Highlights on Achievements of Southern Railway

During the current year 2022-23, Southern Railway has registered tremendous improvements on all fronts namely Safety, Punctuality, Earnings, Loading, Project Commissioning, Station Development and Passenger Amenities.

In the current year 2022-23 (upto Jan 2023), Southern Railway has witnessed excellent growth of 46.45% in Gross earnings as compared to 2021-22 (up to Jan'2022). In Freight Loading, Southern Railway has registered 28% increase over the last year. The punctuality of 93.0% has surpassed the Railway Board's target of 92%.

Infrastructure Projects:

In augmenting infrastructure for improved efficiency and speed of freight and passenger trains, Southern Railway has augmented its network by commissioning 111.8 kms of Doubling and Gauge Conversion works so far, as against 35.47 Kms done during 2021-22, which is a 250% increase.

- Madurai-Teni (75 kms) newly gauge converted section was opened to passenger traffic on 26.05.2022. Further, Teni-Bodinayakanur (15 Kms) was gauge converted and commissioned on 29/12/2022.
- ➤ Tiruturaipundi Agastiyampalli (37.26 kms) newly gauge converted section was opened to passenger traffic on 27.10.2022.
- ➤ Madurai Tirumanagalam (17.32 Kms) doubling, Salem Omalur (11 Kms) doubling, and Nanguneri-Valliyur-Aralvaymoli (32.30 kms) doubling projects were commissioned in 2022-23.
- ➤ Nanguneri Melappalayam (24.50 Kms) doubling and Milavittan-Tuticorin (7.7 Kms) doubling will be commissioned by March'2023.
- As a part of Mission 100% electrification, 188 Route Km were electrified in 2022-23 [Palani Dindigul (56 Kms), Nagapattinam Velanganni (10 Kms), Karaikudi-Mannargudi (61 Kms), Tirunelveli Tiruchendur (62 Kms)].

➤ Electrification of Virudunagar-Rajapalayam-Tenkasi, Tirunelveli-Sengottai, Sengottai-Bhagavathipuram, Punalur- Edaman sections are going to be commissioned by March'2023.

To improve mobility, Southern Railway has enhanced the speed of trains over 743 Route kms during this year as against 137 Route Kms done in 2021-22.

- ➤ The section speed of the Chennai Central Gudur (134.3Km length) UP & DN line sections has been increased to 130 kmph and sanction of CRS has been received for enhancing the sectional speed of Chennai- Renigunta section (133.6 Km)
- ➤ Further, the section speed of Arakkonam Jolarpettai (144.54km Length) section is likely to be increased to 130kmph by June'2023.

Station Redevelopment:

For redevelopment of important stations to world class standards with modern facilities, contracts for the following nine stations have been awarded by Southern Railway.

SI. No	Station Name	State	Likely Date of
			Completion
1	Chennai Egmore	Tamil Nadu	December 2025
2	Katpadi	Tamil Nadu	December 2025
3	Ernakulam Jn	Kerala	July 2024
4	Kollam Jn	Kerala	November 2025
5	Kanniyakumari	Tamil Nadu	August 2024
6	Ernakulam Town	Kerala	August 2025
7	Puducherry	Puducherry	November 2024
8	Madurai Jn	Tamil Nadu	November 2025
9	Rameswaram	Tamil Nadu	April 2024

Further, following 12 stations are under Techno-economic feasibility study.

SI.No.	Station Name	SI.No.	Station Name
1	Chengannur	7	Avadi
2	Thrissur	8	Coimbatore Jn.
3	Kumbakonam	9	Kozhikkode
4	Tirunelveli Jn	10	Mangalore Central
5	Tambaram	11	Varkala Shivagiri
6	Chennai Central	12	Thiruvananthapuram Central

Amrit Bharat Station Scheme:

Amrit Bharat Station Scheme envisages upgradation/renovation of stations on a continuous basis with a long-term vision. 15 stations under each Division, with total of 90 stations in SR covering 6 Divisions have been identified under Amrit Bharat Station scheme. Developmental works planned at these Stations are under process of sanction & tendering on fast track and targeted to be completed by Mar'2024.

