महा प्रबंधक की वार्षिक रिपोर्ट

General Manager's

ANNUAL REPORT

2016—2017

दक्षिण रेलवे/SOUTHERN RAILWAY

प्रधान कार्यालय/Headquarters Office,
सामान्य शाखा/General Branch,
चेन्नै/Chennai-600 003.

मार्च/March –2019

शक/Saka–1937

सचिव (सांख्यिकी)/The Secretary (Stat.),
रेलवे बोर्ड/Railway Board,
नई दिल्ली/New Delhi.

मैं, 31 मार्च 2017 को समाप्त अवधि के लिए दक्षिण रेलवे प्रणाली के कार्य संबंधी रिपोर्ट इसके साथ अग्रेषित करता हूँ ।

I forward herewith my report on the working of the Southern Railway System for the year ended 31st March 2017.

वशिष्ट जोहरी
VASHISHTA JOHRI
महा प्रबंधक/GENERAL MANAGER

विषय-वस्तु/CONTENTS

शब्दावली/**GLOSSARY OF TERMS**

परिचालन संबंधी विशिष्टताएं/**HIGHLIGHTS OF OPERATIONS**

अध्याय/CHAPTER I—सामान्य समीक्षा/**GENERAL REVIEW** 1

General economic conditions; Review of working; Publicity and Public Relations; Vigilance Organisation; General Manager's Inspection.

अध्याय/CHAPTER II—राजभाषा में प्रगति/**PROGRESS OF HINDI** **22**

Hindi Training; Progressive use of Hindi for Official purposes; Implementation .. .. ..

अध्याय/CHAPTER III—वित्तीय परिणाम/**FINANCIAL RESULTS** **24**

Financial Results of working; Capital-at-charge; Source of funds; Balance Sheet; Works expenditure; Correlation of expenditure to performance.

अध्याय/CHAPTER IV—नए निर्माण एवं इंजीनियरी कार्य **36**
NEW CONSTRUCTION AND ENGINEERING WORKS

Lines under construction; Surveys; Open line improvement works; Permanent Way Renewals and welding of rails joints; Block renewals; Damages by natural causes; Staff Amenities; Level crossings; Bad banks; Waterways; Tunnels and Land Management.

अध्याय/CHAPTER V—परिवहन /**TRANSPORTATION** **91**

General description; Volume of traffic; Operating efficiency; Originating tonnage; Loading Export traffic; Goods train running; Parcels and Goods traffic in smalls; Re-organisation of traffic; Wagons position and usage; Trans-shipment points; Engine usage; Water supply; Punctuality; Special trains; Alarm chain pulling; Changes in the train service; Overseas tourist traffic; Overcrowding; Fuel consumption, Input and Output ratio.

अध्याय/CHAPTER VI—वाणिज्य/**COMMERCIAL** **97**

Revision of Fares; Concessions; Introduction and cancellation of station-to-station rate; Claims statistics; Claims prevention measures; Ticketless travel; Road competition.

अध्याय/CHAPTER VII—यांत्रिक इंजीनियरी/**MECHANICAL ENGINEERING** **105**

Stock on line; Additions and Renewals; Locomotives on line with their tractive efforts ; Coaching Vehicles and seating capacity; Goods Vehicles and carrying capacity; Rail cars; Travelling cranes ; Rolling Stock by age group; Overaged Rolling stock on line; Rolling stock under or awaiting repairs; Rolling stock turned out after repairs from workshops; Locomotives; Coaches and wagons overdue repairs; Engine failure; Hot boxes; Diesel loco outage.

अध्याय/CHAPTER VIII—बिजली इंजीनियरी/**ELECTRICAL ENGINEERING** **114**

Electric services—Statistics; Introduction of incentive scheme; Electrification of new section

अध्याय/CHAPTER IX—सिगनल व दूर संचार/**SIGNAL AND TELE-COMMUNICATION** **117**

General; Signalling and Tele-communication facilities etc.; Major Signalling developments and signalling element of line capacity works; Major tele-communication works (additions and improvements); Working Results Workshops; Staff.

अध्याय/CHAPTER X—भंडार/**STORES** **138**

Organisation; Stores ordered and received; Stores balance; Use of khadi; Purchase from Cottage and Small Scale Industries; Supply position of timber and Permanent Way Materials ; Overstock and surplus ; Shipping; Printing Press.

विषय-वस्तु/CONTENTS

अध्याय/CHAPTER XI—चिकित्सा/**MEDICAL** **145**

General Review of developments and working of the Medical Department; Comparative Statistics.. ..

अध्याय/CHAPTER XII—कर्मचारी/**STAFF** **152**

Number and cost of staff; Recruitment and training; Labour relations; Co-operative movements on the Railway ; Provision of quarters.

अध्याय/CHAPTER XIII—यात्रियों को सुख-सुविधाएं/**AMENITIES FOR PASSENGERS** **159**

Amenities towards greater comfort and less overcrowding; Drinking water arrangements; Passengers Amenity works completed and in progress; Expenditure of Railway Users' Amenities; Departmental catering; Number of stations opened for traffic.

अध्याय/CHAPTER XIV—संरक्षा/**SAFETY** **175**

Collisions; Derailments; Accidents at level crossings; Review of statistics; Accident Preventive measures; General and Subsidiary Rules.

अध्याय/CHAPTER XV—सुरक्षा व्यवस्था/**SECURITY ARRANGEMENTS** **182**

Introduction; Training; Discipline and morale; Anti-sabotage measures; Firings, Dog Squad; Crime statistics

सड़सठ वर्ष का सार/**Sixty Seven Years of Summary** **191**

सघनता विवरणिका/**Density Statement 2016–17** (बड़ी लाइन व छोटी लाइन/Broad Gauge and Metre Gauge) **198**

सघनता चार्ट (पाकेट में)/**Density Chart** (in pocket) **200**

शब्दावली/GLOSSARY OF TERMS

Readers may find the following definitions of various terms helpful in reading the Annual Report :—

CAPITAL-AT-CHARGE

Includes capital outlay on worked lines.

ROUTE KILOMETRES

Distance of each gauge owned by a railway including its worked lines treated as single line open for passenger and goods traffic. Kilometrage of double, treble, quadrupli tracks, crossings at stations and sidings as also the track from the centre of terminal stations to the end of main line buffer stop are to be excluded.

GROSS EARNINGS

True earnings in an accounting period irrespective of whether amounts have been realised or net.

WORKING EXPENSES

True expenses in an accounting period irrespective of whether amounts have been disbursed or not. They comprise of Ordinary Working Expenses, Appropriation to Depreciation Reserve Fund and Pension Fund.

NET EARNINGS

Gross earnings minus working expenses.

OPERATING RATIO

The relation of working expenses to gross earnings expressed as a percentage .

PASSENGER KILOMETRES

The transportation of one passenger one kilometre.

TONNES ORIGINATING

Include tonnage of Railway stores and materials carried in material ballast train on open lines for Railway constructions, project authorities, stock owned or hired by them for Independent Railway Project work.

FRIEGHT TONNE KILOMETRES

The transportation of one tonne of freight one kilometre.

TRAIN KILOMETRES

The transportation of one train one kilometre.

NUMBER OF STAFF

Number of employees on roll on the last day of the year excluding casual labour.

NUMBER OF STATIONS

Exclude block huts, branch booking offices, out-agencies and halts.

परिचालन संबंधी विशिष्टताएं/HIGHLIGHTS OF OPERATIONS

Particulars	Units	2015–16	**2016–17**
Financial Position —			
Capital-at-Charge	₹ in Crores	13880.76	**14528.83**
Capital Fund	₹ in Crores	4433.24	**4640.62**
Gross Earnings	₹ in Crores	7605.93	**7510.29**
Working expenses (excluding suspense)	₹ in Crores	7356.27	**8196.50**
Net Earnings	₹ in Crores	–2516.00	**-3646.36**
Operating Ratio	Percentage	134.89	**147.83**
Percentage of Net Earnings to Capital-at-charge and investment from Capital Fund	Percentage	–14.13	**-19.02**
Passenger Statistics —			
No. of Passengers Originating	In Millions	798	**799**
No. of Passengers Carried	In Millions	854	**868**
Passenger Kilometres	In Millions	85396	**85033**
Earnings from Passenger Carried	₹ In Crores	3858.67	**4011.8**
Average Earning per Passenger Kilometres	In Paise	45.27	**47.18**
Average length of Passenger journey	Kilometre	99.92	**97.96**
Freight Statistics —			
Freight Tonnes Originating	In Millions	33.37	**32.36**
Freight Tonnes Carried	In Millions	58.03	**54.55**
Freight Tonne Kilometres	Kilometre	15583	**1436.42**
Earnings from Goods Carried	₹ in Crores	2756.03	**2558.55**
Average Earning per Freight Tonne Kilometres	in Paise	176.86	**178.05**
Average Lead of Tonne of Goods (Revenue)	Kilometre	268	**263.42**
Train Statistics —			
Train Kms. Pass & Goods incl. Dept. EMU, MEMU, DEMU (in thousands)	Kilometre	75820	**76540**
Gross Earnings per Train Kilometres	₹	1001.36	**982.31**
Working Expenses per Train Kilometres	₹	970.23	**1072.07**
Net Earnings per Train Kilometres	₹	–331.85	**-476.93**
Staff —			
No. of Staff as on 31st March	Number	94085	**93452**
Cost of Staff	₹ In Crores	7475.75	**9389.89**
Station and Route Kilometrage —			
No. of Stations as on 31st March (Excl. Halts & incl. Block Huts) ..	Number	614	**619**
Route Kilometres as on 31st March	Kilometre	5074.45	**5079.51**

परिचालन संबंधी विशिष्टताएं/HIGHLIGHTS OF OPERATIONS

Details	Units	2015–16	**2016–17**
Assets (as on 31st March)			
Capital-at-Charge	₹ in Crores	13880.76	**14528.83**
Total Investment	₹ in Crores	29435.40	**31162.06**
Route kilometers-Electrified	₹ in Crores	2745.36	**2835.07**
Total Route kilometers	₹ in Crores	5074.45	**5079.51**
Running Track kilometers-Electrified	₹ in Crores	4573.89	**4940.01**
Total Running Track kilometers	Percentage	7003.39	**7193.92**
Number of stations Excl Halts & Incl. Block Huts. ..	Percentage	614	**619**
ROLLING STOCK			
Locomotives- Steam	In Millions	8	**8**
Diesel	In Millions	397	**401**
Electric	In Millions	450	**447**
Coaching Stock-Passenger Carriages	₹ In Crores	6268	**6181**
E.M.U. Coaches	In Paise	822	**815**
Rail Cars	Kilometre	0	**0**
Other Coaching Vehicles	Kilometre	361	**360**
Wagons	Kilometre	9626	**9552**
STAFF—			
No. of empoloyees	Number	94085	**93.452**
Cost of Staff	₹ In Crores	7475.75	**9390.61**
Average cost per employee	₹	7945.74	**1004860**
TRANSPORTATION OUTPUT			
Train Kilometres excluding departmental	In Millions	...	**...**
Passenger and proporation of Mixed	₹ in Crores	52.52	**53.23**
EMU		9.18	**9.10**
MEMU		2.69	**2.74**
DEMU		1.33	**1.37**
Goods and proporation of Mixed	Kilometre	10.11	**9.65**
Vehicle and Wagon Kilometres excl dept. and Brakevans			
Vehicle	Kilometres	1995	**2040**
EMU		9071	**91.63**
MEMU		23.36	**23.84**
DEMU		10.53	**10.89**
Wagon	Kilometre	483	**447**
VOLUME OF TRAFFIC-PASSENGER TRAFFIC			
No. of Passengers originating	In Millions	798	**799**
Passenger Kilometre	In Millions	853.96	**85033**
Passenger Earrings	₹ In Crores	3858.67	**4011.83**
Averange Lead	in Kilometre	99.92	**106.42**
Average rate per Passenger per	in Kilometre	45.19	**47.18**

परिचालन संबंधी विशिष्टताएं/HIGHLIGHTS OF OPERATIONS

Details	Units	2015–16	2016–17
GOODS TRAFFIC			
TONNES ORIGINATING (in Millions)			
Revenue earning traffic	₹ in Millions	33.48	**32.36**
Total traffic	₹ in Millions	33.59	**32.51**
NET TONNE KMS. (in Millions)			
Revenue earning traffic	₹ in Crores	15583	**14369**
Total traffic	₹ in Crores	15583	**14379**
Earnings from Goods carried excluding wharfage and demurrage charges ..	₹ in Crores	2756.03	**2560.85**
Average Lead -Revenue	Kilometre	269	**263**
Average rate per tonne..	In Paise	176.86	**178.06**
QUANTITY OF FUEL CONSUMED BY LOCOMOTIVES			
Coal	In Millions	0.01	**0.004**
Diesel oil	In Kilometre	1948.69	**1903.85**
STORES PURCHASED	₹ In Crores		
Indigenous (Excluding imported Direct)		2022.89	**2422.61**
Total		2494.51	**2431.88**
OPERATING REVENUE & EXPENDITURE	₹ In Crores		
Revenue-Gross Receipts		7605.93	**7510.29**
Working expenses including depreciation etc., and Miscellanceous expenses		10214.82	**11175.01**
Net Revenue Receipts..		-2516.00	**-3646.36**
Percentage of Net Revenue Receipts to the Capital-at-Charge and investment from Capital Fund ..		-14.13	**-19.02**
Operating Ratio	Percentage	134.89	**147.83**
Dividend to General Revenues		519.65	**0.00**
Surplus (+) Deficit(-)		-2952.50	**-3646**

No. of Staff As on March 2017

(Figures in 000's	92.03
OPEN LINE	1.42
CONSTRUCTION	
TOTAL	93.45

for details

Spoken on 16/07/2010

Spoken to S/Sh

Shri. K. A. Ramesh

S & AO

ASO 9003060129

Ms. Sujatha Dederi.

General Economic Condition of the Zone

The Jurisdiction of Southern Railway extends over the States of Tamil Nadu, Kerala, and Southern parts of Andhra Pradesh. The General economic of these States except Andhra Pradesh and Pondicherry in respect of Agriculture, Irrigation, Power, Industries, etc., are appended below :—

Tamil Nadu State Industrial Development Corpn. Ltd. (TIDCO) :

Sl. No.	*Industrial Projects relating to TIDCO*	*Nos.*	*Enclousures*
1.	No. of Projects completed and commissioned during 2016-17.	..	..
2.	No. of Projects under implementation.	11	List enclosed at Annex.

Project under implementation

1 LNG Import Terminal Project in Thiruvallur District

2 TRIL Infopark Limited at Taramani

3 TICEL Bio Park-III Project in Coimbatore District

4 Polymer Industries Park Project in Tiruvallur District

5 Special Economic Zone/Special Investment Region project in Krishnagiri Districts.

6 Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) in Cuddalore and Nagapattinam District

7 Aerospace Advanced Computing and Design Engineering Centre Project in Kancheepuram District.

8 Heavy Engineering Components Hub Project in Tiruvallur District.

9 National Investrial and Manufacturing Zone Project in Ramanathapuram District.

10 Chennai Bengaluru Industrial Corridor (CBIC) – Ponneri Industrial Node Development Project.

11 Integrated Food Irradiation and Services Facility Project in Kancheepuram District.

Nineral occurrances and its production in the state during 2016–2017 (Tamil Nadu)

Sl. No.	*Name of mineral*	*Production*	*Uses*
		A. Major Minerals	
1.	Limestone		Limestone is used based on the calcium content and variation of other impurities. It is mainly used in cement industry for the manufacture of Cement and Lime. It is uded in Chemical Industry for making Bleaching powder, Soda ash, Calcium carbide and in Metallurgical, Pharmaceutical Industries.
2.	Lime Stone Dunite		Magnesite is namely used as refractory bricks, magnesia cement (sorel cement which is used for making durable, fireproof). This sorel cement is used in hospitals, hotels, bathrooms, ship decks etc. for jointless flooring and for wall tiles. It is also used as wood preservative.
3.	Silica Sand		Silica sand is mainly used in the manufacture of Glass. Other than this, it is used in making moulds and casts for metals in foundries.
4.	Limeshell		It is used in chemical industries for the preparation of Acetylene.
5.	Fireclay		It is used for making refractory bricks to line the walls of furnaces and boilers.
6.	Ball Clay		This clay is blended with other clays to make them suitable in preparing whilewere and also as bonding material in abrasives and fire bricks.
7.	Vermiculite		Vermiculite is mainly used as loose fill insulation for houses and factories. It is also used for insulation of articles such as bake-ovens, water heaters, thermal jugs and stoves.
8.	Gypsum		The main use of Gypsum is in the preparation of Plaster of Paris. It is also largely used for preparation of ammonium sulphate, a well known fertilizer and many insecticides.
9.	Marl		It is used in cement industry.
10.	Graphite		This is mainly used for making crucibles, electrodes, carbon brushes and plates. It is also used as a moderator in atomic reactor, filters in fertilizers, batteries, boilers and coating gun powder. Further it is used as lubricants and for making black lead pencils.
11.	Garnet		The important property of Garnet is its hardness, toughness and irregular shape used in the manufacture of abrasives. The crushed Garnet material is used in scratch free purposes in semi-conductors, sand blasting to remove the coating formed due to algae on the ships and buildings.
12.	Ilmenite		Ilmenite is used in manufacturing of while pigment known as Titanium White. This white pigment is used as raw material for paints and dyes. Titanium is a very light material, strong, durable, non reactive and non corrosive metal very much utilized in Aero space industries. It is also used as 'Human spare parts' such as hip replacements and pace makers. The titanium white pigment is also used in organic solvents. Titanium paint is used in preparation of rubber, artificial silk, coloured glass, glazing of pottery, plastics, ceramics enamel ware, electrodes, cosmetics, dye etc.
13.	Rutile		It is used in manufacture of white paint and also for making synthetic rutile which is about six time costlier then Ilmenite. It is also used in manufacture of Titanium-di-Oxide.
14.	Zircon		It is used as good refractory material and can withstand temperature up to 2600°C. Ferro-zircon is used in industries to resist corrosion due to high temperatures. The other uses of Zircon are lasers, optical glass, permanent magnet, in application as Nuclear reactor control rods, Oxygen sensor, machgine tools, additives etc.
15.	Silimanite		It is mainly used in making high temperature refractory bricks.
16.	Leucoxene		It is opaque variety of ilmenite.
17.	Monazite		Monazite is a source material of thorium, a radio active material.
18.	Bauxite		It is mainly used as a raw material for the production of alumina which is used in the extraction of aluminium metal by electro-thermal process. Aluminium is largely used as alloys. Alluminium foil is used for wrapping purposes. Aluminium alloys are chiefly used for the construction of aircrafts, automobiles, petrol tanks, pistons, cylinder heads, window frames and interior fittings.
19.	Soapstone		It is used as filler and for making toilet soap and powder.
20.	Crude Oil		It is mainly used in automobiles, in the preparation of industrial lubricants etc.

