.51	6.51	384.00	384.00	27978	0	27978	38139	13125	0	0	38139	13125	4298	0	4298	0
15	GPT-WMY	B/Line	1.70	DL	Elect.	0	0	0	0	6.47	4.52	366.10	226.60	1894	9865	11760	14656	18902	0	0	14656	18902	3866	3723	3866	3723
16	JNCB-VSPS	B/Line	3.10	TSL, SL	Elect.	0	0	0	0	10.81	10.75	580.20	447.10	28787	13938	42725	48799	29308	0	0	48799	29308	4265	3441	4265	3441
17	VDPD-JNCB	B/Line	4.70	TSL	Elect.	0	0	0	0	20.66	17.34	1136.70	945.60	39585	46310	85894	76647	76536	0	0	76647	76536	3669	4091	3669	4091
18	JGPM-VDPD	B/Line	1.70	TL	Elect.	0	0	0	0	13.45	15.42	744.30	862.90	36379	35031	71410	66582	69111	0	0	66582	69111	3667	4156	3667	4156
19	KTV-KRPU	M/Line	189.10	SL, DL	Elect.	0.35	0.35	4.73	4.73	10.86	12.51	619.20	713.20	590	48444	49035	21671	65915	487	487	22158	66402	4215	3964	4215	3964
20	KRPU-JDB	M/Line	105.88	SL, DL	Elect.	1.62	1.62	19.10	19.09	10.97	12.63	636.10	732.70	2324	51126	53450	23740	68980	1966	1965	25705	70945	4304	0	4304	3856
21	JDB-KDRL	M/Line	149.81	SL, DL	Elect.	0.35	0.35	4.77	4.73	12.20	13.80	707.80	799.00	109	49049	49158	24287	69398	491	487	24778	69885	1366	0	1366	0
22	SPRD-VZM	M/Line	133.80	DL	Elect.	5.28	5.26	109.15	108.75	24.69	25.81	1333.30	1393.80	62885	84313	147198	99557	120019	11233	11192	110790	131211	3392	3617	3392	3617
23	SPRD-DJ-KRPU	M/Line	163.70	SL	Elect.	1.27	1.27	14.36	14.33	9.00	7.99	485.90	431.60	14914	28823	43738	29402	39477	1478	1475	30880	40952	4201	4347	4201	4347
24	NWP-GNPR	B/Line	90.20	SL	Elect.	0.87	0.87	8.96	9.01	0	0	0	0	0	0	0	0	0	922	927	922	927	0	0	0	0
25	BOBBILI-SALUR	B/Line	16.40	SL	Elect.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