The list of stations under Amrit Bharat Station Scheme is as follows:

Division	No. of Stations Identified	Station Name
		Chennai Beach, Tiruvallur, Arakkonam Jn., Chengalpattu
MAS	15	Jn., Guindy, Perambur, Ambattur, Mambalam, Chennai
IVIAG	13	Park, St.Thomas Mount, Guduvancheri, Tiruttani,
		Jolarpettai, Gummidipoondi & Sullurpeta.
		Salem, Tiruppur, Erode, Karur, Mettupalayam,
SA	15	Udagamandalam, Coonoor, Morappur, Podanur, Bommidi,
J SA	15	Tirupattur, Chinna Salem, Samalpatti, Namakkal &
		Coimbatore North.
		Shoranur Jn., Thalassery, Kuttipuram, Ottappalam,
PGT	15	Pollachi, Tirur, Vadakara, Payyanur, Nilambur Road,
PGI	15	Kasargod, Mangalore Jn., Mahe, Parappanangadi, Ferok &
		Angadippuram.

TVC	15	Wadakancheri, Nagercoil Jn., Guruvayur, Alappuzha, Thiruvalla, Chirayinkil, Ettumanur, Kayankulam, Tirupunithura, Chalakudi, Angamalli for Kaladi,
		Changanaseri, Neyyattinkara, Kulitturai & Mavelikara.
		Thanjavur Jn., Villupuram Jn., Mayiladuthurai Jn., Ariyalur,
TPJ	15	Chidambaram, Karaikal, Mannargudi, Lalgudi, Srirangam,
		Polur, Tirupadirippuliyur, Tiruvannamalai, Tiruvarur Jn.,
		Vellore Cantonment & Vriddhachalam Jn.
		Palani, Tiruchendur, Ambasamudram, Virudhunagar,
MDU	15	Punalur, Sholavandan, Tenkasi, Srivilliputhur, Karaikkudi,
INDO	15	Kovilpatti, Manapparai, Pudukkottai, Ramanathapuram,
		Rajapalayam & Paramakudi.
TOTAL	90	

Other Major Highlights:

- First Vande-Bharat train was introduced in South India from 12.11.2022 between Chennai, Bengaluru and Mysuru.
- > Southern Railway has provided LHB rakes to 16 trains in place of ICF rakes.
- As part of Mission 100% Railway Electrification, 188 Route km was electrified in S.Rly in 2022. With this, 87% of route km in SR has got electrified totaling 4393 electrified Rkm up to 31.12.2022.

Punctuality & resumption of train services:

- Punctuality of SR for the year 2022-2023 up to Jan 2023 is 93.0% against the Railway Board target of 92.0%.
- All the Mail/Express and Passenger trains over Southern Railway have been resumed to Pre-COVID level.

Introduction of New Trains:

4 pairs of new trains were introduced during 2022-23, including the prestigious Vande Bharat express to Mysore. Details are as under:

1. Train No.06701/06702 Madurai-Teni unreserved express Special.

- 2. Train No.40203/40204 Tambaram-Chengalpattu EMU service.
- 3. Train No.16309/16310 Ernakulam-Kayankulam Express.
- 4. Train No.20607/20608 Chennai Central-Mysuru Vande Bharat Express.

Special trains:

A total of 392 Special trains were operated during 2022-2023 to various destinations.

Speeding up of trains:

➤ 38 express trains were speeded up and 2 passenger trains were upgraded to express category during 2022-2023.

Additional stoppages:

- Papanasam station for Train No.16105/16106 Chennai Egmore-Tiruchendur Express.
- > Samalpatti station for Train No.12679/12680 Chennai Central-Coimbatore Express.

Augmentation of coaches:

➤ 43 Pairs of trains were augmented with 96 Coaches during 2022-2023.