Sl. No.	Name of mineral	Production	Uses
		A. Major Minerals	
21.	Natural Gas		It is mainly used as fuel.
22.	Lignite		It is mainly used for power generation.
23.	Quartz		It is mainly used in watches, preparing quartz wedges and for the manufacture of glass. Further it is also used making computer chips. It is also used in preparing refractory bricks.
24.	Feldspar		It is mainly used in ceramic industries for making potteries, glasswares, enamels, porcelain and sanitary ware. It is also used in the manufacture of floor and wall tiles and in the preparation of artificial teeth.
		B. Minor Minerals	
1.	Black and Colour granite		Black Granite and Colour granite are used as decorative and ornamental purposes. It is mainly used in the production of monuments which are export worthy. It is also used in building, facade, flooring and as kitchen slabs.
2.	Roughstone		It is used in construction of buildings and making road etc.
3.	Quartzite		It is also used for construction purposes.
4.	Gravel/Earth/ Clay/Red Soil/ Savudu		It is used for surfacing of roads and highways, and as a fine aggregate in concrete, mortar, plaster etc.

QUANTITY OF MINERAL

(MINOR MINERAL)

Sl. No.	District	Quantity Permitted (in Cubic Metres)
BLACK GRANITE		
1.	Cuddalore	0.000
2.	Dharmapuri	17708.711
3.	Erode	3916.000
4.	Kancheepuram	56.260
5.	Krishnagiri	2928.247
6.	Namakkal	0.000
7.	Perambalur	1523.168
8.	Salem	2203.496
9.	Thiruvannamalai	4014.092
10.	Tiruvallur	688.176
11.	Tirchy	0.000
12.	Vellore	2009.203
13.	Villupuram	9826.807
	Total	**70974.160**
COLOUR GRANITE		
1.	Coimbatore	387.571
2.	Dharmapuri	0.000
3.	Dindigul	3480.000
4.	Erode	1407.000
5.	Kancheepuram	0.000
6.	Kanniyakummari	87.570
7.	Karur	53976.820
8.	Krishnagiri	94306.434
9.	Namakkal	15065.968
10.	Pudukkottai	14650.863
11.	Salem	6405.848

QUANTITY OF MINERAL

(MINOR MINERAL)

Sl. No.	District	Quantity Permitted (in Cubic Metres)
COLOUR GRANITE		
12.	Sivagangai	359.281
13.	Theni	0.000
14.	Thiruvannamalai	0.000
15.	Thoothukudi	2018.949
16.	Tirunelveli	58851.373
17.	Tiruppur	3279.000
18.	Trichy	272.610
19.	Vellore	975.774
20.	Villupuram	207.280
21.	Virudhunagar	72221.800
	Total	**327954.141**
Roughstone		
1.	Coimbatore	1244275.000
2.	Cuddalore	6300.000
3.	Dharmapuri	145266.000
4.	Dindigul	673844.000
5.	Erode	301008.000
6.	Kancheepuram	3908670.000
7.	Kanniyakummari	1094343.000
8.	Karur	1114035.000
9.	Krishnagiri	4226393.000
10.	Madurai	604608.000
11.	Namakkal	562020.000
12.	Perambalur	94445.000
13.	Pudukottai	1097090.000
14.	Salem	703872.000
15.	Sivagangai	108960.000
16.	Theni	184506.000
17.	Thiruvannamalai	688198.000
18.	Thoothukudi	760351.000
19.	Tirunelveli	2825205.000
20.	Tiruppur	1472498.000
21.	Tiruvallur	7455.000
22.	Trichy	76296.000
23.	Velloore	1249023.000
24.	Villupuram	1018368.000
25.	Virudhunagar	988233.200
	Total	**25155262.200**
Gravel / Earth / Clay / Red Soil / Savudu		
1.	Ariyalur	137121.000
2.	Coimbatore	238249.000
3.	Cuddalore	385867.000
4.	Dharmapuri	0.000
5.	Dindigul	3360.000
6.	Erode	257198.000
7.	Kancheepuram	484009.000
8.	Kanniyakummari	176035.000
9.	Karur	1050.000
10.	Krishnagiri	7620.000
11.	Madurai	894283.000
12.	Nagapattinam	26550.000

QUANTITY OF MINERAL

(MINOR MINERAL)

Sl. No.	District	Quantity Permitted (in Cubic Metres)
Gravel / Earth / Clay / Red Soil / Savudu		
13.	Namakkal	40000.000
14.	Perambalur	385.000
15.	Pudukottai	300969.000
16.	Ramanathapuram	655391.000
17.	Salem	36606.000
18.	Sivagangai	584556.000
19.	Thanjavur	41900.000
20.	Theni	158583.000
21.	Thiruvannamalai	94434.000
22.	Thoothukudi	392667.000
23.	Tirunelveli	358157.000
24.	Tiruppur	280584.000
25.	Tiruvallur	317184.000
26.	Tiruvarur	74969.000
27.	Trichy	10568.000
28.	Velloore	32733.000
29.	Villupuram	143910.000
30.	Virudhunagar	521795.460
	Total ..	**6626733.460**
Pebbles		
1.	Ariyalur	0
2.	Cuddalore	7292
3.	Pudukottai	0
4.	Villupuram	10398
	Total ..	**17690**
Quartz		
1.	Coimbatore	480
2.	Dharmapuri	0
3.	Dindigul	5895
4.	Erode	360
5.	Karur	4420.17
6.	Madurai	0
7.	Namakkal	1240
8.	Salem	1960
9.	Tiruppur	1290
10.	Trichy	1620
11.	Velloore	40
	Total ..	**17305.17**
Kankar		
1.	Ariyalur	0
2.	Dindigul	1200
3.	Theni	18
4.	Tirunelveli	429
5.	Tiruppur	0
6.	Virudhunagar	1296.25
	Total ..	**2943.25**
Limeshell		
1.	Coimbatore	0
16.	Ramanathapuram	0
	Total ..	**0**

QUANTITY OF MINERAL

(MINOR MINERAL)

Sl. No.	District	Quantity Permitted (in Cubic Metres)
Silica Sand		
1.	Cuddalore	89189.29
2.	Kancheepuram	500
3.	Nagapattinam	75235
4.	Thoothukudi	0
5.	Villupuram	0
	Total ..	**164924.29**
Feldspar		
1.	Coimbatore	1880
2.	Dindigul	2880
3.	Erode	4840
4.	Karur	16124.95
5.	Madurai	0
6.	Namakkal	4230
7.	Salem	107712
8.	Tiruppur	2310
9.	Trichy	3695
	Total ..	**143671.95**
Dunite		
1.	Karur	600
2.	Salem	6288
3.	Tiruppur	6870
	Total ..	**13758**
GYPSUM		
1.	Coimbatore	0
	Total ..	**0**
Fireclay		
1.	Ariyalur	252000
2.	Cuddalore	12100
3.	Perambalur	10150
4.	Thiruvannamalai	0
5.	Trichy	130
	Total ..	**274380**
Ballclay		
1.	Cuddalore	22008.6
	Total ..	**22008.6**
Quarztite		
1.	Thoothukudi	1755
2.	Tirunelveli	0
	Total ..	**1755**
Soapstone		
1.	Coimbatore	1230
2.	Trichy	0
	Total ..	**1230**

TANGEDCO : Projects

DETAILS OF POWER PROJECTS

(I) Completed and commissioned during 2016–17

Nil

(II) Under constructions and Anticipated benefits

ONGOING PROJECTS :

(1) ETPS Expansion Thermal Power Project (1 x 660 MW)

The total project cost is Rs. 5,421 crores with Interest during construction (IDC). LOA for engineering, Procurement and Construction (EPC) contract was issued to on 27–02–2014 at a cost of Rs. 3,921.55 crores. Project Civil and Mechanical works are under progress. 4,914.36 MU are expected to be generated per annum from this project. The Project is expected to be commissioned in December 2019.

(2) Ennore SEZ Thermal Power Project (2 x 660 MW)

The total project cost including Interest during construction Rs. 9,800 crores. LOA for EPC cum debt finance contract has been issued on 27–09–2014 at a cost of Rs. 7,688 crores. Project Civil and Mechanical works are under progress, 9828.72 MU are expected to be generated per annum from this project. The Project is expected to be commissioned in 2020–21.

(3) North Chennai Thermal Power Station stage–III (1 x 800 MW)

The total project cost including Interest during construction is Rs. 6376 crores.

BTG Package

LOA issued on 29–01–2016 for supply, Erection, and Commissioning of Boiler, Turbine, Generator (BTG) package and allied civil works on Engineering, Procurement and Construction (EPC) basis for a value of Rs. 2759 crores and amended to Rs. 2901 Crores inclusive of additional In-Boiler modification Works to adhere to Revised MOEF norms. ESP erection work under progress. Boiler erection commenced on 30–08–17. Other Civil works are under progress.

BOP Package

LOI issued on 28–10–16 for Balance of Plant (BOP) package with allied civil works for a value of Rs. 2600.02 crores. Erection of Working Pile in chimney area and Switch Yard Completed. Erection of Working Pile in NDCT area, Central Store and Compound wall under progress.

A petition has been field by a Social Activisit before the National Green Tribunal (NGT) to cancel the Environmental Clearance issued for the project. The case is to be heard on 30–11–17. 5956.8 MU are expected to be generated per annum from this project.

The Project from expected to be commissioned in 2019–20.

4. Upper Thermal Power Project (2 x 800 MW)

The total project cost including Interest during construction is Rs. 12778 crores.

BTG Package : LOA issued for supply, erection & commissioning of BTG package along with connected civil works on EPC basis on 27–02–16 for a value of Rs. 5,580 Crores and amended to Rs. 5852 Crores for additional In - Boiler modification Works to adhere to Revised MOEF norms. Land pertaining to BTG area was handed over to M/s BHEL initially. Geo-technical work under progress.MNecessary Drawing approval for initial actvities being processed.

Writ petitions challenging the Land Acquisition Act have been field by a few land owners of the project site. Counter is being field. In addition to the above cases, the farmers of the area have filed an Appeal in the National Green Tribunal (NGT) in 2016, challenging the Environmental Clearance issued by MoEF for the project. Thia case is to be heard by the Tribunal on 29–11–17. The Consent to Establish the project has been issued by TNPCB on 22–08–17.

BOP Package : Award of Contract has been approved by TANGEDCO Board. Contract will be placed after obtaining details on GST.

Sea water intake and outfall system : Final Price negotiation conducted 20–10–17 and order will be placed in November 2017.

11913.6 MU are expected to generated per annum from this project.

The Project is expected to be commissioned in 2021–22.

5. Udangudi Thermal Power Project – Stage I (2 x 660 MW)

The total project cost including interest during construction and coal jetty is Rs. 10615 Crores.

After lodging the previous tender for EPC cum Debt Financing contract fresh tender was called for. A petition was field in High court of Madras by one of the bidders, and stay was granted. Writ appeal was field by TANGEDCO on 07–07–15 for quashing of stay. The Honourable Madras High Court issued an interim order dt. 30–10–15 in the stay petition permitting TENGEDCO to proceed with the processing of the tender dated 21–04–2015 and withholding the award of tender till further orders. TANGEDCO Board approved the proposal for award of EPC contract in its meeting held on 28–03–17, with remarks that the award of contract is subject to the outcome of the pending court case. The final hearing was conducted on 13–09–17. The Honourable High Court has ordered to approach the Learned single judge for disposal of the writ petition. Price bid for Establishment of Captive Coal Jetty opened and price negotiation under progress. 9828.72 MU are expected to be generated per annum from this project. The project is expected to be commissioned in the year 2020–21.

The total project cost including interest during construction is Rs. 1831.29 crores. All the statutory clearances required for the project have been obtained. Execution of certain initial works such as Access Tunnel, cable cum ventilation Tunnel and Approach roads have been completed. Tenders for the Packages I and II. (Civil and Hydro Mechanical Works) of Phase I under process. In the mean time, two bidders have field Writ Petitions againstopening of the price bids of TANGEDCO's eligible tender for package I and II respectively in Hon'ble High Court of Madras. The cases are to be heard. Tenders for package III/Phase I & Phase II have been called for. Tender for phase III will be called for shortly.

3723 MU are expected to be generated per annum from project. This Project is programmed to be commissioned in 2020–21.

III. PROPOSALS IF ANY TO BE UNDERTAKEN

1. Ennore Replacement Thermal Power Project (1 x 660 MW)

The total project cost with interest during construction is Rs. 5400 crores. ToR for the project has been issued by MoEF/New Delhi on 25–07–2014. Terrestrial EIA Study Rapid Marine EIA study and Socio-economic study completed.

ToR for the project has been issued by MoEF/New Delhi on 25–07–2014. The Expert Appraisal Committee meeting of MoEF was held on 30–08–2017 and the committee considered the project proposal and decided to send a Sub-committee for a site visit to the project. TNPCB & CRZ clearances are underway. DPR for the new Replacement project prepared by contractor and Purchase Order issued for engaging the consultant for preparation of Asset Valuation report of old ETPS. 4914.36 MU are expected to be generated per annum from this project.

The Project is expected to be commissioned in the year 2020–21.

2. Udangudi Expansion Project Stage – II (2 X 660 MW)

The total project cost including interest during construction is Rs. 8745 crores. GoTN accorded approval for establishment of the Project, *vide* G. O. (4D), No. 1, Dt. 03–02–2015. Application for TOR submitted to MOEF on 22–09–2015 and the Expert Appraisal Committee meeting was conducted on 30–10–15. The Committee directed to approach them again after at least awarding the work of Udangudi Stage - I, so as to consider issuing TOR for stages II & II. Terrestrial EIA Study and Comprehensive Marine EIA study completed. Land acquisition under progress. 9828.72 MU are expected to be generated per annum from this project.

The Project is expected to be commissioned in the year 2021–22.

3. Udangudi Expansion Project Stage – III (2 x 660 MW)

The total project cost including interest during construction is Rs. 8745 crores. GoTN accorded approval for establishment of the Project, *vide* G. O. (4D), No. 1, Dt. 03–02–2015. Application for TOR submitted to MoEF on 22–09–2015 and the Expert Appraisal Committee meeting was conducted on 30–10–15. The Committee directed to approach them again after at least awarding the work of Udangudi Stage - I, so as to consider issuing TOR for stages II & II. Terrestrial EIA Study and Comprehensive Marine EIA study completed. Land acquisition under progress. 9828.72 MU are expected to be generated per annum from this project.

The Project is expected to be commissioned in the year 2021–22.

4. Cheyyur Ultra Mega Power Project (5 x 800 MW)

The total project cost including interest during construction is Rs. 25,970 crores.

As this is an ultra mega power project, this project is developed by Government of India with private sector participation through Power Finance Corporation. Tamil Nadu will get 1600 MW power from the project as its share. Environmental clearance has been received for the project on 30–09–2013. Land acquisition is under process. On finalization of the bidding documents MoP has planned to upload the bidding documents shortly. Government of India is in the process of modifying the bidding documents for utilization of 100% domestic coal. 29784 MU are expected to be generated per annum from this project.

5. Sillahalla pumped storage Hydro-Electric Project (2000 MW)

This project was initially proposed to be taken up in 2 phases, based on pre-feasibility report, during 2014 at a cost of Rs. 7000 Crores (Excluding IDC) as perthe G. O. Ms. No. 67, dt. 11–09–14.

Accordingly the DPR for Phase I was prepared.MAs per the DPR, actual inflow to the proposed Sillahalla reservoir is found lesser than the earlier assumption in the pre-feasibility report. So the proposal of additional energy generation (energy augmentation) from Kundah Power Housr I utilizing the flow from Sillahalla resrvoir (apart from the pumped storage scheme) was found not feasibile. Hence, a revised proposal combining Phase I & Phase II was evolved and the Overall Layout of Sillahalla PSHEP was sent to CEA for initial scrutiny/remarks.

As remarked by CEA, It is now proposed to execute the project in 2 stages having lesser storage capacity intermediate reservoirs.

In the first instant, stage I of the project with the proposed Sillahalla reaervoir as upper Reservoir and a new reservoir (below the existing Kundah paalam) & Kundah Power House I as lower reservoir is proposed to be taken up.

Preliminary works and Land Acquisition are under process. 14892 MU are expected to be generated per annum from this project.

6. Kadaladi Supercritical Thermal Power Project (5 x 800 MW)

The total project cost including interest during construction is Rs. 30,000 crores. The Honourable Chief Minister of Tamil Nadu has announced this project under Rule 110 in the Assembly on 01–09–2015. TANGEDCO has accorded approval *vide* (Per) FB TANGEDCO Proceedings No. 57 (Technical Branch) Dated 08–10–15. In-principle approval *vide* G. O. (MS) No. 3 dt. 14–01–2016 has been issued. The MoEF, New Delhi in its Expert Appraisal committee meeting held on 30–08–2016 has stated that the proposal seeking TOR for the project may be resubmitted proposing alternate sites as all the now proposed sites are falling in the buffer zone of Gulf of Mannar Biosphere reserve. TANGEDCO is in the process of identifying alternate sites.

Further in order to minimize water drawal from the Gulf of Mannar which is an eco-sensitive zone.MAir Cooled Condenser have been proposed. IIT, Madras have furnished their offer to study the intake and outfall options. 29784 MU are expected to be generated per annum from this project.

7. Kadaladi Ultra Mega Solar photovoltaic park Power Project (500 MW)

The total cost of the project including IDC is Rs. 2350 Crores. The Honourable Chief Minister of Tamil Nadu has announced this project under Rule 110 in the Assembly on 30–06–17. TANGEDCO has accorded approval *vide* (Per) FB TANGEDCO Proceedings No. 38 (Technical Branch) Dated 16–05–17 for establishment of the project in Narippaiyur and nearby villages in around 900 Hectares of land on EPC contract basis under State Sector. In-principle approval from GOTN has been sought for in this regard. The work of demarcation of the site under CRZ has been awarded to Insitute of Remote Sensing, Anna University, *vide* letter dated 22–06–17. The project is expected to be commissioned in 2019.

The above projects will serve to bridge the gap between supply and demand. 3723 MU are expected to be generated per annum from this project.

Bus services operated by the State Transport Corporations :

The various bus services operated by the State Transport Corporations to the travelling public as on 31–03–2017.

Chennai Metro – City services	..	..	3,688
Town Services – (in Districts)	..	..	6,916
Mofussil Services	..	..	8,561
Ghat Services	..	..	528
Express services			
Inside State	..	..	648
Outside State	..	..	435
Total Services	..	..	20,776
Spare Buses for total Services	..	..	1,757
Total Fleet Strength	..	..	**22,533**

(See Appendix – 2)

1.4 Performance Indicators :

Efforts are taken to optimize the revenue and reduce the cost by route retionalization. Accordingly, the scheduled services and operated kilometers have been regularized and the variable cost towards the diesel and tyre has been reduced to an extent.