EAST COAST RAILWAY
DENSITY STATEMENT FOR THE YEAR 2021-22
SAMBAL PUR

Sl. No.	Section From - To	Route	Route KMs of Section	Whether the section is Single/ Double/ Triple line etc	Whether the section is Electric	Avarage Daily no. of Coaching train run on the Section		Avarage total Daily no. of vehicles (in terms of 8 wheelers) run on the Section		Avarage Daily no. of Goods train run on the Section		Avarage total Daily no. of Wgns(in terms of 8 wheelers) run on the Section		Net tonne KMs Per route km per day			Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Goods incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching incl. Prop.of mixed		Gross tonne KMs Per route km per day (incl Wt of Eng & deptt) for Coaching & Goods service Combined		AVERAGE NET LOAD PER GOODS TRAIN			
						UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	TOTAL	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN
1	2	3	4	5	6	7		8		9		10		11		12	13		14		15		16		17	
1	JSG-JSGR	B/Line	0.63	DL	Elect.	7.87	7.87	157.37	157.37	11.48	8.53	587.10	392.09	30959	15782	46741	71036	39002	10158	10158	81193	49160	2338	1818	2338	1818
2	IB-JSGR	B/Line	0.96	SL	Elect.	1.64	1.64	32.71	32.71	15.67	14.21	791.45	668.22	43044	24931	67975	85532	55849	2111	2111	87643	57961	4374	4269	4374	4269
3	JSGR-SBP	B/Line	46.54	DL	Elect.	7.91	7.91	158.19	158.19	38.83	32.78	1997.20	1630.33	87943	73538	161481	138490	114611	10211	10211	148700	124822	3181	2953	3181	2953
4	SBP-HKG	B/Line	7.25	SL	Elect.	7.08	7.08	134.56	134.56	16.39	16.37	796.78	748.63	29327	34691	64017	51931	55598	8685	8685	60616	64284	1568	1431	1568	1431
5	HKG-DOBH	B/Line	23.26	DL	Elect.	7.08	7.08	134.56	134.56	16.39	16.37	796.78	748.63	29242	34691	63932	50374	53848	8685	8685	59059	62533	1564	1431	1564	1431
6	DOBH-BRPL	B/Line	30.89	SL	Elect.	7.08	7.08	134.56	134.56	16.22	16.29	788.53	745.57	29027	34517	63544	49768	53404	8685	8685	58453	62090	3114	2855	3114	2855
7	BRPL-BUDM	B/Line	100.10	DL	Elect.	7.08	7.08	134.56	134.56	15.27	14.91	747.64	681.31	28851	31278	60129	48037	48192	8685	8685	56722	56878	3126	2875	3126	2875
8	BUDM-TIG	B/Line	20.04	SL	Elect.	7.68	7.68	146.01	146.01	15.17	14.45	743.47	664.07	28615	30360	58975	48310	47504	9424	9424	57734	56929	3134	2900	3134	2900
9	BLGR-BHPI	B/Line	14.58	SL	Elect.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	TIG-KSNG	B/Line	12.96	DL	Elect.	7.99	7.99	151.74	151.74	32.07	31.15	1578.27	1601.92	59353	82685	142037	102151	124361	9794	9794	111945	134155	2856	3080	2856	3080
11	KSNG-RPRD	B/Line	16.17	DL	Elect.	7.99	7.99	151.74	151.74	32.00	31.13	1575.21	1601.32	59180	82651	141830	101417	123639	9794	9794	111212	133433	2859	3078	2859	3078
12	RPRD-SPRD	B/Line	95.32	DL	Elect.	8.95	8.95	169.96	169.96	36.62	35.51	1580.49	1856.10	59478	96838	156317	100225	141614	10970	10970	111195	152585	2857	3109	2857	3109
13	TIG-BLSN	B/Line	157.83	DL	Elect.	5.16	5.16	103.29	103.29	15.31	19.46	673.51	956.39	28860	52285	81144	45759	74969	6667	6667	52426	81636	1684	4034	1684	4034
14	BLSN-LAE	B/Line	14.96	DL	Elect.	5.16	5.16	103.29	103.29	15.31	19.35	673.51	956.39	28860	52285	81144	46687	76651	6667	6667	53354	83318	1686	3778	1686	3778
15	SBP-RAIR	B/Line	70.91	SL	Elect.	6.20	6.20	123.95	123.95	20.16	15.95	1017.82	741.61	32431	38976	71406	59403	56908	8000	8000	67404	64909	3020	2933	3020	2933
16	RAIR-KPJG	B/Line	71.79	DL	Elect.	6.20	6.20	123.95	123.95	20.03	16.04	1012.54	742.84	32131	38977	71109	58976	56943	8000	8000	66976	64944	3028	2922	3028	2922
17	LJR-JNRD	B/Line	54.30	SL	Elect.	0.96	0.96	14.38	14.38	1.15	1.15	23.93	23.93	346	1007	1354	1028	1616	928	928	1956	2545	1649	3053	1649	0

*Route Km. of by pass section is SBPY to SLRA which is 0.984 KM. has not been accounted in this statement.