Conversion to LHB:

Twelve (12) pairs of IRS Mail/Express trains were replaced with LHB rakes during 2022-2023.

Safety and security:

Southern Railway is a largely passenger oriented railway and therefore we accord highest priority to the safety and security of passengers. Because of the sincere efforts of all the Railway men on Southern Railway, during current the year, there were no train accidents. Southern Railway has taken a novel initiative by compiling a booklet named "Lessons Learnt from Past Accidents" which contains case studies of select accidents occurred in the past over the Indian Railways. This book would be highly useful for all the ground staff. Further, lot of new innovative ideas have also been implemented, some of which I would like to mention.

➤ Hot Axle Box Detection systems have been installed at 44 locations in S.Rly which is the highest among all Zonal Railways to detect the Hot Axles and prevents accidents.

- Frack Maintenance work carried out during 2022-23 (up to Jan 2023) achieving highest ever progress in the area of Tamping of track, Points & Crossings, Deep screening of plain track and points & crossings with Ballast Cleaning Machine and other track works.
- Further, 30 nos. of Road over bridges, Road under bridges and Limited height subways, 87 nos. of bridges have been completed and 23 nos of Manned LCs are eliminated up to Jan 23.
- ➤ In the year 2022-2023, 43 LC gates have been interlocked thereby increasing the safety at level crossing gate.
- > State of the art Electronic Interlocking System conforming to latest international safety standard has been provided at 21 stations in the year 2022-23, thereby enhancing Reliability of Signalling assets.
- ➤ During the year 2022-23, 634 offenders were arrested with the recovery of railway property and 88 persons were arrested with seizure of Hawala Money, Gold/Silver worth Rs.33 crores.
- A total of 2,205 runaway children were rescued and handed over to the concerned authorities and 62 life saving act done by RPF/S.Rly.
- ➤ Contraband articles and belongings of passengers worth Rs. 24.00 crores have been seized. 54,261 Offenders were arrested and prosecuted under various section of Railway Act with realization of fine Rs.2.26 crores.
- ➤ 416 touts were arrested with seizure of railway e-tickets valued Rs.1.40 crores. By way of vigilance checks on re-weighment, Rs.2.15 crores has been recovered.

Passenger amenities:

As part of passenger amenities, the work of 25 Foot over Bridges, Raising of 21 platforms at 17 stations, Extension of 12 platforms, 19 lifts have been completed this financial year till Jan '2023

Energy conservation:

SR has installed roof top solar plants of 5.13 MWp. Energy generated through solar plants for the year 2022-23 (up to Jan.'22) is 4.272 million units, which amounts to a savings of Rs.1.9 Crores. Total energy generated so far through Wind mills is 103.62 million units feeding to traction services, which amounts to a savings of Rs.55.45 crores.

Profiles of Southern Railway

State-wise Route / Running Track kms

State / UT		Route km						
	BG	MG	Total					
TAMIL NADU	3806.10	45.88	3851.98					
ANDHRA PRADESH	120.85	0	120.85					
KERALA	1047.49	0	1047.49					
KARNATAKA	45.14	0	45.14					
PUDUCHERRY	21.23	0	21.23					
Total	5040.81	45.88	5086.69					

Division-wise Route km

Division	Route km					
Division	BG	MG	Total			
CHENNAI	700.33	0	700.33			
SALEM	810.82	45.88	856.7			
PALAKKAD	580.58	0	580.58			
THIRUVANANTHAPURAM	626.79	0	626.79			
TIRUCHCHIRAPPALLI	1027.68	0	1027.68			
MADURAI	1294.61	0	1294.61			
Total	5040.81	45.88	5086.69			

Electrification

	Completed	In Progress
Route km	4392	405

Rolling Stock Holding

	BG	MG
Passenger coaches	7463	47 (NMR)
Average wagon holding	7810	-

^{* -} NMR type

Locomotives

	BG	MG	Total
Diesel Loco	315	05	320
Diesel Power Car (DPC)	29	-	29
Electrical	598	-	598
Steam Loco	-	9	9
Total	942	14	956