Thr physical Performance Indicators from 2011–2012 to 2016–2017 are as follows :

Item	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
Fleet Strength	21,207	22,053	22,501	22,474	23,078	22,533
Scheduled Services	19,507	20,500	20,684	20,684	20,839	20,776
Total Kilometres operated per day (in lakhs Kms.)	88.44	89.78	91.20	90.21	94.02	92.55
Breakdown/ 10,000 Km	0.01	0.01	0.01	0.004	0.004	0.004
Accidents/ 1,00,000 Km.	0.22	0.20	0.20	0.18	0.18	0.16
Fatal Accidents	1237	1233	1187	1165	1258	1209
No. of persons dead in accidents	1397	1382	1318	1331	1460	1373
Fuel performance (KMPL) Average	5.25	5.27	5.26	5.30	5.29	5.33
Km run per condemned tyre (in lakh kms.)	1.65	1.80	1.82	1.92	20.1	2.08
Men per bus	6.40	6.31	6.43	6.48	6.52	6.51

(See Appendix – 3)

Select Indicators of overall performance of State Transport Corporations in Tamil Nadu 2016–17

(Upto March 2017)

Sl. No.	Item	Unit	Performance
1.	No. of Transport Corporation	Nos.	8
2.	Fleet Strength	Nos.	22533
3.	Total Kilometres operated per day	in Lakh Kms.	92.55
4.	Total Passengers carried per day (incl. free & concession pass.)	in Lakhs	201.66
5.	Fleet Utlisation	Percentage	92.97
6.	Kilometre efficiency (excluding specials)	Percentage	97.32
7.	Kilometre run per liter of diesel	KMPL	5033
	(a) City/Town		5.18
	(b) Mofusell		5.50
8.	No. of routes		
9.	No. of New routes Introduced during the year	Nos.	0
10.	New villages benefitted during the year		0
11.	Benefitted village population (in lakhs)		0
12.	Staff strength (excl. Reserve)		135336
13.	No. of new buses put on road		607

PUBLIC SERVICES RENDERED BY THE STUs IN TAMIL NADU 2016–17

State Transport Undertakings	No. of New Routes operated	No. of Villages covered	Populations benefitted (in Lakhs)
1. Metropolitan Transport Corporation, Chennai.	0	0	0.00
2. State Express Transport Corporation, Chennai.	0	0	0.00
3. Tamil Nadu State Transport Corporation, Villupuram.	0	0	0.00
4. Tamil Nadu State Transport Corporation, Salem.	0	0	0.00
5. Tamil Nadu State Transport Corporation, Coimbatore.	0	0	0.00
6. Tamil Nadu State Transport Corporation, Kumbakonam.	0	0	0.00
7. Tamil Nadu State Transport Corporation, Madurai.	0	0	0.00
8. Tamil Nadu State Transport Corporation, Tirunelveli.	0	0	0.00
Total ..	0	0	0.00

TRANSPORT CORPORATION IN TAMIL NADU 2016–17

Name of the State Transport Corporation after Amalgamation	Head Quarters	Principal area of Operation	Fleet Strength as on 31-03-17
Metropolitan Transport Corporation, (Chennai) Ltd., Chennai-2.	Chennai	Chennai	3980
State Express Transport Corporation (T.N.) Ltd., Chennai-2.	Chennai	Tamil Nadu and Neighbouring States Andhra, Karnataka, Kerala & Puducherry	1185
Tamil Nadu State Transport Corporation, (Villupuram) Ltd., Villupuram.	Villupuram	Villupuram, Cuddalore Tiruvannamalai, Vellore, Thiruvallur & Kancheepuram	3596
Tamil Nadu State Transport Corporation (Salem) Ltd.,Salem.	Salem	Salem, Namakkal, Dharmapuri & Krishnagiri	2222
Tamil Nadu State Transport Corporation (Coimbatore) Ltd., Coimbatore.	Coimbatore	Coimbatore, Tiruppur, Nilgris & Erode	3228
Tamil Nadu State Transport Corporation (Kumbakonam) Ltd., Kumbakonam.	Kumbakonam	Thanjavur, Nagapattinam, Thiruvarur, Karur, Trichy, Perambalur, Ariyalur, Sivagangai, Ramanathapuram & Pudukottai	3832
Tamil Nadu State Transport Corporation (Madurai) Ltd.,Madurai	Madurai	Madurai, Dindigul, Theni & Virudhunagar	2593
Tamil Nadu State Transport Corporation (Tirunelveli) Ltd., Tirunelveli.	Tirunelveli	Tirunelveli, Thoothukudi &, Kanniyakumari	1897
Total			22533

Department of Agriculture (Tamil Nadu) :

The area and Production of Paddy, Pulses and Groundnut for the year 2015–16 and 2016–17 is furnished as below :–

Crop	2015–16		2016–17	
	Area (ha)	Production (MT)	Area (ha)	Production (MT)
1. Paddy	20,00,212	73,74,681 (interms of Rice)	14,43,990	40,37,930 (interms of Rice)
		110,62,022 (interms of Paddy)		60,56,895 (interms of Paddy)
2. Pulses	8,87,650	5,84,969	6,14,860	3,31,150
3. Groundnut	3,46,611	8,92,280	3,00,240	5,16,120

Power Projects in Kerala

(i) Power project Commissioned during 2016-17

Sl. No.	Name of Project	Capacity (MW)
A)	**Hydro Electricity**	
1.	VellathoovalSmall Hydro project ..	3.6
B)	**SOLAR**	
1.	CIAL solar project ..	7.4
2.	Solar Power plant at Kollengode (KSEB)	1
3.	Solar Power plant at Edayar (KSEB)	1.25
4.	Barapole Canal Bank (KSEB)	1
5.	Barapole Canal Top (KSEB)	3
6.	Solar park at Kasargod fist stage ..	36
7.	Hindaico solar project ..	1
	Sub total of megawatt range solar projects commissioned.	50.65
	Total capacity og projects commissioned	54.25
(ii)	Projects under construction	
A)	**Hydro Electricity**	
1.	Chathankottunada-stage II Small Hydro project	6
2.	Kakkayam Small Hydro project ..	3
3.	Extension to Pallivasal Hydro station ..	60
4.	Perumthenaruvi Small Hydro project ..	6
5.	Poringalkutthu Small Hydro project ..	24
6.	Thottiar Hydro project ..	40
7.	VellathoovalSmall Hydro project ..	3.6
8.	Boothathan kettu Small Hydro project..	7.5
9.	Upper Kallar ..	2
	Sub Total (SHP) ..	152.71
B)	**SOLAR**	
1.	Solar projects of KSEBL (Total) ..	15
2.	Solar park at Kasargod fist stage ..	64
	Sub Total Solar ..	79
C)	**WIND PROJECT**	
	NPHC wind project at Agali ..	8
	Total Capacity of projects under construction	239.1
(iii)	**Project under Tendering stage**	
	HYDRO ELECTRICITY	
1.	Pazhassi Sagar ..	7.5
2.	Peruvannamuzhi ..	6
3.	Chinnar ..	24
	Sub Total ..	37.5
	Total Capacity of projects under tendering stage	

Sl. No.	Name of Project	Capacity (MW)
(iv)	**Project Proposals**	
A)	**Hydro Electricity**	
1.	Olikkal Small Hydro project ..	5
2.	Poovaramthode Small Hydro project ..	3
3.	Chembukadavu III Small Hydro project..	7.5
4.	Peechad Small Hydro project ..	3
5.	Ladrum Small Hydro project ..	3.5
6.	Western Kallar Small Hydro project ..	5
7.	Marmala Small Hydro project ..	7
8.	Mankulam Small Hydro project ..	40
9.	Uppersengulam Small Hydro project ..	24
10.	Valanthodu Small Hydro project ..	7.5
11.	Marlpuzha Small Hydro project ..	6
12.	Anakkayam Small Hydro project ..	7.5
13.	Pambar Small Hydro project ..	40
14.	Achencoil Small Hydro project ..	30
15.	Athirappalli Small Hydro project ..	163
	Sub Total ..	352
WIND PROJECT		
1.	NHPC wind project ..	74
2.	Microwind (Poovar) KSEBL ..	1
3.	Kanjikode KSEBL ..	2.5
4.	Intercropping KSEBL ..	2.625
5.	Project by Ramakkalmedu Power Pvt. Ltd.	2
6.	Project by Kosamattam Finance Ltd. ..	1
7.	Project by ANERT at Ramakkalmedu ..	3
8.	Project by Malayala Manorama Co. Ltd.	10
	Sub Total ..	96.125
SOLAR PROJECT		
	West Kallada by NHPC ..	50
	Total Capacity of projects proposals	498.125

Mineral occurrence and its production in the state during 2016–17 Details of quantity of Mineral produced and their uses during the year 2016–17.

MAJOR MINERALS

Sl.	Name of Mineral	Production	Uses
1.	Bauxite/ Laterite	72524	Cement Industry, Chemical Industry etc.
2.	Ilmenite	117075	Ore of titanium, synthetic rutile, in paint industry.
3.	Rutile	5188	Ore of titanium, in paint industry.
4.	Zircon	5586	Ceramic industry (Zir flor)
5.	Sillimanite	6797	Granular Sillimanite (refractory purpose)
6.	Leycoxene	201	Ore of Titanium
7.	Lime shell	28751	Cement Industry (white cement), chemical industry
8.	Limestone	410538	Chemical industry
9.	Graphite	705	Refractory, crucibles, Pencil leads, moderator in atomic reactors.

Sl.	Name of Mineral	Production	Uses
		MINOR MINERAL	
1.	China Clay	655230	In paper Industry (coating as well as filler material) Pharmaceuticals.
2.	Silica Sand	58209	Glass, refractory, cast iron & mould industries etc.
3.	Granite (Building Stone)	34100724	Constuction Sector
4.	Granite (Dimension stone)	2531*	Constuction Sector (as flooring slabs)
5.	Laterite (Building stone)	4746559	Construction Sector
6.	River sand	33099#	Construction Sector
7.	Ordinary sand	1761519	Construction Sector
8.	Lime shell	12959	Lime industry
9.	Ordinary Earth	10445979	Construction Sector
10.	Brick clay	1267999	Brick, tile industry

* in cubic Meters

Department of Agriculture :

Data od commodities during 2016–17

Crop	Season	Area (in hectare)	Production (in tonnes)	Remarks
Paddy and Rice	Kharif	56601	168066	Production of Rice
	Rabi 1	72253	141397	
	Rabi 2	42544	Not available	
Groundnut	Kharif	283.3	398.1	
	Rabi 1	64.1	93.2	
Oil seeds				
Coconut	Not available			
Sesamum	Rabi 1	0.4	0.1	
Soyabean	Not available			
Others	Not available			
Dry Chillies	Not available			
Sugarcane (Canegur)	Kharif	407.2	4102	
	Rabi 1	419.8	5241.6	
Tobacco	Not available			
Cotton	Rabi 1	79	118.5	No. of bales of 170 Kg.
Cholam (maize)	Kharif	45.4	36.1	
	Rabi 1	32.5	37.4	
Cambu	Not available			
Ragi	Kharif	11.3	16.8	
	Rabi 1	21.5	21.1	
Pulses				
Cow pea	Not available			
Black gram, Horse gram, Green gram	Rabi 1	67	107.3	
Tur/Red gram	Rabi 1	167	267.2	
Other pulses	Kharif	13.1	15.6	
	Rabi 1	99.8	269.9	
Pulses other than Tur/ Red gram	Not available			

Source : Advance estimate of area and production or crops by department of Economics and Statistics, Kerala.

Crop	Season	Area (in hectares)	Production (in tonnes)	Remarks
Paddy	Kharif	60418	160894	Production of Rice
	Rabi 1	89118	243675	
	Rabi 2	47334	144706	
Total		196870	549275	
Groundnut		440	619	
Oil seeds				
Coconut		790223	5873	Production in million No. s
Sesamum		187	47.703	
Soyabean		1	1	
Others		780	Not available	
Dry Chillies				Not available
Sugarcane		1361.59	13812.51	Production in Canegur
Tobacco		9	15	
Cotton		109	196	No. of bales of 170 Kg. each
Cholam (maize)		59	74	
Cambu				Not available
Ragi		64	76	
Pulses				
Cow pea		1241	Not available	
Black gram,		555	Not available	
Horse gram,		112	Not available	
Green gram		168	Not available	
Tur/Red gram	Rabi 1	1431	18.45	
Other pulses	Kharif	257	Not available	
Pulses other		2333	2420	
than Tur/				
Red gram				
Total		6097		

Source : Advance estimate of area and production or crops by department of Economics and Statistics, Kerala.

2. Railway Kilometrage

PCE

The open line kilometrage as on 31st March 2017

Gauge	Route Kilometrage			Track Kilometrage including Sidings Kilometrage
	Single Line	Double/ Triple/ quadruple lines	Total	
Broad Gauge	2825.68	1873.83	4699.51	8441.53
Metre Gauge	380	0.00	380.00	400.82
Narrow Gauge	0.00	0.00	0.00	0.00
Total	**3205.68**	**1873.83**	**5079.51**	**8842.15**

Note.—
Out of 380 km. of MG Route km, 334 km. are under various stages of gauge conversion.

3. General Review of working for the year 2015–2016 and 2016–2017 are as follows :—

	2015–16	2016–17
Gross Earnings (in crores of rupees).	7,605.93	**7,510.29**
Working Expenses (excl. Suspense) (in crores of rupees).	7,356.27	**8,196.50**
Number of passengers carried.. (in millions).	854.62	**868.43**
Tonnes originating (Revenue) .. (in millions).	33.37	**32.36**
Tonnes Carried (System) (Revenue) (in millions).	58.03	**52.43**
Freight tonne kms. (Revenue) .. (in millions).	15,583.00	**137.02**
Goods Train kms. (in millions)..	10.11	**9.66**
Train Engine kms. (Goods and prop.) (in millions).	19.35	**17.96**

4. PLANNING BRANCH-EFFICIENCY Cell

1.0 WORK STUDIES/CRASH STUDIES

1.1 The Planning Branch is conducting work studies and Crash studies to identity the surplus posts in various Field Units. The recommendations of work study are made based on the yard stick, Bench Mark and as per the need on various activities duly considering the Technological Improvements and outsourced activities. The Railway Board is advising the Annual Target for surrender of surplus posts through work study. The surplus posts Surrendered are credited to the Vacancy Bank as per Railway Board norms.

- During the year, 2016-17, 55 Numbers of Work Studies were completed. The total numbers of surplus posts indentified were 1213 with a projected savings of Rs. 48 cr. per annum (Approximately)

- For the Railway Board Target of surrrendering 800 surplus posts, 720 posts were achieved during the year 2016–17. The Annual Financial savings on account of the above surrender is ₹. 28.19 cr. per annum (Approximately)

- The Proposal for creation of posts is also routed through Planning Branch to monitor the surrendering of surplus posts identified through Work Studies. A total No. of 972 posts have been agreed for creation *vide* 32 No. of proposals from all the departments.

- No. of Chief Work Study Inspectors = 11
  No. of Chief Planning Inspectors = 02
  (Total Inspectors = 13)

2.0 SOUTHERN RAILWAY MONTHLY GAZETTE PUBLICATION :-

The Planning Branch is compiling the details such as results of Selection to various posts, Staff due to Retire, Change in Employee's Name, Missing Pass PTO and Cash Value Books etc., for publishing in Southern Railway Monthly Gazette. The Monthly Gazette is also distributed to all Field Units.

3.0 SALIENT FEATURES–'e-PUBLICATION

An Annual e- Publication titled 'SALIENT FEATURES' is uploaded in the Southern Railway Rail Net Home Page comprising the details about the activities and achievements of all the Departments.

4.0 OTHER COORDINATION WORKS :-

- The Planning Branch is compiling the details of Work load indices of various Divisions and submits to Railway Board every year.

- The Planning Branch is coordinating with all Departments to adjudge the best performing Division/Units for conferring Efficiency Shields during Railway Week Celebrations. The efficiency Shields are made ready for the distribution by GM during Railway Week celebrations in the month of April with respect to the various winners of all departments each year.

5. STATISTICAL ORGANISATION

Statistical Organisation is functioning under the Directorate of Statistics & Economics, Railway Board. At Zonal level the statistical Branch functions under the Administrative council of the principal Financial Commissioner, with the overall supervision of FA&CAO/T, Dy. CAO/T with Statistics and Analysis Officer as the Branch Officer.

Collection of data from source points, systematic compilation and generating statements as per Railway Board/Domestic periodical requirement in form of various statements is the prime role of the organization. Analysis and interpertation of various statistical parameters are also made.

- In order to assist in increasing the revenue preposition.

- Assist in eleminating the waste by expenditure monitoring ; and

- Enhancing efficiency with economy.

The activity of the Department can be classified into following two broad categories :—

Commercial Statistics :

Railway Board, Commercial and Accounts department as users, the following compilation of statements are done.

- Advance Gross Earnings and Traffic handled are reported for every 10-day period.

- In 12 Commodity Statement – the tonnes and number of wagons originating details are advised for 12 important commodities.

- Under Goods Revenue Statistics in Statistical Statement No. 7A & 7B Goods Earnings, NTKM and No of Tonnes Loaded for a month under Plan Head Commodities, are furnished on originating basis.

At present the checking and consolidation of RRs are done 'on line '.

• Number of Passengers Originating, carried and Passenger KMs. and Passenger Earnings & Rate Per Passenger Per Km. are complied and advised to Railway Board and other HODs.

• Parcel Traffic (Tonnes & Earnings) is advised through statistical statement No. 6B to Railway Board and other HOD's.

Operating Statistics :

Railway Board, Transportation, Mechanical and Electrical department as uders, the following compilation of statments are done :—

⇨ Monthly Performance Evaluation Report,

⇨ Passenger Train Performance (St. No. 1B)

⇨ Goods Train Performance (St. No. 2)

⇨ Rolling Stock (Loco motive) Performance (St. No. 4A)

⇨ Rolling Stock (Carriage & Wagon) Performance (St. No. 4B)

⇨ Fuel & Power Statistics (St. No. 5A)

⇨ Lubricating Oil Statistics (St. No. 5B)

⇨ EMU/MEMU/DEMU Train Performance (St. No. 8)

Efficiency indices like NTKM per Engine Hour, Percentage of Train Engine Hours to Total Engine Hours, Engine Kilometres per Engine day in use etc. are complied and sent to Board every month.

Goods Operating Statistics.— Statements consists of Section-wise, division-wise and traction-wise volume of goods traffic and efficiency indices for the use of operating department are prepared month-wise.

Around 45 Annual Statistical Statements.—covering Financial, Operating, Commercial and Personnel statistics are prepared and sent to Railway Board to meet requirements at various levels. They are published by Railway Board through in the book of Annual Statistical Statements, published every year and the book is also a part of the Budgetary Documents.

A hand book (Compendium) – Pocket Book of Financial Results and Important Statistical Highlights.— exhibiting data for five years at a stretch on important statistical parameters of Southern Railway, with graphical representation, is published to help the administration for information, review and in decision-making. It helps in manpower planning, assets utilization and to devise marketing strategies for better performance. It is also available in the Railnet Statistical branch web site.

Chart on density of traffic section-wise, division-wise are prepared with the assistance of drawing branch for publication to grab quick graphical view of the traffic density over sections and divisions.

Statistical Branch Web Page.—

Under the initiative of Statistics & Analysis Officer and FA & CAO/T all important statements are posted & updated periodically in the Web Page, including Special Studies/ Analysis and Inspection notes. This helps the users to access any details that they require from our branch at any time.