EAST COAST RAILWAY DENSITY CHART 2021-2022



	60.JSG-JSGR 0.63 Km	61.IB-JSGR 0.96 Km	62.JSGR-SBP 46.54 Km	63.SBP-HKG 7.25 Km	64.HKG-DOBH 23.26 Km	65.DOBH-BRPL 30.89 Km	66.BRPL-BUDM 100.10 Km	67.BUDM-TIG 20.04 Km	68.BLGR-BHPI 14.58 Km	69.TIG-KSNG 12.96 Km	70.KSNG-RPRD 16.17 Km
UP											
PASS.TRAIN:	7.87	1.64	7.91	7.08	7.08	7.08	7.08	7.99	7.99	7.99	7.99
VEHICLE:	157.37	32.71	158.19	134.56	134.56	134.56	146.01	151.74	151.74	151.74	151.74
GDS.TRAIN:	11.48	15.67	38.83	16.39	16.39	15.27	15.17	32.07	32.00	32.00	32.00
WAGON:	587.10	791.45	1997.20	796.78	796.78	788.53	747.64	1578.27	1575.21	1575.21	1575.21
NTKM:	30959	43044	87943	29927	29927	29927	28851	59553	59553	59553	59553
DN											
PASS.TRAIN:	7.87	1.64	7.91	7.08	7.08	7.08	7.08	7.99	7.99	7.99	7.99
VEHICLE:	157.37	32.71	158.19	134.56	134.56	134.56	146.01	151.74	151.74	151.74	151.74
GDS.TRAIN:	11.48	15.67	38.83	16.39	16.39	15.27	15.17	32.07	32.00	32.00	32.00
WAGON:	587.10	791.45	1997.20	796.78	796.78	788.53	747.64	1578.27	1575.21	1575.21	1575.21
NTKM:	30959	43044	87943	29927	29927	29927	28851	59553	59553	59553	59553

	71.RPRD-SPRD 95.32 Km	72.TIG-BLSN 157.83 Km	73.BLSN-LAE 14.96 Km	74.SBP-RAIR 70.91 Km	75.RAIR-KPJG 71.79 Km	76.LJR-JNRD 54.30 Km
UP						
PASS.TRAIN:	8.95	5.16	5.16	6.20	6.20	0.96
VEHICLE:	169.96	103.29	103.29	123.95	123.95	14.38
GDS.TRAIN:	36.62	15.31	15.31	20.03	20.03	1.15
WAGON:	1580.49	673.51	673.51	1017.82	1012.54	23.93
NTKM:	59478	28860	28860	32431	32131	346
DN						
PASS.TRAIN:	8.95	5.16	5.16	6.20	6.20	0.96
VEHICLE:	169.96	103.29	103.29	123.95	123.95	14.38
GDS.TRAIN:	36.62	15.31	15.31	20.03	20.03	1.15
WAGON:	1580.49	673.51	673.51	1017.82	1012.54	23.93
NTKM:	59478	28860	28860	32431	32131	346

	53.KTV-KRPJ 189.10 Km	54.KRPJ-JDB 105.88 Km	55.JDB-KRDL 149.81 Km	56.SPRD-VZM 133.80 Km	57.SPRD-DJ-KRPJ 163.70 Km	58.NWP-GNPR 90.20 Km	59.VBL-SALR 16.40 Km
UP							
PASS.TRAIN:	0.35	1.62	0.35	5.28	1.27	0.87	0
VEHICLE:	4.73	19.10	4.77	109.15	14.36	8.96	0
GDS.TRAIN:	10.86	10.97	12.2	24.69	9.00	0	0
WAGON:	619.20	636.10	707.80	1333.30	485.9	0	0
NTKM:	590	2324	109	62885	14914	0	0
DN							
PASS.TRAIN:	0.35	1.62	0.35	5.26	1.27	0.87	0
VEHICLE:	4.73	19.09	4.73	108.75	14.33	9.01	0
GDS.TRAIN:	12.51	12.63	13.80	25.81	7.99	0	0
WAGON:	713.20	732.70	799.00	1393.80	431.6	0	0
NTKM:	48444	51126	49048	84313	28823	0	0