No. of stations

Category	NSG 1	NSG 2	NSG 3	NSG 4	NSG 5	NSG 6	SG 1	SG 2	SG 3	HG 1	HG 2	HG 3	Total
No. of stations	3	11	32	34	99	307	1	3	71	11	72	83	727

Average no. of trains/day

	Suburban	Mail/Express	Passenger	MRTS	Total
BG	557	330	298	80	1265
MG	-	-	8	-	8

Passenger Reservation System

Region	TN	KL	KAR	AP	Union Territory	Total
PRS-RH	33	32	1	1	1	68
PRS-NRH	34	25	0	1	0	60
YTSK	4	2	0	0	0	6
IUTS	143	59	0	4	2	208
UTS	278	81	3	11	1	374
JTBS (Terminals)	22	32	0	0	0	54
STBA	68	30	1	1	0	100
ATVM (Location)	41	18	1	1	0	61

Originating Loading

(in million tonnes)

2017-18	2018-19	2019-20	2020-21 2021-22 April-January		2020-21	April-January		%var.
					2021-22	2022-23		
29.533	35.933	31.959	26.886	30.544	24.681	30.562	24.3 %	

Originating No. of Passengers

(In Millions)

	2017-18	2018-19	2019-20	2020-21	2021-22	April- January		%Var
	2017-10	2010-19	2019-20	2020-21	2021-22	2021-22	2022-23	/0 v ai
Suburban	401.72	410.49	383.65	56.07	181.94	138.62	250.12	80.4
Non-Sub	412.60	427.20	416.39	42.01	157.83	117.40	278.37	137.1
Total	814.32	837.69	800.04	98.08	339.77	256.02	528.49	106.4

Originating Earnings

Particulars	2017-18	2018-19	2019-20	2020-21	2021-22	April- January		Vari
T di libulato	2011 10	2010 10	2010 20	1020 21		2021-22	2022-23	%
Originating	8081.75	9055.04	8571.41	3814.76	7275.03	5644.23	9037.77	60%
Earnings								

Apportioned Earnings

(in crs)

Particulars	2017-18	2018-19	2019-20	2020-21	2021-22	April- January		Vari
latticulars	2017-10	2010-13	2013-20	2020-21		2021-22	2022-23	%
Apportioned	7669.99	8464.11	8189.02	4026.43	7093.58	5563.08	8147.25	46.5%
Earnings	7003.33	0404.11	0103.02	4020.43	7033.30	3303.00	0147.23	40.376

Expenditure NET

(In crores)

Working Expenses	2019-20 2020-2		2021-22	April- J	Vari	
Working Expenses	2019-20	2020-21	2021-22	2021-22	2022-23	%
(F) Total Working						
Expenses (Without	11943.69	8803.63	13426.39	11271.28	12817.58	13.72
Suspense)						

Operating Ratio shown in %

Particulars	2019-20	2020-21	2021-22	April- J	Variation	
l articulars	2013-20	2020-21	2021-22	2021-22	2022-23	Variation
Operating						
Ratio	145.85	218.65	189.28	202.62	157.32	-22.36
(F/A x 100)						

Passenger Amenities

(In crores)

Particulars	2017-18	2018-19	2019-20	2020-21	2021-22	April to January 2022-23
Budget Grant (for the year)	73.96	164.50	264.22	198.11	224.57	417.40
Actual Expenditure	102	57.56	114.44	204.71	154.34	108.34

Safety

Category		2018-19	2019-20	2020-21	2021-22	2022 (Apr - Jan)
No. accidents	of	5	1	1	0	0

Appointment on Compassionate Ground

No. of appointments made during 2020-21	255
No. of appointments made during 2021-22	375
No. of appointments made from 01.04.2022 to 31.01.2023	293
No. of CGA requests pending as on 31.01.2023	58