Statistical Inspection.—

An inspectorial section consisting of Senior Statistical Inspectors conduct periodical test checks on various statistical returns at source points of Stations, crew Booking Centres, Goods Sheds etc; Regular test checks on Advance Tri Monthly Statement of Gross Earnings are made to ensure correct compilation of vital statistics. The errores noticed during inspection were notified to concerned staff for avoidance in future. Accountal procedures pertaining to various newly introduced mode of booking like ATVM, COTM and mobile bookings were also taken care of in Advance Trimonthly Statement of Gross earnings.

Traffic Costing Cell of this Railway continued to do :

1) Cost Analysis of Coaching Services.
2) Cost Analysis of Freight Services.
3) Study on the Economics of EMU Services.
4) Analysis of Incremental cost for Goods services
5) Analysis of the Shunting Engine Hourly Costs.

The reports were sent to Railway Board to enable preparation of End results booklets, containing the Unit costs of Coaching and Goods services.

Southern Railway Headquarters IT centre is located in Moore Market Complex, 8th floor, Chennai. The main activities of this Office include development of new software, maintenance of database, servers, ROLIN network for HQ, MAS division & PER area, maintenance of network/software support for divisions and workshops in Southern Railway. The following applications are processed at HQ/divisional levels and other areas of Southern Railway with necessary software support :—

1. AFRES (IC - X bills & Custom Reports, E-Suspense, PF, Pension e-scroll, Remittance into bank, Traffic Accounts, Cash & Pay, Budget).
2. FMIS (Financial Management System)
3. PRIME (Technical Support to WPR, WSI, Income Tax, OT, EMIS, WGR, ST-40, Digitization activities).
4. WGR (Workshop General Register)

   (General and workshop Payroll System)
5. FAS (Freight Accounting System)
6. PAS (Passenger Accounting System)
7. OSS (Operating Statistics System)
8. Database Administration
9. Infrastructure Section
10. IPAS Implementation

1. **AFRES–Advanced Finance and Railway Earnings & Expenditure System.**

This Oracle based integrated system, provides total solution for autornation of Accounts Department in Railways. The System covers–

❖ **Internal Check**–Establishment Bills and Expenditure bills registration, audit and payment. Linked with PRIME for employee payments. Internal Check module was implemented in May'16 in IPAS. Facility

has been made for those reports and queries which are not available in IPAS by downloading data from IPAS and storing it in a database created for this purpose and giving reports as and when requested by the user.

- **Suspense-E-Suspense and G-Suspense**

  E-Suspense :–Module was partially implemented in IPAS. The data ported from IPAS to AFRES to enable the users to reconcile the data.

  The Closing data as on 31st March, 2017 (HQRS, MAS, PER, TVC, SA and TPJ) for E-Suspense porting handed over to CRIS. Co-orinating with CRIS for this implemetation.

- **G Suspense**–Mould was partially implemented in IPAS.NData ported from IPAS to AFRES to enable the users to reconcile the data.

- **Provident Fund** :–Maintains employee PF account-Accounting debit & credit, Interest calculation, Settlement and Reconciliation.

  PF data in AFRES pertaining to HQ, MAS & PER units have been mapped in the required format to port into IPAS.

- **Books**–Cheques generation, Cheques & Bank Scroll reconciliation of bank remittance, Book closure (Cash book-I & Cash book-II and account current), generation of revenue and capital schedules. New reports developed as per the user's request. Books module was implemented in June'16 in IPAS. Facility has been made for those reports and queries which are not available in IPAS by SRITC Staff, by taking data from IPAS and storing it in a database created for this purpose and giving reports as and when requested by the user.

- **Pension** :–Settlement cases of all divisions are processed locally. Data regarding revision of cases, received from all divisions are updated in the consolidated pension master. Trouble shooting for all divisions for 6th and 7th pension revision done as and when requested.

Pension e-scroll :–Railway debit scrolls received from the banks are compared with the Pension master and exception reports (viz. tallied, utallied and Unmatched) generated for recouncilation.

WEB Development :–The above exercise of pension scroll matching is done as web application using PHP Maker and MYSQL.

REMITTANCE INTO BANK :–Module still running in AFRES only. Porting of cash office daily data from PGT and TVC divisions done on a monthly basis along with TPJ cash data received as files. After receipt of credit data from banks, cleansing like date correction and checking for duplicate data are done.NMonthly process of both credit data and debit data is done and unmatched listing (I listing) sent for checking. After ARD corrections final processing done and various reports handed over to books section for further action. Yearly DHR exception reports generated and given. Panel Interest for delay in remitting by banks is calculated half yearly and statements given to books for reconciling with the banks.

- **Traffic Accounts**–Maintenance and Trouble Shooting of the following sections of Traffic Accounts in AFRES.

1. **Cash and Voucher** :–Updation of Station Master as and when new Stations are opened for traffic. Forms and reports were modified to include the POS factor.

2. **Balance Sheet** :–Updation of Station Master as and when new Stations are opened for traffic.

3. **Error Advice (Outstanding Section)** :–Modification of existing forms and reports done for all the above modules as and when requested by ussers.

Cash & Pay :–MCR data (cash & Chq) entered in IPAS is ported into AFRES for HQRS, TVC.

Various Activities of Cash & Pay Section :–

1. Assisting Divisions/Unit.
2. Data porting from IPAS to AFRES for necessary processing and taking reports by HQ, MAS, PER, TVC & PGT.

MCR data (cash & Chq) entered in IPAS is ported into AFRES for HQRS, TVC on daily basis since cash module is not fully implemented in IPAS.

Cash remittance Note (CRN) for Traffic earnings is maintained in AFRES only.

Trouble shooting is done to generate challans and also to process every day Cashbook.

Facility has been made for those reports and queries which are not available in IPAS by SRITC, taking data from IPAS and storing it in a database created for this purpose and giving reports as and when requested.

Station Master available in this office is being updated regularly as requested.

PMR data (HQRS, PER & MAS division) entered in IPAS is ported into AFRES. Reports are commissioned to eanble the respective divisions to process Cash book every day in PAY module.

Budget :–This Module has been developed in-house in AFRES and various reports for budget estimate, August Review, Revised Estimate and Final Modifications are taken by HQ, Budget Section consolidating the data given by various units of Southern Railway and sending it to Railway Board. New forms and reports developed as per the user's request.

2. FMIS– Financial Management Information System :– This ORACLE based application software is used for consolidation of Account current processing at Head quarters and generation of revenue and capital schedules for all divisions, workshops and Zonal Railway. Same has been implemented in IPAS.

Facility has been made for those reports and queries which are not available in IPAS, by SRITC Staff, by taking data from IPAS and storing it in a database created for this purpose and giving reports as and when requested by the user.

C & R account Module and ST 15 & 30 is still maintained in AFRES only.

3. PRIME Payroll and Related Independent Modules- (General and Workshop Payroll Systems)

This **Oracle** based software application is in use for

- ❖ Employee Information System.
- ❖ Generation of Payroll OT, NDA eliments for workshop.
- ❖ Incentive payments for workshop employess.
- ❖ Generation of supplementary and arrears bills like
  - ✦ MACP arrears
  - ✦ PLB, DA arrears payments
  - ✦ Other arrears like NDA, OT etc.
- ❖ Generation of exceptional reports like as drawn particulars, HBA recovery, EE charges etc.
- ❖ IT Projection Statement, Form 10E & Form 16 etc. for the previous periods.
- ❖ Shifting of processing of data from PRIME to IPAS.
- ❖ Porting of data serving employees from PRIME to IPAS.
- ❖ Porting of data retired employees from PRIME to IPAS.
- ❖ Processing for pay and Allowances for Workshop Payroll and General Payroll.

4. Workshop General Register (WGR), WSI & Labour Summary–

Workshop General Register (WGR)

- ❖ Updation of Concordance Master.
- ❖ Porting stores data from STORES module.
- ❖ Porting Workshop Incentive Bonus data after ratification of Zero Work Orders.
- ❖ Porting WGR supplementary data from ftp sites.
- ❖ Porting Labour summary data
- ❖ Generation of monthly reports.

Work Shop Incentive :

- ❖ co-ordination with users for data entry
- ❖ ARD, Processing and generation of monthly reports.
- ❖ Generation of Debit analysis, payroll statistics, Bonus without Earnings, Average Hourly rates.

Labour Summary :

- ❖ coordinating with users for data entry of tally sheets.
- ❖ Monthly updation of Average Hourly Rates.
- ❖ Periodical updation of ONCOST details.
- ❖ Generation of monthly reports

Users : EWS/AJJ, S&T/PTJ, Loco, Car, ELEC/PER.

5. FAS – Freight Accounting System (FAS)

The details of the work done by the Goods Section at SRITC/ MMC/MAS during 2016–17.

Oracle based application software is being used for

- ❖ Data captured from FOIS terminal available at Traffic Accounts and necessary modifications are carried out and used for Oracle processing.
- ❖ 7A reports are processed and generated for every 10-days, i.e. thrice in a month separately and are forwarded to Railway Board through Statistical Branch. Similarly for the consolidated monthly data, 7A reports are processed, generated and forwarded to Railway Board through Statistical Branch.
- ❖ Generation of other allied reports like Analysis, ST8, ST10, originating Statistics, Commodity wise statistics etc.
- ❖ Transfer of date as per Railway Board Schedule to Centralized Apportionment System through Traffic Accounts.
- ❖ Quarterly, Half-yearly processing and Annual Processing has been done.
- ❖ Maintenance of legacy data pertaining to Goods Earnings and Traffic from the year 2009.

6. PAS – Passenger Accounting System–

Passenger Accounting System (PAS) enables processing of PRS and UTS journey performed monthly data and gene ration of summary reports pertaining to originating passenger and earnings.NIt slao enables to generate various periodical MIS reports i.e. Monthly,/Quarterly,/Half yearly/and Annual based on the parameters like Railways wise, Division wise, Class Wise, Ticket Type Wise, Distance Leg Wise, etc. The stake holders of this application are Traffic Accounts, Statistical Branch, Commercial and Operating departments, reply to queries and parliamentary queries.

7. Operating Statistics System (OSS)

Maintenance of Engine Module. The data received from GMST/TPJ in Excel format is converted into sql format and ported into Oracle Database for processing. After processing Statistical Office uses the data and takes various print-outs.

Various new forms and reports are developed as and when required by the GM's Statistical Office.

Fuel Module :–Fuel Module was suitably modified as per user request. Various forms and reports are also newly developed in Oracle D2k 6i (Forms and Reports). 15 Railway Consumer Depots (RCD's) are connected to the database at SRITC.

8. Database Administration :–

Database Migration from HP Server to DELL Power Edge R630 Server at Construction / MS :

In july 2016 Database were migrated from Windows environment to Unix environment in the New Server at Construction Office / MS.

i. Configured the Server with 2 raid Volume Group. Volume Group I with Raid I (Mirroring) to accommodate Virtual Host, Volume Group 2 with RAID 5 (Stripping with Parity) to accommodate Virtual Guest.

ii. Configured Oracle 8i Database In OEL 4.8 and Two Databases. Afres Database of Construction (FMSCNMS) and Audit Database of Construction (AUDIT II) were migrated from HP Server.

Migration of Databases and Applications from SunFire V480 Servers to Fujitsu M10-1 Solaris Servers at SRITC / MAS :

i. In October 2016, The 14 Databases and 9 Applications were migrated to the newly produced Fujitsu M10-1 Solaris Servers from old servers and do away with AMC for the old servers.

ii. The Tape Library with Tape Offline facility (Storage Tek SL150) is attached to Database Server. The logical backup stored in the backup area, will be copied.

Database Migration from SunFire V480 Server to DELL R915 Server at Palghat :

In November 2016 a new server is configured as a standby server for the Old server to cater to the disaster recovery of data of PGT and old data of SA division.

i. Configured the Server as Standby with 2 RAID Volume Group.

ii. The Standby Server was made available and SRITC / PGT can import Database Dump from Sun Server in case of emergency.

9. Infrastructure Section

A. During the year 2016–17 AMCs were entered into for

- ❑ PCs and Printers for one year
- ❑ SUN V480 through Rider Agreement for 6 months period
- ❑ Power One 30kva ups for two year
- ❑ LIPI 6306 Line Printer for one year
- ❑ LIPI 6215 Printer for one year

B. The following Hardware and Consumables were procured.

- ❑ EXIDE Battery (100Ah) for NUMERIC UPS
- ❑ Printer Cartridges for HP Colour Laser Jet printer
- ❑ Fujitsu Server M10-1 (midrange server)

C. Processed AMC quarterly bills and refund of Security deposit for SUN V480 Server and AMC for the server is concluded.

10. IPAS implementation :

- ❑ Implementation of Pay Roll in IPAS on April 2016. Implementation of Books, Internal Check and PF in IPAS on June 2016. Implementation of Cash (MCR) and Pay (PMR) in IPAS on July 2016. In Pay roll module, Pay Commission implmentation carried on July 2016 and Bonus and DA arrears calculation carried on September 2016. Partial implmentation of OT module on August 2016.NIn Books module, Schedules in Account current implemented on October 2016. Partial implementation of G-Suspense module on November 2016. Implementation of Stores module (JV, Purchase order) on December 2016.NPartial implementation of E-Suspense module on January 2107.
- ❑ User ID created for different modules for all division wise, workshop wise, construction wise users with Zonal level security in IPAS.
- ❑ Ulmparted IAPS training to all staff of Accounts and Personnel Branch, HQRS, Division wise and Workshop wise users.

Other Activities :

- ❑ **Budget**–Facilitated to Conduct Budgetary Reviews pertaining to Demand No. 16–Plan Head 17 (Computerization) and Demand No. 3 pertaining to Sr. EDPM/MAS (03–243) and Submission of Appropriation Account (Demand No. 16–Plan Head 17 for FA&CAO/MAS and other allied works.
- ❑ Support for other divisions and workshops for
  - ❑ Processing of Payroll.
  - ❑ Maintenance of Payroll related Software and database.
- ❑ Maintenance of ROLIN Internet network used for oracle based applications which is managed by in-house team of this office.
- ❑ 190 Technical Clearance accorded for software and hardware procurements, licensing, etc. by all departments of Southern Railway covering HQRS, Chennai Division, PER, COS/PER & all officers under the control of CAO/CN/MS.
- ❑ Computer Learning Centre
  - ❑ In house training imparted to staff from other user departments (Personnel, Accounts, Audit and executives) in various software programs.

6. Public Grievances Cell

1. All Public Grievances are investigated in detail by the Public Grievance cell both at the Headquarters and the Divisions and suitable corrective/preventive action is taken. Where the staff are found at fault, disciplinary action is taken against them to prevent recurrence. Training programmes are arranged and also counselling sessions held in order to create awareness amongst them for better service orientation. In all cases, replies are sent to the complainants explaining the position in detail.

2. All measures are taken to create a feeling in the minds of the "Travelling Public" that their interest, welfare and safety are taken care of by the Railways.

3. Details about the number of complaints received and dealt with in respect of major categories during 2016–17 as compared to those received during 2015–16 is given below :—

Sl. No.	Classification	OB	Number of Complaints					
			2015–16			2016–17		
			Received	Disposed	Balance	Received	Disposed	Balance
1	Behaviour of staff	3	593	536	60	845	794	111
2	Lack of amenities/ Unsatisfactory Maintenance of Amenities at Stations/ Trains.	16	3008	2963	61	5050	4993	118
3	Late running of trains	0	452	447	5	934	922	17
4	Coaching reservations and other than reservations	13	1604	1512	105	2178	2093	190
5	Catering Arrangements	2	333	322	13	548	468	93
6	Miscellaneous/ Suggestions	3	1814	1799	18	3051	2987	82

4. Number of complaints received, disposed of and pending during 2016–17 as compared to the previous year is as follows :—

Year	Opening Balance	Receipt	Total	Disposed	Pending
2015–16 ..	37	7804	7841	7579	262
2016–17 ..	262	12606	12868	12257	611

5. During **2016–17** a total number of **12606** complaints were registered as compared to **7804** complaints in **2015–16.**

6. Incivility :–Complaints regarding Incivility/behaviour of staff are investigated throughly and in proved cases, deterrent action is taken against the staff as fault.

Note.–Due to Introduction of complaints from various sources such as Web, Mobile, App, SMs based on COMs Portal as well as Manual complaints, there has been sharp increase in the Public Grievances. Therefore high variation in the number of complaints registered.

PUBLIC RELATIONS AND PUBLICITY

(April 2016 to March 2017)

Public Relations Department of Southern Railway, which serves as a link between the organization and the public, plays a key role in projecting the corporate image of Southern Railway.

Keeping the public abreast of the developments on the Railways through the print and electronic media is the primary responsibility of the Public Relations wing. Organized Publicity Campaigns and media related activities are fundamental to the growth of a corporate organization. The Public Relations Department was engaged in various activities such as media coverage, publicity campaigns and participation in exhibitions besides maintaining a record of media feedback.

PRESS COVERAGE

Dissemination of information to the travelling public is the primary responsibility of the department. Press releases, that are both informative, dealing 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 abreast of day-to-day railway working.

- ☞ During the period, a total of 2263 Press releases that were operational and informative in nature / concentrating on developmental activities and achievements of the Railway were issued.
- ☞ 100 Press Conferences/Press meets were arranged on various occasions focusing on the activities of the Railway. Press Meets enabled to gauge the concern of the public and clarify various queries thereby building up trust and boosting the goodwill of the organization.
- ☞ Rejoinders were issued, wherever necessary, to counter wrong and distorted reports appearing in certain sections of the Press.
- ☞ Complaints and grievances appearing in the columns of the press were taken up for immediate action.
- ☞ In lines with Ministry of Railways initiatives, "Rail Humsafar Saptaah", "Swachata Saptaah" and "Rail Vikas Shivir" campaigns were widely publicized in Print and Media.
- ☞ Photo coverage for all important events viz., MR/MoSR functions, CRS/GM inspections, visits by Parliamentary Committees, Railway week, SRWWO functions, I-Day and R-Day and other departmental events.
- ☞ The department arranged for extensive Press & Media coverage of flagship programmes of Southern Railway, viz., Unveiling of Auto-vision document for freight & Signing of MoUs with Chennai and Ennore Ports and Launch of Station Redevelopment Programme.
- ☞ Photo coverage for all important events viz., MR/MoSR functions, CRS/GM inspections, visits by Parliamentary Committees, Railway week, SRWWO functions, I-Day and R-Day and other departmental events.
- ☞ The department arranged for extensive Press & Media coverage of flagship programmes of Southern Railway, viz., Unveiling of Auto-vision document for freight & Signing of MoUs with Chennai and Ennore Ports and Launch of Station Redevelopment Programme.
- ☞ PR Department played a vital role in organizing of events for SRWHQ at Ashraya special school, tree sapling plantation drives and other welfare activities. The department took every effort to make the Photo Exhibition held on the „Role of Women in Railway working organized by SRWHQ on International Women s Day, a grand success.