	44.SCMN-JGPM 2.30 Km	45.JGPM-DVD 1.10 Km	46.VDPD-DVD 2.60 Km	47.GPT-JGPM 4.30 Km	48.DVD-STDV 12.00 Km	49.GPT-WMY 1.70 Km	50.JNCB-VSPS 3.10 Km	51.VDPD-JNCB 4.70 Km	52.JGPM-VDPD 1.70 Km
UP									
PASS.TRAIN:	0	0	0	0	0	0	0	0	0
VEHICLE:	0	0	0	0	0	0	0	0	0
GDS.TRAIN:	20.51	9.66	3.54	2.65	6.51	6.47	10.81	20.66	13.45
WAGON:	1140.90	531.00	175.50	134.90	384.00	366.10	580.20	1136.70	744.30
NTKM:	78186	36080	12255	3650	27978	1894	28787	39585	36379
DN									
PASS.TRAIN:	0	0	0	0	0	0	0	0	0
VEHICLE:	0	0	0	0	0	0	0	0	0
GDS.TRAIN:	18.78	7.76	7.61	4.09	6.51	4.52	10.75	17.34	15.42
WAGON:	1055.90	438.60	414.10	233.30	384.00	226.60	447.10	945.60	862.90
NTKM:	40335	4029	4138	1727	9865	13938	46310	35031	35031

	35.PSA-NWP 26.20 Km	36.NWP-VZM 116.20 Km	37.VZM-KTV 34.60 Km	38.KTV-SCMN 16.80 Km	39.SCMN-GPT 2.60 Km	40.VSKP-GPT 6.52 Km	41.GPT-DVD 10.30 Km	42.SCMN-DVD 2.58 Km	43.SCMN-WMY 8.25 Km
UP									
PASS.TRAIN:	14.80	13.93	18.22	18.93	18.93	39.68	23.09	1.25	0
VEHICLE:	302.07	293.11	388.30	393.03	393.03	841.38	497.98	26.64	0
GDS.TRAIN:	27.18	27.32	45.03	56.27	1.51	0.00	1.75	16.35	15.61
WAGON:	1440.50	1448.00	2386.70	2982.50	92.80	90.50	865.20	813.20	813.20
NTKM:	85333	85989	128262	168517	5151	0	6302	56962	46164
DN									
PASS.TRAIN:	14.95	14.08	18.36	19.07	19.07	39.55	23.10	1.22	0
VEHICLE:	305.66	296.65	392.51	396.28	396.28	838.6	488.45	26.23	0
GDS.TRAIN:	26.65	26.64	45.79	54.93	1.7	6.52	2.85	16.41	0
WAGON:	1412.5	1422.6	2427.1	2911.1	90.00	162.80	323.60	894.70	894.70
NTKM:	55993	56772	123526	118127	4495	0	692	15563	48851



	1.RLIC-BHC 5.05 Km	2.BHC-JKPR 51.39 Km	3.JKPR-HDS 23.53 Km
UP			
PASS.TRAIN:	39	40	41
VEHICLE:	783	805	821
GDS.TRAIN:	23.19	27.80	35.40
WAGON:	1182.85	1446.91	1903.53
NTKM:	32099	47057	79669
DN			
PASS.TRAIN:	38	40	44
VEHICLE:	761	805	846
GDS.TRAIN:	22.17	29.79	36.89
WAGON:	1122.64	1567.90	1948.38
NTKM:	68306	80696	109328

	4.HDS-NRG 29.92 Km	5.CTC-NRG 10.69 Km	6.CTC-BRAG 11.41 Km	7.BRAG-MCS 9.51 Km	8.MCS-BBS 6.61 Km	9.BBS-KUR 19.06 Km
UP						
PASS.TRAIN:	45	52	54	58	56	60
VEHICLE:	862	924	962	1020	990	1032
GDS.TRAIN:	27.50	41.04	15.72	26.89	26.91	26.91
WAGON:	1470.19	2263.36	772.99	1431.41	1432.48	1432.48
NTKM:	64005	69205	37299	74533	73763	73763
DN						
PASS.TRAIN:	45	50	50	57	57	61
VEHICLE:	862	894	900	1008	1008	1054
GDS.TRAIN:	25.32	43.93	17.42	25.56	25.58	25.58
WAGON:	1317.49	2423.17	856.94	1310.41	1311.83	1311.83
NTKM:	71965	136227	48148	55852	57393	57393

	10.KUR-BAM 146.8 Km	11.BAM-PSA 73.91 Km	12.ANGL-TLHD 12.00 Km	13.TLHD-BDPK 6.62 Km	14.TLHR-BDPK 10.60 Km	15.TLHR-TLHD 10.60 Km	16.KPJG-ANGL 13.51 Km
UP							
PASS.TRAIN:	33	32	21	22	22	22	20
VEHICLE:	662	644	388	400	400	400	372
GDS.TRAIN:	29.25	27.55	20.00	7.52	49.30	6.09	24.53
WAGON:	1543.68	1444.13	1151.62	401.67	2927.80	362.56	1399.68
NTKM:	78449	75368	20928	20864	180074	21827	32484
DN							
PASS.TRAIN:	36	35	21	22	22	22	20
VEHICLE:	720	708	388	400	400	400	372
GDS.TRAIN:	27.26	26.03	17.60	11.41	43.95	12.40	19.90
WAGON:	1402.75	1325.25	887.38	634.88	2535.31	741.32	1109.64
NTKM:	60410	57200	54646	32869	1605	128	62287

	17.RIGR-SQJ 22.97 Km	18.SQJ-NRG 2.56 Km	19.KIS-SQJ 4.30 Km	20.RIGR-BRAG 25.30 Km	21.BDPK-RIGR 61.91 Km	22.CTC-PRDP 82.92 Km	23.MZY-RQP 1.54 Km	24.TMKA-SKND 17.00 Km	25.SKND-KPR 7.39 Km
UP									
PASS.TRAIN:	14	9	5	15	22	5	3	3	3
VEHICLE:	254	195	59	299	400	48	50	44	44
GDS.TRAIN:	36.75	28.25	11.48	11.69	51.91	31.50	0.40	14.40	15.99
WAGON:	2195.15	1647.30	678.75	686.62	3022.80	1825.41	21.30	847.76	952.05
NTKM:	129871	101304	29402	39032	180459	104770	1348	52000	57713
DN									
PASS.TRAIN:	14	9	5	14	22	5	3	3	3
VEHICLE:	254	195	59	272	400	48	50	44	44
GDS.TRAIN:	37.29	28.01	8.49	8.69	56.91	26.95	0.17	14.29	15.81
WAGON:	2202.71	1655.10	481.88	484.21	3324.01	1576.39	8.12	821.87	895.40
NTKM:	54953	34538	28183	8281	69205	29659	514	32227	35565

	26.SGDP-TMKA 26.88 Km	27.SGDP-PNR 89.92 Km	28.NYG-PNR 14.02 Km	29.SKND-JKPR 15.24 Km	30.DATR-TMKA 8.00 Km	31.KUR-PURI 43.55 Km	32.KUR-NXNR 90.50 Km	33.TLHR-SUNAKHANI 17.64 Km	34.HPGM-ARGL 3.23 Km
UP									
PASS.TRAIN:	3	3	2	0	0	37	3	0	0
VEHICLE:	44	44	32	0	0	666	24	0	0
GDS.TRAIN:	13.30	1306	12.46	1.38	1.15	0	0	0	0
WAGON:	791.54	758.83	738.95	79.76	67.48	0	0	0	0
NTKM:	48533	33704	45259	3659	4173	0	0	0	0
DN									
PASS.TRAIN:	3	3	2	0	0	35	3	0	0
VEHICLE:	45	46	32	0	0	622	24	0	0
GDS.TRAIN:	12.91	13.30	12.71	1.90	1.27	0	0	0	0
WAGON:	750.01	791.68	729.95	113.69	73.83	0	0	0	0
NTKM:	33190	48533	36143	2696	0	0	0	0	0

REFERENCE

AVERAGE DAILY NUMBER OF COACHING TRAINS RUN ON THE SECTION : PASS.TRAIN

AVERAGE DAILY NUMBER OF VEHICLES IN TERMS OF S-WHEELERS ON THE SECTION : VEHICLE

AVERAGE DAILY NUMBER OF GOODS TRAIN RUN ON THE SECTION : GDS.TRAIN

AVERAGE DAILY NUMBER OF WAGONS IN TERMS OF S-WHEELERS ON THE SECTION : WAGON

NET TONNE KILOMETRE PER ROUTE KILOMETRE PER DAY : NTKM

KHURDA ROAD
SAMBALPUR
WALTAIR

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