TELEVISION / ALL INDIA RADIO COVERAGE

Wide coverage was given for all Railway events by the AIR, Doordarshan and Satellite television channels and Social Media viz., official face book and Twitter handles besides regularly updating in www.sr.indianrailways.gov.in (Southern Railways s website). Important press releases were flashed on the Radio and TV networks for the benefit of the public.

Special efforts were taken during Jallikattu protests and Cyclone Vardah to reach rail users through prompt scroll messages in various TV and Radio FM channels with real-time information pertaining to cancellation, diversion, re-scheduling and partial cancellation of services and operation of specials at short notice.

Informative programmes, inclusive of interviews by senior Railway Officials, were broadcast/telecast on the AIR and TV for the benefit of the public. Mr.P.K.Mishra, AGM, participated in a programme on the eco-friendly initiatives of Southern Railway was telecast in DD Podhigai and briefed about the zone s GOGREEN efforts.

SOCIAL MEDIA

Southern Railway is active on social media. Press releases, event updates, innovations, achievements of all the departments are being shared in the official twitter (@GMSRailway) and face book (Southern Railway face book) handles. The number of followers of these interactive forums is steadily increasing. From over 4300 followers in March 2016, @GMSRailway twitter handle has 10,500 followers as on 31st March 2017. The number of followers of Southern Railway face book has increased from 25000 last year to over 37000 in March 2017.

The complaints, grievances and suggestions received from rail users are being monitored closely and forwarded to officials concerned for further action. Close liaison is maintained with DRMs in redressal of social media based public grievances. Every endeavour is made to keep these interactive portals alive by responding real time, upholding the image of Railways.

CAMPAIGN ADVERTISING

Healthy publicity through appropriate media channels is necessary to promote the corporate image of the establishment. A total of 4 advertisements on social and safety themes in addition to 8 Display advertisements during Hon ble MR functions were published. Further, 1140 tender notifications were released in the national and regional newspapers and magazines. A signature campaign was organized during a Press Meet by General Manager on the „GO GREEN INITIATIVES OF SOUTHERN RAILWAY in which Press & Media personnel expressed their solidarity with the railway s eco-friendly efforts

PUBLICTY LITERATURE

No publicity campaign is complete without publicity literature. Wide-ranging publicity campaigns on various social awareness issues were organized through the print and electronic media.

Multi-coloured brochures, Invitations, folders and posters were published in English, Tamil, Malayalam, and Hindi to mark specific occasions, especially inauguration of new projects/train services etc by Hon ble Minister of Railways. Besides, a brochure on NMR was released during APHTRO exhibition held at Delhi Rail Museum.

Besides, as per the instructions of Railway Board, as a pre-budget exercise, special booklets were printed and sent to MLAs and MPs of Tamil Nadu and Kerala elaborating the achievements of the zone during 2015-16 and 2016-17. The list of eminent personalities was compiled and e-mails detailing the Performance highlights of Southern Railway was sent to them.

Two video clippings, „Southern Railway – a success story and „Achievements of Southern Railway were made and screened during „Rail Vikas Shivir conclave of Prime Minister of India. The same were uploaded in the official face book and twitter handles and you tube.

Indian Railway Magazine and Bharatiya Rail Hindi Magazine are used as a platform to constantly update various developments in the zone.

EXHIBITIONS

Railway pavilions at the various Tourist/Trade fairs across the country have been attracting vast crowds every year. As part of the PR exercise, Southern Railway participated in the following exhibitions during the year.

(1) All India Tourist and Industrial Fair at Chennai.

(2) The stall highlighting the picturesque NMR by Southern Railway attracted large number of foreign delegates at the Exhibition cum International Conference of Asia Pacific Heritage & Rail Transport Organization held at National Museum, New Delhi.

Besides, the Railway also participated in a number of regional exhibitions conducted by educational institutions and social organizations.

Important events of the year 2016–17

Hon ble Union Minister of Railways Functions in Southern Railway for inauguration / dedication of various capacity augmentation/ amenities/ train services.

Sl. No.	Date	Venue
1.	16th June, 2016	Ernakulam Jn.
2.	24th July, 2016	Chennai Central
3.	3rd September, 2016	Coimbatore Jn.
4.	26th September, 2016	Kozhikode Jn.
5.	26th September, 2016	Thiruvananthapuram Central
6.	4th March, 2017	Chennai Central Jn.
7.	11th March, 2017	Tiruchchirappalli Jn.
8.	12th March, 2017	Kumbakonam Jn.

Besides, Hon ble MoSR Shri.Rajen Gohain visited Southern Railway Headquarters on 23.9.2016. A Press Meet was organized as part of "Swachata Saptah" (17.09.16 – 25.09.16) during which Hon ble MoSR detailed the press about the ambitious „Swachh Rail-Swachh Bharat initi atives of Indian Railways.

The activities of the zone during "**Rail Humsafar Saptaah"** (26.5.16 - 1.6.16) and "**Swachhata Saptaah"** (17.09.16-25.09.16) and "**Rail Vikas Shivir"** (18.11.2016 - 20.11.2016) were given wide publicity through Press & Media and Official face book and twitter handles. Reports received from various divisions/departments during these events were compiled and sent to Railway Board regularly.

7. Public Relations performance during the year 2016–17

(From 1st April 2016 to 31st March 2017)

Sl. No.	Activity	Indicate Number(s)	Remarks If any
1.	Press Releases Issued	2263	..
2.	Press Releases Published	2263	..
3.	Press Conferences	100	..
4.	Press Tours Conducted	Nil	..
5.	Publicity Brochures brought out	18	..
6.	Participation in Exhibitions	8	1.All india Tourist & Industrial Fair at Chennai. 2.The MNR stall by southern Railway at the Exhibition cum International Conference of Asia Pacific Heritage & Rail transport Organisation held at National Museum, New Delhi. Besides the above, SR participated in 6 regional exhibitions conducted by Educational & Social Industries.
7.	Advertisements released		
	(a) Display	8	..
	(b) Tender	1140	..
	(c) Others	4	Social & Safety Themes.

Important events of the year 2016–17

Shri Suresh Prabhakar Prabhu, Hon ble Union Minister of Railways Functions in Southern Railway for inauguration / dedication of various capacity augmentation/ amenities/ train services.

Sl. No.	Date	Venue
1.	16th June, 2016	Ernakulam Jn.
2.	24th July, 2016	Chennai Central
3.	3rd September, 2016	Coimbatore Jn.
4.	26th September, 2016	Kozhikode Jn.
5.	26th September, 2016	Thiruvananthapuram Central
6.	4th March, 2017	Chennai Central Jn.
7.	11th March, 2017	Tiruchchirappalli Jn.
8.	12th March, 2017	Kumbakonam Jn.

Besides, Hon ble MoSR Shri.Rajen Gohain visited Southern Railway Headquarters on 23.9.2016. A Press Meet was organized as part of "Swachata Saptah" (17.09.16 – 25.09.16) during which Hon ble MoSR detailed the press about the ambitious „Swachh Rail-Swachh Bharat initi atives of Indian Railways.

The activities of the zone during "**Rail Humsafar Saptaah"** (26.5.16 - 1.6.16) and "**Swachhata Saptaah"** (17.09.16-25.09.16) and **"Rail Vikas Shivir"** (18.11.2016 - 20.11.2016) were given wide publicity through Press & Media and Official face book and twitter handles. Reports received from various divisions/departments during these events were compiled and sent to Railway Board regularly.

8. RAILWAY USERS' COMMITTEE

Various Consultative Committee Bodies, Viz.. Zonal Railway Users' Consultative Committee. Divisional Railway Users' Consultative Committee, Sub-urban Railway Users' Consultative Committee and Station Users' Consultative Committee provide opportunities for Rail Users to interact with the administration. The issues addressed are broadly related of passenger amentities construction of new lines, gauge conversion works, etc.

The committee have representatives from Parliament, State Legislatures, State Governments, Chamber of Commerce and Trade Associations, Agricultural interests, Public Sector Undertakings, Passenger Associations, besides nominations under Special Interests.

During the year 2016-17, one meeting of ZRUCC held at Chennai on 13–06–2017.

During the year 2015-16, three meetings of DRUCC at Chennai, One meeting at Tiruchchirappalli and Two meetings at Madurai were held. Two meetings at Palakkad, three meetings at Thiruvananthapuram and two meetings at Salem were conducted.

Divisions	No. of Meetings conducted during 2016–17
Chennai	3
Tiruchchirappalli	1
Madurai	2
Salem	2
Palakkad	2
Thiruvananthapuram	2

9. VIGILANCE ORGANIZATION

The functions of the Vigilance Department comprise of Preventive, Investigative and Educative in the sphere of anti-corruption activities. Regular Seminars and Workshops were conducted by Vigilance Department to update the knowledge of the employees regarding the lapses in the system and also latest rules in force and to train them to be effective in discharge of their duties. Preventive checks are conducted to identify weak spots in the system and remedial actions are suggested to avoid revenue leakage. The vigilance also monitors the DAR cases arising out of vigilance / SPE investigation. The complaints from President's Office & PMO references, CA-iii references, CVC's referred are dealt on priority. Source information on alleged irregularities are collected from various quarters and surprise checks are organized to nab the offenders indulged in irregularities. A close liaison is maintained with CVC & CBI. Preventive checks are conducted regularly on officials of doubtful integrity and those who are on "Agreed" and "Secret" lists.

2 Handling of complaints:

Detailed investigations are undertaken in all cases of genuine complaints, which are having vigilance angle. During the year 2016 – 2017, 169 complaints were taken up for investigation, 145 complaints (Gaz. 50 & Non.gaz. 95) have been investigated and the results thereof are given below :

	Gazetted	Non-gazetted
No. of major penalty proceedings initiated	1	7
No. of minor penalty proceedings initiated	2	21

3 Preventive Checks :

Regular and surprise inspections are conducted on sensitive areas which are susceptible to corruption. Every year, Railway Board identifies certain thrust areas to conduct preventive checks. This includes Mass Contact Area, like PRS, Booking Office and Trains, which help in prevention and detection of irregularities in areas which has a great impact on the image of the Railways. Special Checks are organized during important festival seasons and holidays in PRS and in Trains to detect irregularities so that genuine passenger is not put to unnecessary hardship. Re-weighment is done regularly to detect leakage of revenue due to over-loading, which is having a safety angle as well as. Scrutiny of expenditure/earning contracts, leakage of HSD/Lube oil, checks on e-tickets, refund of reservation tickets, fraud in SPTM/UTS tickets, misuse of concessions/ passes, disposal of scraps, Hospital management, check on quality of construction are the other thrust areas on which checks are conducted to detect possible irregularities and to plug leakage of revenue. Apart from these thrust areas, the vigilance focuses on other areas where there are possibilities of committing frauds.

During the year 2016 - 2017, 3499 preventive checks were conducted by the Vigilance Organization. Department-wise breakup of checks done is furnished below:-

Department	No. of checks
Accounts	44
Civil Engineering	70
Electrical Engineering	43
Mechanical Engineering	64
Medical	38
Personnel	157
Security	28
Signal & Telecommunication	28
Stores	77
Commercial/Operating	2941
Others	9
Total	3499

A total number of **4** successful 'Decoy Checks' were conducted over stations, trains, circulating areas of major stations etc. during the year 2016 - 17 to curb down the malpractices.

In order to augment the checks made in mass contact areas, the vigilance organization is also conducting checks on tout activities. During the last financial year, vigilance conducted **509** checks and **107** touts/anti-social elements were apprehended and prosecuted. Tickets to the value of **Rs.5,77,807/-** were seized and an amount of **Rs. 50,650/-** was collected as fine.

In addition to the above, **999** checks on unauthorised vendors were conducted and **999** unauthorised vendors were apprehended. **Rs.4,94,620/-** was realized as fine.

4. Punitive Action taken during the year 2016 - 2017

The Inquiry Organization functioning under SDGM & CVO has completed **47** departmental Inquiries during the year 2016 - 2017 and Inquiry Reports were sent to the concerned disciplinary authorities for necessary DAR action.

No. of officials punished as a result of Vigilance DAR proceeding

Penalty	Gazetted	Non-gazetted	Total
MAJOR	**6**	**67**	**73**
MINOR	**4**	**548**	**552**

5. Earnings accrued to the Railway through vigilance checks during the year 2016 - 2017 was Rs. 3,31,25,639/-

The break-up of the earnings through vigilance check is as follows:

Sl. No.	Details of earnings	Amount (in Rs.)
1	Earnings from without ticket passengers	89,935
2	Earnings from un-booked luggage/parcels	1,230
3	Earnings from undercharges realized	2,19,22,571
4	Higher Travel	870
5	Demurrage / Wharfage charge	1,050
6	Earnings from excess/shortfall in Govt. cash	70,442
7	Other traffic recoveries	12,48,925
8	Leave Account / Establishment matter	17,14,323
9	Technical recoveries	77,71,473
10	Amount realized as fine by Court of Law	3,04,820
	Total	3,31,25,639

6. System Improvements suggested by Vigilance:

6.1 A system improvement has been suggested to CPO/ MAS, FA&CAO/MAS, CSC/MAS, Chairmen/RRB/MAS, TVC and RRC/MAS to get the endorsement/ mentioning of time as to which the cover in which the Question Booklets are sealed by the candidates of the examination.

6.2 A system for request transfer of SM/SS has been circulated to avoid interpolation of seniority in request transfers.

6.3 With regard to testing of Retro Reflecting sheeting, Railway Board Vigilance advised Zonal Railway to find out which labs are capable of the specified tests prescribed by RDSO and accordingly, include the name of those laboratories in tender documents for future tenders.

6.4 The following system improvement are suggested in Procurement of electronic and like such items:

(i) Tendering for such items (Electronic ballast 36W) should be done, after clubbing quantities of different consignees. All consignees may be asked to check their demands and submit the same before three/ four targets dates spread out over in one year.

(ii) Possibility of finalizing rate contract at divisional level/Headquarters level may also be explored.

(iii) Makes/Brands of these items may be standardized in order to ensure receipt of quality electronic ballasts.

6.5 A system improvement was suggested to CPO/MAS, FA&CAO/MAS, CSC/MAS, intimating that while handing over the question booklet, certain details to be written on the cover and signature of candidates be obtained.

6.6 A system correctness letter issued to CPO & CMD for claiming of salary for the Contract Medical Practioner and part time Doctors.

6.7 Sanction of CTL to be followed by as per Para 527 of IREM Vol. I has been suggested to Sr. AFA/CN/MDU.

6.8 For effective monitoring of S.1539 vouchers (DS.8s) of P.way item, which are processed for condemnation and to avoid undue delay in forwarding to Stores Depot for arranging its disposal the following system improvement suggested:

"The officer in charge of Track Planning (HQrs. Engineering Branch) should conduct a review meeting at HQrs. level with Sr.DENs of all divisions and likewise at divisional level all Sr.DENs should conduct a review meeting with their filed officers at regular intervals separately as deemed fit for reconciling the S.1539 vouchers forwarded to divisions to Hqrs. and field units to Divisions respectively for condemnation.

The custodians of engineering department after processing of DS.8s (S.1539 vouchers) for condemnation should monitor its progress until it is handed over to Stores department by HQrs. Engineering Branch. Necessary copy of the

acknowledgement to this effect has to be obtained from HQrs. Engineering Branch and filed along with the DS.8 (S.1539 voucher). Any delay in receipt of acknowledgement has to be brought to the notice of their higher-ups during review meetings".

6.9 It is suggested that the dealers of tender section in divisions/construction units may suitable be advised to improve the system before uploading of tender document in the web site.

6.10 A system improvement suggesting the question setter to specify the details of date, time & venue of the examination in addition to the details presently furnished, has been recommended while handing over the question booklet covers to the Exam Coordinator.

6.11 A system improvement is suggested to CMD/MAS to undertake quality check of medicines periodically by DMS in addition to medicines sent by Government Drug Inspectors.

6.12 A system improvement is suggested to CPO/MAS to approach Railway Board for treating bigamy marriage as serious offence and getting clarification on nature of penalty to be imposed.

6.13 A system improvement is suggested for getting the evaluation of answer sheets of the written examination for promotion from Group 'C' to Group 'B' papers to be done by other Zonal Railway to ensure total objectivity in evaluation.

6.14 During a check, certain lapses were found in execution and quality checks by railway for work of "re-winding of auxiliary motors (MVRH, MVMT, MCP)" at contractor's premise.

(i) For traceability of raw materials, Invoices No./ Batch No./Lot No. were not mentioned in respective raw materials test certificates.

(ii) Validity calibration certificate of testing instrument was not checked and not mentioned in acceptance report.

In absence of above details in test certificate, raw materials supplied for repairing electrical machine/ transformers by contractor cannot be confirmed as per specification. Hence, the following system improvements are suggested for implementation to improve the quality of raw materials and reliability in working of all repaired electrical machines/ transformer and also these shall be incorporated in contract condition ;

- All raw materials test certificates shall be verified at contractor premises by railway inspecting officials with invoice/lot no./batch no. to match items with test reports and conforming of relevant specification;
- Valid calibration certificate of testing instrument/ equipment issued by approved agency shall be verified;
- Stage inspection report specified in CA shall be recorded and submitted by contractor to railway inspecting engineer during final inspection at contractor premises.

6.15 A system improvement for proper maintenance of Register exclusively for the issuance of Hospital Permit in Railway Hospitals / Health Units etc. has been advised to CMD/MAS by explicitly describing the format. 6.16 CPO/MAS has been advised a system improvement with regard to recruitment / selection, in that, henceforth, the using of the word 'Equivalent' may be avoided while prescribing the educational qualification for recruitment to any post and it would be better to spell out the essential qualification that are required for that post clearly.

6.17 A system improvement was suggested to CMD regarding issuance of fresh medical certificates to food handlers at Railway Stations duly obtaining the signature of person examined to avoid any malpractice.

6.18 As per Railway Board observation that no unauthorized person is permitted in the examination centre (inside the examination hall). A system improvement is suggested as follows –

"RRB may issue clear procedure in permitting media persons inside the examination centre duly indicating the competent authority to handle such issue"

6.19 A system improvement was suggested to CPO, FA & CAO & CSC regarding payment of CELS (NR) duly ensuring proper accountal of leave availed during last month.

6.20 A system correctness has been suggested to CPO to ensure proper scrutiny in the SRs of the employees at the time of granting annual increments in order to avoid grant of automatic increments to employees who are imposed with the penalty of withholding of increments.

6.21 A system correctness has been suggested to CPO that the evaluating officials may be sensitized regarding all rules before commencing evaluation.

6.22 A system improvement was suggested to CMD regarding issuance of fresh medical certificates to food handlers at Railway stations duly obtaining the signature of person examined to avoid any malpractice.

6.23 Investigation revealed that the SSE in-charge for execution had failed to inspect the materials and no inspection certificate with details as per tender requirement/drawing was produced and the part bill was passed based on overall consignee inspection certificate given by the SSE, the following system improvement is suggested.

"When high value items are procured on consignee inspection, the consignee inspection certificate shall be given individual item wise duly mentioning all the prescribed parameters as per specification/drawing"

6.24 In one case the DS8 vouchers processed for condemnation are not handed over to Stores department within a reasonable time resulting undue delay in disposal of scraps and realization of revenue. Following System improvement has been suggested to Engg Dept :

- The Officer In charge of Track Planning (Hqrs Engineering Branch) should conduct a review meeting at Head quarters level with Sr.DENs of all divisions and likewise at divisional level all Sr.DENs should conduct a review meeting with their field officers at regular intervals separately as deemed fit for reconciling the S.1539 vouchers forwarded by Divisions to Head quarters and field units to Divisions respectively for condemnation.
- The custodians of Engineering department after processing of D.S.8s (S.1539 vouchers) for condemnation should monitor its progress until it is handed over to Stores department by Headquarters Engineering Branch. Necessary copy of the acknowledgment to this effect has to be obtained from Hqrs Engg. Branch and filed along with the D.S.8. Any delay in receipt of Acknowledgement has to be brought to the notice of their higher-ups during review meetings.

6.25 In one case, Stores Department has been advised

"To furnish additional location details like land mark of location in all the sale related documents like Auction catalogue, Sale advice, Delivery order, Point letter etc, for easy access and identification of Location".

To give prior intimation to Vigilance in case of cancellation of delivery point.

6.26 In one case, Mechanical Department has been advised to follow the procedures and process for the rejected and accepted lot samples in all the labs of Southern Railway as detailed below for better and effective management of testing of items in CMT labs.

- Rejected tested samples: Preserve the rejected tested sample in the respective labs till Joint Inspection is finalized or for six (6) months whichever is earlier. Thereafter it may be scrapped.
- Accepted tested Samples: Preserve the accepted tested samples for three (3) months in the respective labs. Thereafter, it may be returned to the sender if desired or scrapped in consultation with the user department.

6.27 In one case it was found that the firms submitting the budgetary quotation are not participating in the tender for the reasons in unavailability of IREPS registration.

A system improvement is suggested that "the purchase officers in divisions/depots should include such firms from whom the budgetary Quotation has been taken should be included in the panel duly advising them through a separate letter about the tender details and to get themselves registered in IREPS duly following the procedures so as to participate in e-bidding."

6.28 Payment for washing and distribution of Linen was made based on the report signed by TTEs. The genuineness of signature of TTE as well as the quantity certified by the TTE could not be verified due to insufficient details available in the report. In long distant trains such as GT/TN express more than 8 TTEs of various zones/ divisions travels. On some of the TTE's reports not even the name of TTE was available. Contract staff also expressed various problems in obtaining TTE certification. System improvement was suggested to make payments based on the CRIS report (RAC and confirmed passengers excluding wait list passengers) in line with system followed at Chennai division.

6.29 During a check it was found that in case of cluster tickets where first lap of journey was confirmed and second lap is waitlisted/not reserved, the concession in fare was being extended to second lap as well, which was not in order. The same was referred to Railway Board for changes in the system, based on which the Railway Board have introduced a system improvement vide commercial circular No.31/2017.

6.30 During a preventive check conducted at PRS to detect vulnerabilities in reservation on passes, it was detected that if the Pass No. is preceded by a special character, the pass number is nether accounted in the Database nor printed in the Ticket, which gives room for manipulation. A system improvement was suggested to CRIS and this vulnerability has since been rectified.

6.31 During a preventive check, it was noticed that TTEs while declaring the private cash in figures and in words using the name of each individual number (eg. Rs.756/- Rupees seven five six) instead of writing seven hundred and fifty six. As it is susceptible to manipulation by inserting the word before, in between, or in the end, a system improvement was suggested that all the TTEs should declare their personal cash in rough journal book and EFT in name format only when writing in words.

6.32 A check was conducted by Vigilance in one of the Divisional Purchase offices with regard to procurement of Rain suit through divisional purchase powers. Investigation revealed that the item was procured with specific brand's description, instead of generic description/specification and also overstepping of divisional purchase power. Moreover, the reasons for passing over the lowest offers were not recorded on the offers while finalizing the tender. In this connection, the following system improvements are suggested to PCMM.

"(i) Necessary action for stocking two-piece rain suit adopting suitable description/specification to facilitate centralized bulk purchase which will derive possible price benefits and uniformity in specification of item.

(ii) Conduct workshops/awareness programme for the field officers and staff of Stores department/ indenting department to sensitize and enlighten them regarding the pitfalls in procurement of Non-stock items with special emphasis on necessity of adopting generic description/specification, and other pre-requisites to be considered in Non-stock purchases.

(iii) Arrange to issue necessary instructions to all the purchase officers to strictly follow the codal provisions and record the reasons on the offers while passing over the lowest offers, in direct acceptance cases at headquarters and depot level purchases."

The above three system improvements were advised to PCMM for implementation.

Further the following system improvements were advised to all departments for compliance.

(iv) Generic specification/description should be adopted for all non-stock purchases for all items by all the departments.

6.34 A check was conducted by Vigilance in one of the SSE/Electrical/Power offices in Trichy division with regard to accountal and disposal of electrical condemned materials. Investigation revealed that DS8 for condemned electrical material was prepared for part quantity instead of entire released material available at the time of preparation of DS-8; no separate register for condemned items and serviceable/repairable items was maintained as per codal provision; issue of serviceable/repairable items were made from released materials register; quantity raised through non-stock indent for replacement in excess of condemned quantity and placed the indents for piecemeal quantity instead of full condemned quantity resulting multiple purchases in different rates. In this connection, the following system improvements are suggested.

"a) Serviceable released materials viz. AC Ceiling fans, wall mounting fans, Sealed Maintenance Free Battery charger in different capacities etc., shall be taken into account in stock register and issues shall be made from the stock register only to the end user instead of taken into account in Released materials register. Serial numbers of released Sealed Maintenance battery charger in different capacities should be entered in the Released materials register.

b) Separate register shall be maintained for repairable released materials. After reconditioning or repairs be rendered serviceable and useful for another term of life, shall be taken into account in stock register. No distinction should be made between new, serviceable and repaired released materials in the matter of storage and issues."

The above system improvements for Sl. 2(a) and (b) were advised to PCEE/MAS, PCME and PCSTE for implementation.

In addition the following system improvement has been advised for implementation in all departments:

"Consuming departments should furnish the DS8 details with quantity and condemnation approval references in the non-stock indents on replacement account on submission of the same for taking procurement action, failing which such non-stock indents will not be accepted/entertained. Purchase Sections/Purchase Officers should ensure the same on receipt of non-stock indents on replacement account."

6.35 A letter was sent to Sr.DMO/HU/NGO/MAS to follow the system of preparing indent as indicated in Para 408 (1) of Indian Railway Medical Manual.

6.36 In SA division, in some of the cases, the EE charges of Railway quarters were not recovered from the occupant Railway staff. The following system improvement is suggested to overcome the issue of non recovery of EE charges.

" Periodic reconciliation to be done between Electrical and Personnel Department and in the cases of EE charges not recovered, the recovery to be ensured in the subsequent months. In the cases of continuous non-recovery, steps to be taken to ensure remittance of Electrical charges by the concerned employee else, the power supply to be disconnected duly following the procedure. For the cases of non recovery of EE charges due to errors in ' data', the same to be rectified immediately, duly collecting necessary details from the employees occupying the quarters."

6.37 A system improvement is suggested to RH/GOC regarding procurement of provisions and milk for Hospital Kitchen for the use of In-patients.

The system improvement suggested is that provisions may be procured on single quotation basis from Tiruchirappalli Consumers Co-op Wholesale Stores Ltd. (Chinthamani Super Market-Govt. of Tamil Nadu undertaking) by obtaining the necessary concurrence and sanction from the competent authority or the prescribed tendering procedure may be adhered to.

6.38 A system improvement suggested to SRSA for the sports persons appointed under the Sports Quota, not participated in the tournaments under the banner of Railways, and also on the aspect of visiting foreign countries without getting prior permission of the Administration.

6.39 A system improvement has been issued to PCPO/MAS that clearance from Vigilance Department invariably be obtained for taking different management decision including the promotion as laid down in the IRVM.

6.40 A check was conducted by Vigilance on delivery of condemned and unserviceable class III rails-60 kg on 22.12.2016. At the time of check it was observed that (i) Cutting of Rails was under progress. (ii) Permission for cutting was not obtained from the competent Authority. (iii). No specific condition for cutting was available in the Delivery order. In this connection, the following system improvements were suggested to PCMM to avoid possible mix up & malpractice.

" To formulate appropriate condition authorizing the purchaser for cutting of condemned Rails in to suitable loadable size and to incorporate the same in General/Special conditions of the e-auction sale pertaining to Southern Railway and also in all sales documents like Auction catalogue, Sale advice, Delivery order etc."

7. Vigilance Awareness Programmes :

7.1 Lecture on Vigilance awareness was given to the SSE/JE/Works and SSE/P.Way & JE/P.Way for promotional training at SRCETC/TBM on 05.08.2016.

7.2 Lectures on Vigilance awareness was given to the SSE/JE/Works and SSE/P.Way & JE/P.Way for Refresher course at SRCETC/TBM on 20.05.2016, 17.06.2016, 19.08.2016.

7.3 Lectures on Vigilance awareness was given to the SSE/JE/Works and SSE/P.Way & JE/P.Way for Initial course at SRCETC/TBM on 17.08.2016, 19.08.2016, 29.09.2016.

7.4 Vigilance awareness class was conducted by CVI/ Engineering on 18.11.2016 and 29.12.2016 at SRCETC/TBM for 11 staff of RC/PWAY and RC/works.

7.5 Vigilance awareness class was conducted by CVI/ Engineering on 10.11.2016 in view of vigilance awareness week at SRCETC/TBM for initial course of RC/PWAY, RC/works and drawing. 70 numbers of staff attended the class.

7.6 Preventive Vigilance lecture given at ZRTI on 01.06.2016, 04.07.2016, 23.07.2016 for Pro.CCs, ECRCs and Commercial Apprentices by AVO/G.

7.7 A Vigilance awareness class was conducted at ZRTI/ TPJ for Pro.TTEs on 20.08.2016.

7.8 A vigilance awareness lecture was given by Dy.CVO/ L to SSEs at Avadi Training Centre on 21.06.2016, 28.07.2016.

7.9 Vigilance awareness class was conducted by CVI/ Electrical on 02.11.2016, 01.12.16 at ZETTC/AVD for Refresher Course for SSE/JE/TRD and SSE/JE/TRS.

7.10 A Seminar on Tenders & Contracts pertaining to commercial matters was organized at CVO/O/MS on 20.06.2016 by Dy.CVO/T. for the benefit of commercial officers of all divisions at HQrs.

7.11 A Seminar on DAR conducted to Ch. OS/Confidential section of all divisions on 23.08.2016 by Dy.CVO/T. at HQrs.

7.12 Dy.CVO/Engg. has conducted a meeting with ADRM/ MDU and Sr.DPO/MDU on 20.10.2016 in connection with the Vigilance Awareness Week Programme to be held from 31.10.2016 – 05.11.2016 and detailed planning has been made.

7.13 Dy.CVO/T has conducted a Vigilance Seminar to TTEs of MAS & SA division on 18/10/2016 and 19/10/16.

7.14 Seminars regarding NS purchase and regarding IREPS presentation were organized on 10.01.17 and 18.01.17 respectively at Vigilance office/MS.

7.15 A seminar was conducted about PRS quota utilization on 09.01.17 for vigilance inspectors and vigilance officers.

7.16 Vigilance awareness class at SRCETC/TBM for promotional course of SSE/P.Way & SSE/Works has been conducted on 24.02.2017 and 17.03.2017 for five and seven officials respectively.

7.17 A lecture on Vigilance awareness to trainees of PRO CC & PRO TE was delivered by AVO/G at ZRTI/TPJ on 11.02.2017.

7.18. Vigilance awareness programme was conducted at SRCETC/TBM to SSE/P.Way & JE/Works attending the refresher course on 17.03.2017- Eight officials have attended the class.

The following awareness programmes were conducted during the Vigilance Awareness Week 2016.

7.19 "Diwali", a short-film of 17 minutes duration, was produced by Vigilance department during the Vigilance Awareness Week, 2016. It was a bilingual film in Tamil and Hindi. This film depicts the ill-effects of corruption in a poignant and subtle way. This was telecast in Podhigai, Doordarshan-Chennai during the Vigilance Awareness Week. The film was uploaded in youtube and Hon'ble MR also tweeted about this film.

7.20 During Vigilance Awareness Week, various competitions and seminars were conducted in 15 colleges outside Chennai.

7.21 Seminars, Skits, Elocution & Essay-writing competitions were organized in 16 schools.

7.22 In addition, various programs like Seminars, Elocution competitions, Essay-writing competitions, workshop etc., were organized in all Divisions of Southern Railway, Zonal Training Schools/Central Training Institutes and Workshops on topics related to Vigilance Awareness.

7.23 Dy.CVO/A conducted seminar on Vigilance Awareness on 02.11.16 in PGT division for officers and Supervisors.

7.24 Dy.CVO/M conducted seminars on Vigilance Awareness on 02.11.16 in MAS division, on 03.11.16 at CWM/O/CW/PER, 05.11.16 at GOC shed and Diesel workshop and on 09.11.16 at CWM/O/LW/PER.

7.25 Vigilance awareness lecture was given by Dy.CVO/ S&T at Zonal Railway Training Centre/TPJ on 04.11.2016.

7.26 A lecture on the subject "Handling of Stores in preventing Corruption" was given on 04.11.2016 by Dy.CVO/S in which Divisional Officers and Supervisory staff dealing with Stores took part.

7.27 Dy.CVO/T addressed and participated in the seminar conducted on 02.11.16 for supervisors of SA Division.

8. Vigilance Publications during 2016 – 17

8.1 A Special Vigilance Bulletin was published during vigilance awareness week, which contained articles from Officers & Inspectors of Vigilance department, as well from the employees of open-line.

GENERAL MANAGER'S ANNUAL INSPECTION

General Manager Annual Inspections along with Principal Heads of Department during the year April 2016 to March 2017 are as follows :—

No.	Name of the Division	Sections	Date	Distance	Gauge in Km.
1	Madurai	TPJ-KKDI-MNM	22–12–2016	151	BG
2	Salem	VRI-SA	05–01–2017	139	BG
3	Tiruchchirappalli	VM-VRI-ALU	31–01–2017	108	BG
4	Palakkad	CLT-CAN	28–02–2017	89	BG
5	Chennai	MS-MYP	07–03–2017	152	BG
6	Thiruvananthapuram	ERS-KTYM-KYJ	16–03–2017	115	BG

Feb 2020
Spoken to Hindi madam M&A on 16/7/2020

II. राजभाषा में प्रगति/PROGRESS OF HINDI

2017-18

1. ORGANISATION

A Separate Hindi Organisation is functioning under the direction of Mukhya Rajbhasha Adhikari. He is assisted by DGM/OL, Sr.Rajbhasha Adhikari, Rajbhasha Adhikaris, and other staff of Hindi Organisation spread over different units.

2. TRAINING IN HINDI

In order to implement Official Language policy of Union of India, Southern Railway has been giving special attention in the training area. Since major part served by this Railway falls under Tamil Nadu, which is situated in 'C' region, time-bound training of all the employees is a challenging task. Ministry of Home affairs has extended the period for Hindi training upto 2025.

During the year 2016 -2017 a total of 679 employees have been trained in Hindi under various training programmes.

3. CONVERSATIONAL TRAINING

To give training to frontline staff who come in contact with the public, conversational training is being imparted. During the year 2016 -2017, 103 employees have been trained in Hindi Conversation Course.

4. HINDI TYPEWRITING AND HINDI STENOGRAPHY

Hindi Typing and Hindi Stenography training is imparted through Hindi Teaching Scheme, Ministry of Home Affairs. Staff are given training in Hindi Computer Keyboard also. 590 employees have been trained during the year 2016-2017 in Hindi Keyboard and they are typing in Hindi also.

5. Hindi Workshop :- During the year 2016 -2017, 31 Hindi Workshops were conducted all over S.Rly and 923 Officers/ Employees were trained in the workshop.

6. COMPUTERISATION IN HINDI

There are 3791 Computers in Southern Railway and all of them have bilingual facility. Southern Railway website WWW.southernrailway.org. & www.srailway.com have been made bilingual and important templates and Annual Programme have been uploaded on this site. Information regarding passenger amenities is also available in two languages i.e., English and Hindi. Besides, a separate page for HINDI is opened in the Intranet. Learn a word a day,competition results and other activities of Hindi are uploaded in the intranet from time to time.

7. SECTION 3(3) OF OL ACT:

Documents coming under section 3(3) of the OL Act 1963 are to be issued in bilingual form. Southern Railway has achieved 100% compliance during the year under review. All reports submitted to various Parliamentary Committees visiting this Railway have been prepared in Hindi-English bilingual form. All invitations for various functions have been printed in Hindi & English.

8. IMPLEMENTATION

To review the progress of Hindi at different levels 85 Official Language Implementation Committees (OLICs) are functioning in this Railway. Quarterly Meetings of these committees are conducted regularly.

9. SHIELD

Rajbhasha shield is awarded to the best performing division and workshop with regard to implementing various aspects of Official Language. Apart from this, Inter-Branch Rolling Shield is being awarded to the Branch of HQRS who doing maximum usage of Hindi in their work every year. During the year under review, I, II & III Prize of the Inter-Branch Rolling Shield was bagged by Security Department, Operating Department and Engineering Department respectively.

2017-18 All read

10. USE OF HINDI IN PUBLIC ADDRESS SYSTEMS

At major stations trilingual announcements are made in Tamil, Hindi & English languages through Computerised digital announcement system.

11. INSPECTIONS DONE BY OFFICERS

During the ZOLIC/OLIC meetings, officers are requested to inspect implementation of Hindi aspects also during their routine inspections. Check list of items pertaining to OL Inspections has been provided to all the officers. During the year under review, 3462 inspections on OL aspect has also been included.

12. ORIGINAL WORK IN HINDI

§ Noting in Hindi

During the year 2016-17, out of 1,07,894 notings, 45,722 notings were written in Hindi/Bilingual form in Hqrs office, Divisions & Workshops.

§ Entries in Registers/Diaries.

During the year 2016-17, out of 24904 Registers/Diaries, entries in 13960 Registers/Diaries were made in Hindi-English mixed language. All efforts are taken to make the remaining registers/diaries in bilingual form.

13. USE OF RAILNET

Reports such as Quarterly Progress Report and Half-yearly Progress Report are being sent to Railway Board through Railnet.

14. USAGE OF TEMPLATES

Routine types of letters have been translated into Hindi and loaded in the computer of concerned branches in bilingual form with a view to increase the usage of Hindi in correspondence.

15. HINDI MAGAZINE

House Magazines in Hindi are published by the Hqrs Office, All the Divisions and Workshops of this Railway.

16. SEMINARS IN HINDI

During the year 2016-17 seminars on various subjects in Hindi were conducted periodically by Hqrs, Divisions & Workshops of S.Rly. During the year under review 14 seminars were conducted.

17. HELP LITERATURES

During the year 2016-17, Help-literatures in Hindi on various subjects were printed & distributed in Hqrs Office, Divisions & Workshops of Southern Railway.

18. HINDI LIBRARY

To increase the Hindi knowledge of officers and employees, 65 Hindi Libraries are functioning in this Railway. A total number of 57 Hindi Titles were purchased during the year under review for Headquarters . With a view to propogate & utilize the Hindi books, available in the Hindi Libraries , Hindi competition based on Rahim's Doha & Book review competition were conducted during the year 2016-17. In all these competitions 30 Officers / Employees participated.

HINDI WEEK CELEBRATION

every year, during the year under review, various competitions were conducted to increase interest in employees wards Hindi and to increase the usage of Hindi in Official work. During the year 2016-17 Hindi Typing, Noting & Drafting, Essay, Elocution, Singing and quiz competitions were organized and 120 Employees participated with much interest.

III. वित्तीय परिणाम/FINANCIAL RESULTS

Financial Results

Financial Results of working for the year 2016–17

(Rupees in lakhs of ₹)

Particulars	Actuals 2015–16	**Actuals 2016–17**
1. (a) Capital-at charge	13,88,076	**14,50,083**
(b) From Capital Fund.. ..	4,43,324	**4,64,062**
2. (a) Gross Traffic Earnings ..	7,60,593	**7,51,029**
(b) Traffic Suspense ..	1,723	**1,090**
(c) Gross Traffic Receipts ..	7,62,316	**7,52,119**
3. (a) Ordinary Working Expenses	7,35,627	**8,19,650**
(b) Suspense..	-4,445	**7,251**
(c) Ordinary Working Expenses (incl. susp.)	7,31,182	**8,26,901**
4. Appropriation to D. R. F. ..	38,700	**36,400**
5. Appropriation to Pension Fund ..	2,51,600	**2,54,200**
6. Payment to worked lines ..	—	—
7. Total working Expenses ..	10,21,482	**11,17,501**
8. Net Traffic Receipts ..	-2,59,166	-3,65,382
9. Net Miscellaneous Receipts ..	390	**746**
10. Net Revenue	-2,58,776	**-3,64,636**
11. Payment to General Revenue ..	36,474	—
12. Surplus/Shortfall	-2,95,250	**-3,64,636**
13. Percentage of Working Expenses to Gross Earnings.	134.89	**147.83**
14. Ratio to Net Revenue to Capital at-charge and Investment from Capital Fund. ..	-14.13	**-19.05**

2. Traffic receipts

The details of Revenue Receipts for 2015–16 and 2016–17.

(Figures in lakhs of ₹)

Heads of Traffic	2015–16	**2016–17**	Variation
Passenger ..	3,85,867	**4,01,180**	15,313
Other Coaching ..	43,616	**43,316**	-300
Goods	2,81,618	**2,61,532**	-20,086
Sundries	49,491	**45,001**	-4,490
Suspense	1,723	**1,090**	-633
Gross Earnings ..	7,62,315	**7,52,119**	-1,096

3. Coaching Earnings

(a) Passenger Earning under important Heads During 2016–2017 compared with 2015–2016

Particulars	Traffic Earnings 2015–2016 Number of pass. (in thousands)	Earnings (in lakhs)	**2016–2017 Number of pass. (in thousands)**	**Earnings (in lakhs)**	Difference Number of pass. (in thousands)	Earnings (in lakhs)	Percentage of Variation Number of pass. (in thousands)	Earnings (in lakhs)
A. Non-Suburban								
Air-conditioned First Class	367	3130	**330**	**3460**	-37.065	330	-10.10	10.54
Air-conditioned 2-Tier	4493	28617	**4340**	**30601**	-153.483	1,984	-3.42	6.93
Air-conditioned 3-Tier	14137	70217	**14530**	**74394**	392.742	4,177	2.78	5.95
A. C. Chair Car ..	4249	15232	**3907**	**16096**	-342.281	864	-8.06	5.67
First Class—								
(a) Mail/Express ..	..	..	..	..	..	..	#DIV/01	#DIV/01
(b) Ordinary ..	496	253	**507**	**234**	10.9	-19	2.20	-7.41
Total ..	496	253	**507**	234	10.9	-19	—	—
Second Class Sleeper—								
(a) Mail/Express ..	65383	131785	**97302**	**135188**	31919.43	3,403	48.82	2.52
(b) Ordinary ..	851	728	**859**	**762**	7.555	34	0.89	4.62
Second Class Ordinary—								
(a) Mail/Express ..	128368	91963	**117874**	**95250**	-10494.2	3,287	-8.18	3.57
(b) Ordinary ..	249354	24922	**238546**	**25839**	-10808.3	917	-4.33	3.68
Total Non-Suburban ..	467698	366847	**478193**	**381824**	10495.32	14,977	2.24	4.08
B. Suburban								
First Class (Ordinary)	82	79	**84**	**82**	2.297	3	2.80	3.85
First Class (Season)	9,889	1,241	**10337**	**1330**	447.6	89	4.53	7.14
Second Class (Ordinary)	1,76,082	12,204	**179883**	**12338**	3800.538	134	2.16	1.10
Second Class (Season)	2,00,869	5,496	**199992**	**5607**	-876.7	111	0.44	2.02
Total Suburban	3,86,922	19,020	**390296**	**19357**	3373.735	337	0.87	1.77
Grand Total	8,54,620	3,85,867	**868489**	**401180**	13869.05	15,313.3	1.62	3.97

(b) Goods earnings under important heads during 2016–17 compared with 2015–16

Sl. No. Particulars	Tonnes carried–on System (in millions)		Earnings (₹ in lakhs)	
	2015-16	**2016-17**	2015-16	**2016-17**
A. Revenue Earnings Traffic:–				
1. Products of Agriculture..	9.092	**7.442**	53,866	**43,624**
2. Animals & Products of Animals.	0.000	**0.000**	0.000	**0.000**
3. Products of Mines ..	23.495	**23.81**	1,06,717	**1,00,337**
4. Mineral Oil ..	4.425	**4.099**	25,862	**24,879**
5. Products of Forests ..	0.146	**0.151**	626	**629**
6. Manufactures ..	10.240	**10.226**	43,983	**45,763**
7. Miscellaneous ..	8.835	**7.289**	30,740	**32,605**
8. Total Revenue traffic..	56.233	**52.288**	2,61,794	**2,47,837**
B. Non-revenue Traffic				
9. Railway Coal—				
(a) For Home Line ..	0.000	0.000	0.00	0.00
(b) For Other Govt. Rlys.etc.	0.000	0.000	0.00	0.00
(c) Diesel oil booked by Companies for Rlys.	0.000	0.000	0.00	0.00
10. General Stores and Materials for Rlys.—				
(a) For Home Line ..	0.117	**0.146**	0.00	232
(b) For other Govt Rlys., etc.	0.000	**0.000**	0.00	0.00
11. Total Non-Revenue ..	0.117	**0.146**	0.00	232
12. Grand Total Revenue and Non-Revenue	56.350	**52.434**	2,61,794	**2,48,069**

(c) Other Coaching Earnings under important heads during 2016-17 compared with 2015-16.

(Figures in lakhs)

Sl. No. Particulars	2015–16	**2016–17**	Variation
1. Special Trains and reserved carriages(Public)	1,568	**1,820**	252
2. Special Trains and reserved carriages (Military)	1,746	**980**	-766
3. Luggage collected at stations ..	**860**	**852**	-8
4. Luggage collected by special ticket checking staff.	471	**645**	174
5. Public Parcels	16,357	**15,037**	-1,320
6. Transport of Mails.. ..	2,847	**2,463**	-384
7. Service Parcels	0.00	**0**	0.00
8. Miscellaneous	19,767	**21,519**	1,752
Total ..	43,616	**43,316**	-300
Less Refunds	300	**0**	-300
Net Other Coaching Earnings ..	43,316	**43,316**	0
Total Coaching Earnings ..	**4,29,483**	**4,44,496**	15,013

4. Ordinary Working Expenses

Appropriation Accounts for 2016–17—Statement showing percentage of Working Expenses to Earnings for the year 2016-17 :–

Name of the Railway	Percentage of Working Expenses to Earnings
Southern Railway	**147.83**

I. The Operating ratio—The Operating ratio of 2016–17 is 147.83 % is 12.94 points more than the Operating ratio of 2015–16. (134.89%).

(a) The Gross Earnings for 2016-17 is ₹ 7,510.29 crores as against ₹ 7,605.93 crores for 2015–16 with an increase of ₹ 95.64 crores (1.26%).

(b) The Ordinary Working Expenses for the year 2016–17 in respect of Grant No. 3 to 13 are more by ₹ 840.23 crores (11.42%).

(c) Appropriation to DRF has decreased by ₹ 23 crores (-5.94%) and Appropriation to Pension Fund has increased by ₹ 26 crores (1.3%) during 2016–17.

(d) The Total Working Expenses for 2016–2017 including Appropriation to DRF and Pension Fund is ₹ 11,102.50 crores (excluding suspense) as against ₹ 10,259.27 crores for 2015–16 with an increase of ₹ 843.23 crores (8.22%).

II Earnings.—Analysis of variation over actuals of 2015–16.

(a) Passengers :—The increase under Passenger Earnings is ₹ 153.13 crores which amounts to 3.97% over the previous year. The break-up for the increase is as follows :—

(Figures in crores of ₹)

Increase in rates	170.31
Increase in traffic	-17.18
Total ..	**153.13**

(b) Other Coaching.—The decrease under Other Coaching Earnings is ₹ 3.00 crores which amounts to 3.97 % over the previous year. The details for the increase is as follows :—

(Figures in crores of Rs.)

(i) Decrease in Parcels	-13.2
(ii) Increase in Luggage	1.66
(iii) Increase Under Military	-5.15
(iv) Increase in Postal Bills	-3.84
(v) Increase under Others	17.53
Total ..	**-3.00**

(c) Goods Traffic :—The decrease of ₹ 200.86 crores over the last year amounts to 7.13 %. This is mainly due to :—

(Figures in crores of ₹)

(i) Increase in Rates	5.38
(ii) Decrease in Traffic	-202.86
(iii) Decrease in Misc. earnings ..	-3.38
Total ..	**-200.86**

(d) Sundries :—The decrease is ₹ 44.91 crores over the previous year amounts to 9.07%. This can be mainly attributed to :—

(Figures in crores of ₹)

(i) Decrease under Rent	-0.62
(ii) Decrease in Demands Recoverables	19.38
(iii) Decrease in Catering Earnings ..	30.98
(iv) Increase in Others ..	-94.65
Total ..	**-44.91**

III. Working Expenses.—An analysis on variation over 2015–2016.

Increase under Ordinary working Expenses covered by Grants 3 to 12 on Gross basis (Voted) excluding suspense amounts ₹ 95,960.63 lakhs, which amounts to 13.01% more than that of the previous year. The reasons for the variations are dealt by PU wise :—

(Figures in thousands of ₹)

(1)	*Salaries and Wages (PU-01)*— Due to more payment paid	1,90,68,353
(2)	*Dearness Allowance (PU-02)*— Due to twin hikes.	-1,37,08,250
(3)	*Productivity Linked Bonus (PU-03)*— Due to less payments.	7,51,807
(4)	*House Rent Allowance (PU-04)*— Due to more Payments.	39,938
(5)	*Transport Allowance (PU-07)*— Due to twin hikes in DA	72,139
(6)	*Kilometre Allowance (PU-10)* Due to more payments	-17,225

(7)	*Overtime Allowance (PU -11)*	
	Due to less claims	(–) 8,164
(8)	*Night Duty Allowance (PU-12)—*	
	Due to enhancement in rates	34,938
(9)	*Other Allowance (PU-13)—*	
	Due to hike in rates by 25%	10,608
(10)	*Fees and Honoraria (PU-14)—*	
	Payment of more honorarium claims	-2,713
(11)	*Transfer Allowance (PU-15)—*	
	More payment on account of transfers	-22,784
(12)	*Travelling Expenses (PU-16)—*	
	Due to hike in rates by 25%	18,869
(13)	*Leave encashment during service (PU-20)*	28,957
	Due to less claims	
(14)	*Children Education Allowance (PU-25)*	-43,775
	Due to hike rates by 25%	
(15)	*Contingencies (PU-18 to 24)*	(–) 31,484
	Due to more payments of CUG, water charges & RPF contingencies.	
(16)	*Reimpuresement of Medical expenses to the emplyees (PU-26)*	
	Newly introduced PU vide ACS 124 to FII w.e.f. 21-08-15.	14,107
(17)	*Drawal from Stores (PU-27)*	
	More due to increase in activities - Track maintenance.	45,730
	More drawals of stores for electric locomotive activities, Carriages & electrical, General services.	98,799
	More drawals of stores for Elec. & Signal equipemnts maintenance.	53,804
	More consumption of lubricants, Brake blocks & for station cleaning.	29,481
	Due to decrease in HSD prices & Lesser GTKM	-10,75,885
	More drawal of stores for other activities	3,362
	Total	**-8,44,709**
(18)	*Cost of materials - Direct Purchase (PU-28)*	
	Less due to decrease in activities in Gen. Superintendance.	-561
	Less due to decrease in activities in track maintenance	9,646
	Less Purchase of material for DSL locomotive maintenance offset bu more	-386
	More purchase under for signalling & electrical equipments.	8,136
	More under linen procurement & offset by saving in sanitation.	552
	More under steam traction	8,334
	More under medical procurements	71,374
	Due to decrease in purchase of arms and ammunitions and catering	13,954
	Total	**91,757**
(19)	*Cost of Electric Enegry (PU-30)*	
	More under activities in Gen. Superintendence	13,227
	More under activities in shops/sheds	14,119
	Newly introduced PU vide ACS125 to FII	-1,41,033
	Newly introduced PU vide ACS125 to FII for stations.	50,327
	Due to lesser GTKS	-3,12,954
	Less under other activities	-12,608
		-3,88,922
(20)	*Fuel for other than traction (PU-31)*	
	Less consumption of fuel for generators in Rajdhani, Shatabdi & Duranto Express & Staff Cars.	33,419
	Due to increase other minor activities	144
	Total	**33,563**
(21)	*Contractual Payments (PU-32)*	
	More under Contractual payments for track maintenance.	2,84,233
	More due to contracts for DSL. & Elec. locomotives & Wagon maintenance.	28,878
	Less towards under Contractual payments under Elect. S & T and Engg. Departments etc.,	-13,080
	More towards to OBHS constracts	1,51,092
	More towards to Station sanitation	25,235
	More under repairs and maintenance of Residential & Welfare buildings.	46,957
	Less payments for catering contracts	-7,067
	Less due to other activitis	-1,259
	Total	**5,14,989**
(22)	*Transfer of debits/credits from other Units (PU-33)*	
	Less debit under Permanent Way	-1,655
	Less inwards debits towards locomotives	-76,551
	More inwards debits under Carriage & wagons	24,458
	More credits for track machines	-66,071
	More debits towards EE charges other than traction.	21,852
	More credits from IRFA	-4,00,377
	More Fuel debits	7,98,916
	Less debits towards EE non-traction distribution for residential buildings.	-15,523
	Less towards RPSF Debits	-22,282
	More under other activities	431
	Total	**-2,63,198**
(23)	*Adjustment of ' Wages ' on POH (PU-34)*	
	More actitives under EWS/AJJ	25,046
	More outurn under locomotives/Carriage and Wagon & due to 7 CPC implmentation.	9,38,399
	Increase in POH activities of Paint and equipments.	84,823
	More under other activities	1,515
	Total	**10,49,783**
(24)	*Adjustment of ' Materials ' on POH (PU-35)*	
	More actitives under EWS/AJJ	11,751
	Increase in POH Locomotives activities	38,734
	Decrease in POH Carriage and Wagon activities	-1,07,642
	Increase in maintenance of Paint and equipments.	32,091
	Less under other activities	944
	Total	**26,010**
(25)	*Excise Duty (PU-36)*	
	More payments due to higher of ED rates towards HSD oil	5,86,652
	Due due to other activities	587
	Total	**5,86,065**
(26)	*Customs Duty (PU-37)*	
	Trivial	109
(27)	*Sales Tax (PU-38)*	
	More payments towards ST for HSD oil	33,820
	Minor factor.	-53
	Total	**33,767**
(28)	*Air Travel-Domestic (PU-39)*	
	More payments	1,203
(29)	*Air Travel-Foreign (PU-40)*	
	Trivial	-7
(30)	*VAT (PU-41)*	
	Less tax paid in lieu of Sales tax	-4,302
(31)	*Arrears Payments – Salary & Wages (PU-42)*	
	More payments towards Arrears of pay due 7 CPC.	13,06,451

(32)	*Arrear Payments – Dearness Pay & DA (PU-43)*	
	Lesser payments towards DA	-2,17,396
(33)	*Arrear Payments – Allowances other than DA (PU-44)*	
	More payments towards Arrears of other allowances	4,34,581
(34)	*Service Tax (PU-45)*	
	More Service Tax paid	19,961
(35)	*Cost of Computer (PU-50)*	
	Due to more procurement of PC by departments	4,803
(36)	*Computer Consumables (PU-51)*	
	Less payments towards AMCs	-2,714
	Total	**-2,714**
(37)	*Laptops (PU-52)*	
	For purchase of Laptop for Officers	5,304
(38)	*Fuel from stock FFS (PU-60)*	
	More Fuel Debits from Foreign Rly.	4,48,470
(39)	*Transfer of Debit/redit -GTKM (PU-61)*	
	More GTKM credits	-74,581
(40)	*FRM/POH (PU-63)*	
	More inwards debits towards labour cost of POH from Foreign Rly.	1,97,834
(41)	*FRM/POH (PU-64)*	
	More inwards debits towards material cost of POH from foregin Rly.	1,68,723
(42)	*Other Expenses (PU-99)*	
	Less payments for commission & for RRC	-91,991
	More freight charges for PW materials	16,499
	Due to credits received in previous year for Damage Wagons.	52,150
	More rental for PRS terminals & OFCcharges	1,32,865
	Less freight charges	-8,410
	More expenditure towards Welfare/ Residential buildings.	12,885
	Less expenditure on training to staff, compensation & cost of Order Police.	-3,18,252
	Due to other Less activities	-6,924
	Total	**-2,11,178**

Percentage of Working expenses to earnings—

(In lakhs of ₹)

	Budget Grant 2016–17	Revised Grant 2016–17	Actuals 2016–17	Actuals 2015–16	Actuals 2014–15
1. (a) Capital-at-charge	**13,60,350**	**14,42,520**	**14,50,083**	13,88,076	12,12,091
2. Investment from Capital Fund	**4,93,763**	**4,77,888**	**4,64,062**	4,43,324	3,97,442
3. Earnings—					
(a) Passenger	**4,55,725**	**4,19,820**	**4,01,180**	3,85,867	3,71,999
(b) Other Coaching	**57,371**	**50,000**	**4,01,180**	3,85,867	3,71,999
(c) Goods	**3,05,171**	**2,68,287**	**2,61,532**	2,81,618	3,04,572
(d) Sundries	**75,777**	**47,924**	**45,001**	49,492	42,929
(e) Total Gross Earnings	**8,94,044**	**7,86,031**	**7,51,029**	7,60,593	7,59,234
(f) Traffic Suspense and demands recoverable.	**1,000**	**1,000**	**1,000**	1,723	39
(g) Gross traffic receipts	**8,95,044**	**7,87,031**	**7,52,119**	7,62,316	7,59,273
4. Working Expenses—					
(a) Ordinary working Expenses	**8,38,553**	**8,35,126**	**8,19,650**	7,35,627	7,03,363
(b) Appropriation to DRF	**22,400**	**36,400**	**36,400**	38,700	55,700
(c) Appropriation to Pension Fund.	**3,08,600**	**2,54,200**	**2,54,200**	2,51,600	2,20,200
(d) Suspense	**-3,539**	**-2,380**	**7,251**	-4,445	735
(e) Total working Expenses.	**11,66,014**	**11,23,346**	**11,17,501**	10,21,482	9,79,998
5. Net Traffic Receipts 3(g)-4(e)	**-2,70,970**	**-3,36,315**	**-3,65,382**	-2,59,166	-9,79,998
6. (a) Miscellaneous Receipts	**405**	**202**	**809**	436	577
(b) Miscellaneous Payments	**82**	**71**	**63**	46	51
(c) Net Miscellaneous Receipt	**323**	**131**	**746**	390	526
7. Net Revenue 5+6 (c)	**-2,70647**	**-3,36,184**	**-3,64,636**	-2,58,776	-2,20,199
8. (a) Payment to General Revenue	**53,168**	**0**	**0**	51,965	56,234
9. Subsidy from G. R. towards dividend relief & other concessions.	**14,044**	**0**	**0**	15,491	17,371
10. Surplus (+)/Deficit(–) (7–8+9)	**-3,09,771**	**-3,36,184**	**-3,64,636**	-2,95,250	-2,59,062
11. Percentage of working expenses to Gross Earnings	**130.82**	**143.22**	**147.83**	134.89	128.98

Percentage of Working expenses to earnings for the year 2016-17

Comparison of Gross Earnings, Ordinary Working Expenses & Appropriation to Funds 2016–17 with that of 2015-16.

Summary

(Figures in thousands of ₹)

	Actual 2016-17	*Actual 2015-16*	*Variation (+) More (-) Less*	*% of Variation*
1. Gross Earnings	**7,51,02,915**	7,60,59,279	-9,56,364	1.26
2. Ordinary Working Expenses (03-13) Net	**8,19,65,007**	7,35,62,729	84,02,278	11.42
3. Appropriation to DRF	**36,40,000**	38,70,000	-2,30,000	-5.94
4. Appropriation to Pension Fund	**2,54,20,000**	2,51,60,000	2,60,000	1.03
5. **Total (2+3+4)**	**11,10,25,007**	10,25,92,729	**84,32,278**	**8.22**
6. Operating Ratio (5/1 *100)	**147.83**	134.89	12.94	

(ii) Details of Working Expenses.—Abstract wise/Demand wise

(In thousands of ₹)

Demand No.	*Abstract*	*Particulars*	2015–2016	*2016–2017*
(3)	A	General Superintendence and Services	52,33,373	**59,00,491**
(4)	B	Repairs and Maintenance of Permanent Way and Works.	73,64,791	**86,50,783**
(5)	C	Repairs and Maintenance of Motive Power	37,04,009	**44,20,768**
(6)	D	Repairs and Maintenance of Carriage and Wagon.	94,06,524	**1,14,50,679**
(7)	E	Repairs and Maintenance of Plant and Equipment.	43,72,204	**51,14,184**
(8)	F	Operating Expenses—Rolling Stock & Equipment.	67,91,914	**75,28,924**
(9)	G	Operating Expenses—Traffic..	1,15,56,060	**1,26,73,086**
(10)	H	Operating Expenses—Fuel	1,59,31,028	**1,63,80,080**
(11)	J	Staff Welfare and Amenities ..	42,89,853	**44,43,131**
(12)	K	Miscellaneous working expenses	40,02,543	**40,04,701**
(13)	L	Net Provident Fund, Pension and other Retirement Benefits.	9,10,431	**13,98,179**
		Total ..	7,35,62,730	**8,19,65,007**
Suspense—				
(12)	N.	Demands Payable (DR.)	-238087	**-52929**
(12)	N.	Miscellaneous Advances Revenue	-206453	**778034**

(iii) The particulars of additional investment on the Line Capacity Works and Traffic Facility Works during the year 2016–2017 as compared to the previous year 2015-2016 are furnished below.

(Net figures in thousands of ₹)

	2015–2016	*2016-2017*
(1) Capital	77,56,267	**19,54,929**
(2) D. R. F.	1,633	**-1,86,366**
(3) D. F.	2,30,684	**2,19,763**
(4) Capital Fund	0	**0**
(5) EBRIF	0	**59,87,872**
(6) RSF	0	**46,12,980**
Total ..	79,88,584	**1,25,89,178**

Plan headwise expenditure breakup *(Net figures in thousand of ₹)*

2015–2016	Capital	DRF	DF	Cap. Fund	EBRIF	RSF	SRSF	Total
Gauge Conversion	29,62,244	0	0	0		0	0	29,62,244
Doubling ..	47,67,358	1,633	0	0		0	0	47,68,991
Tfc. Facilities ..	26,665	0	2,30,684	0		0	0	2,57,349
Total ..	77,56,267	1,633	2,30,684	0		0	0	79,88,584

2016–2017	Capital	DRF	DF	Cap. Fund	EBRIF	RSF	SRSF	Total
Gauge Conversion	2,511	-1,15,329	0	0	**0**	**46,12,999**	0	45,00,181
Doubling ..	18,21,476	-62,759	0	0	**59,87,872**	0	0	77,46,570
Tfc. Facilities ..	1,30,942	-8,278	2,19,763	0	0	0	0	3,42,427
Total ..	**19,54,929**	**-1,86,366**	**2,19,763**	**0**	**59,87,872**	**46,12,999**	**0**	**1,25,89,178**

5. Capital

Statement showing the Capital-at-charge at the end of 31st March 2017 compared with 31st March 2016 is sent herewith. The capital-at-charge of this Railway stood at ₹. 14,50,083 lakhs at the end of 31st March, 2017 as against ₹. 13,88,076 lakhs at the end of 31st March 2016 :–

6. Assets and Liabilities —

(a) Profit and Loss Account for the year 2016–17 compared with 2015–16

(Figures in thousands of ₹)

Particulars	*2015–2016*	*2016–2017*	*Particulars*	*2015-2016*	*2016–2017*
I. To Working Expenses—			(i) By Earnings —		
A-3 General Superintendence & services..	52,33,373	**59,00,491**	Gross Traffic Receipts		
B-4 Repairs and Maintenance of Permanent Way and Works.	73,64,791	**86,50,783**	Passenger Earnings..	3,85,86,744	**4,01,18,033**
C-5 Repairs and Maintenance of Motive Power	37,04,009	**44,20,768**	Other Coaching Earnings	43,61,555	**43,31,585**
D-6 Repairs and Maintenance of Carriage and Wagons.	94,06,524	**114,50,679**	Goods Earnings	2,81,61,749	**2,61,53,166**
E-7 Repairs and Maintenance of Plant and equipment.	43,72,204	**51,14,184**	Others	49,49,231	**45,00,131**
F-8 Operating Expenses—Rolling Stock and.. equipment.	67,91,914	**75,28,924**	Suspense	1,72,312	**1,08,982**
G-9 Operating Expenses—Traffic ..	1,15,56,060	**1,26,73,086**			
H.10 Operating Expenses—Fuel.. ..	1,59,31,028	**1,63,80,080**			
J.11. Staff Welfare and Amenities.. ..	42,89,853	**661**	(ii) Miscellaneous receipts including receipts from Surcharge on Passenger Tickets.	43,600	**80,921**
K.12 Miscellaneous Working Expenses ..	40,02,543	**40,04,701**			
N.12.Suspense	-4,44,539	**7,25,105**			
L.13. Provident Fund, Pension and other Retirement Benefits.	9,53,033	**13,98,179**	(iii) Subsidy from General Revenues towards Dividend.	15,49,103	**0**
Appropriation to D. R. F.	38,70,000	**36,40,000**			
Appropriation to Pension Fund ..	2,51,60,000	**2,54,20,000**			
II. Payment to Worked Lines.			(iv) Gross Loss..	2,50,70,091	**3,29,62,682**
III. Miscellaneous Expenditure—					
Survey	4,589	**6,325**			
Open line works (Revenue)	0	**0**			
Audit	2,12,110	**2,70,664**			
Government Inspection	0	**0**			
Cost of Railway Board	3,55,786	**4,97,294**			
Railway Recruitment Board	1,31,107	**1,73,575**			
Miscellaneous charges ..	0	**0**			
Total	10,28,94,385	**10,82,55,500**			
To Gross Loss ..	2,50,70,091	**3,29,62,682**	Total	10,28,94,385	**10,82,55,500**
Payment to Dividend to General Revenue	51,96,549	**0**			
Grand Total ..	3,02,66,640	**3,29,62,682**	Net Loss	3,02,66,640	**3,29,62,682**

(b) Statement of Assets and Liabilities as on 31st March 2017, 2016 & 2015 in the form of Block Account—

(Figures in lakhs of ₹)

Liabilities	*As on 31st March*			*Assests* *As on 31st March*	*2015*	*2016*	*2017*
	2015	*2016*	*2017*				
I. (a) Investment Financed from—				1. Cash in Hand ..	11,434	11,812	**1,326**
(i) Loan Capital Advance by General Exchequer.	12,12,091	13,88,075	**14,50,090**	2. Block Account (Contra item 1)	25,33,831	28,60,234	**31,16,205**
(ii) Depreciation Reserve Fund	4,96,248	5,49,547	**5,92,170**	3. Funds with Central Government (Contra item 2 & 3)	-9,84,174	-12,49,769	**-15,20,003**
(iii) Development Fund	2,06,260	2,27,465	**2,42,966**				
(iv) Capital Fund	3,97,442	4,43,323	**4,64,062**	4. Miscellaneous Advance—Sundry Debtors (to be recovered or adjusted).	25,421	23,088	**30,563**
(v) Open Line Works Revenue	9,937	9,937	**9,937**				
(vi) Railway Safety Fund	1,19,518	1,49,551	**2,64,644**	5. Traffic Earnings (yet to be realised at the end of the year).	6,323	4591	**3,320**
(vii) Special Railway Safety Fund	92,328	92,328	**92,328**				
(b) Machinery and Equipment free of cost.	8	8	**8**	6. Items awaited adjustment with Civil Department, State Government, etc.	377	830	**377**
	25,33,832	28,60,234	**31,16,205**				
2. Railway Reserve Fund—							
(i) Depreciation Reserve Fund	2,53,458	2,47,189	**2,46,099**				
(ii) Railway Revenue Reserve Fund	0	0	**0**				
(iii) Development Fund	-2,13,923	-2,35,341	**-2,50,932**				
(iv) Capital Fund	-3,84,737	-4,30,619	**-4,51,357**				
(v) Pension Fund	-7,66,084	-8,44,024	**-9,96,038**				
(vi) Railway Safety Fund	-1,19,027	-1,49,060	**-2,64,166**				
(vii) Special Railway Safety Fund	0	0	0				
	-12,30,313	-14,11,855	**-17,16,394**				
3. Bank Account (Sundry Creditors)—							
(i) Provident Fund and other funds	1,10,902	1,17,007	**1,33,774**				
(ii) Miscellaneous Deposits	1,35,237	45,079	**62,617**				
	2,46,139	1,62,086	**1,96,391**				
4. Demands Payable (i. e.) liabilities remaining undischarged at the end.	32,773	35,153	**35,683**				
5. Net Liabilities arising out of inter-departmental transactions.	10,781	5,168	**-97**				
Total ..	15,93,212	16,50,786	**16,31,788**	Total ..	15,93,212	16,50,786	**16,31,788**

7. Statement of Capital Assets at the end of March 2016 and March 2017 is given below —

(Figures in thousands of ₹)

Sl. No.	PARTICULARS	Capital at charge as on 31st March 2016	Capital at charge as on 31st March 2017
11.	New Line Construction ..	1,96,47,147	**1,98,65,873**
12.	Purchase of New line ..	1,31,779	**1,31,779**
13.	Restoration of dismantled line	-89	**-89**
14.	Gauge conversion ..	4,18,92,855	**4,18,97,254**
15.	Doubling	2,88,86,198	**3,07,18,013**
16.	Traffic facilities & Yard Remodelling	16,31,434	**17,62,382**
17.	Computerisation ..	82,623	**84,326**
21.	Rolling Stock	2,85,58,210	**3,03,95,221**
22.	Leased Assets.. ..	99,82,900	**1,27,48,100**
23.	Unman LC	0	**0**
24.	Road over/Under Bridge..	10,973	**10,973**
25.	Track Renewals ..	-1,749	**-1,749**
26.	Bridge Works	8,812	**8,811**
27.	Signalling & Telecom. Works	1,21,130	**1,21,130**
28.	Taking over line wire from P. & T.	-2,316	**-2,316**
29.	Electrification Project ..	15,96,144	**15,96,144**
30.	Other Electrical Works ..	2,25,594	**2,25,593**
37.	Traction Distribution ..	41,657	**51,627**
41.	Machinery and Plant ..	6,57,204	**7,31,189**
42.	Workshop including production units	29,75,317	**31,63,373**
51.	Staff Quarters.. ..	5,71,531	**5,72,465**
52.	Amenity for Staff ..	**64,998**	**65,479**
53.	(i) Passenger Amenities	6,060	**5,975**
	(ii) Other Railway users' Amenities.	-100	**-13**
62.	Investment in Government/Commercial undertaking Public services.	0	**0**
64.	Other specified works ..	3,83,005	**4,12,800**
71.	Suspense	2,82,62,024	**2,45,04,034**
	Deduct Receipt on Capital Account	13,14,311	**1,82,789**
	Total Capital at charge	16,44,19,030	**16,88,85,585**

8. The Position of the funds maintained by the Southern Railway for 2016–2017 is indicated below—

(Figures in thousands of ₹)

Nature of Fund Accounts	Opening balance as on 1st April 2016	Appropriation during the year 2015–2017 including interest and transfers without financial adjustment	Withdrawal from the fund Actual Expenditure	Balance as on 31st March 2017
1. Depreciation Reserve Fund.	2,47,18,946	**36,39,896**	37,48,896	**2,46,09,945**
2. Pension Fund	-8,44,02,362	**2,54,81,375**	4,06,82,897	**-9,96,03,884**

9. The sources of funds from which expenditure on works met during the year 2015–2016 and 2016–2017.

(Figures are Net and in thousands of Rupees)

	2015–2016	2016–2017
1. Capital (including Transfers without Financial Adjustment)	1,75,98,483	**62,01,488**
2. Depreciation Reserve Fund ..	54,70,649	**37,48,896**
3. Development Fund *	20,97,543	**15,59,054**
4. Railway Safety Fund	30,80,602	**1,15,10,649**
5. Special Railway Safety Fund ..	0	**0**
6. Open Line Works–Revenue ..	0	**0**
7. Capital Fund	45,88,200	**20,73,800**
Total ..	3,28,35,477	**3,10,81,759**

* Inclusive of Expenditure towards—

	2015–2016	2016–2017
(i) Safety Works D.F. IV	3,11,659	**1,73,975**
(ii) Passenger Amenities Works ..	9,57,312	**7,06,638**

10. Statement showing the expenditure—Plan head-wise for the year 2016–2017

(Figures in thousands of ₹)

Sl. No.	Plan Head		Capital		DRF		DF		Capital Fund		R.S.F.		S.R.S.F.		OLWR		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1.	New Lines (Construction)	Gross	1,03,088	115640	..	..	..	..	..	..	9,90,381	48,034	..	..	..	..	10,93,469	1,63,674
	(11)	Credit	95	..	4,102	..	..	..	..	..	2,547	..	..	..	..	..	6,744	..
		Net	1,02,993	115640	-4,102	..	..	..	..	..	9,87,834	48,034	..	..	..	..	10,86,725	1,63,674
2.	Purchase New Lines																	
	(12)	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3.	Gauge Conversion	Gross	4,397	..	..	..	..	..	..	..	46,07,088	27,856	..	..	..	..	46,11,485	27,856
	(14)	Credit	1,886	..	1,15,329	..	..	..	..	..	21,945	..	..	..	..	..	1,39,160	..
		Net	2,511	..	-1,15,329	..	..	..	..	..	45,85,143	27,856	..	..	..	..	44,72,325	27,856
4.	Doubling	Gross	17,54,715	77,098	11,088	..	..	..	..	..	..	..	59,97,272	..	..	..	77,63,075	77,098
	(15)	Credit	10,337	..	73,847	..	..	..	..	..	19	..	9,400	..	..	..	93,603	..
		Net	17,44,378	77,098	-62,759	..	..	..	..	..	-15	..	59,87,872	..	..	..	76,69,472	77,098
5.	Traffic Facilities	Gross	1,28,018	2,930	238	..	2,19,330	672	..	..	..	..	..	..	..	..	3,47,586	3,602
	(16)	Credit	6	0	8,516	..	239	..	..	..	..	..	..	..	..	..	8,761	..
		Net	1,28,012	2,930	-8,278	..	2,19,091	672	..	..	..	..	..	..	..	..	3,38,825	3,602
6.	Computerisation	Gross	1,703	..	49,090	..	1,940	..	..	..	..	..	..	..	..	..	52,733	..
	(17)	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	1,703	..	49,090	..	1,940	..	..	..	..	..	..	..	..	..	52,733	..
7.	Railway Research Works	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(17)	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Statement showing the expenditure—Plan head-wise for the year 2015–2016—Contd.)

(Figures in thousands of ₹)

Sl. No.	Plan Head		Capital		DRF		DF		Capital Fund		R.S.F.		S.R.S.F.		OLWR		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
7.	Railway Research Works	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(18)	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.	Rolling Stock	Gross	1837012	..	941018	..	18625	..	..	..	..	..	..	..	..	..	2796655	..
	(21)	Credit	1775	..	105619	..	..	..	..	..	..	..	..	..	..	..	107394	..
		Net	1837012	..	835399	..	18625	..	..	..	..	..	..	..	..	..	2689261	..
	(i) Locomotives	Gross	203888	..	176492	..	16708	..	..	..	..	..	..	..	..	..	397088	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	203888	..	176492	..	16708	..	..	..	..	..	..	..	..	..	397088	..
	(ii) Loco Spares	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(iii) Carriages	Gross	1644431	..	313042	..	1917	..	..	..	..	..	..	..	..	..	1959390	..
		Credit	..	..	51148	..	..	..	..	..	..	..	..	..	..	..	51148	..
		Net	1644431	..	261894	..	1917	..	..	..	..	..	..	..	..	..	1908242	..
	(iv) Wagons	Gross	-38772	..	196447	..	..	..	..	..	..	..	..	..	..	..	157675	..
		Credit	..	..	29943	..	..	..	..	..	..	..	..	..	..	..	29943	..
		Net	-38772	..	166504	..	..	..	..	..	..	..	..	..	..	..	127732	..
	(v) Rail-cum-road service.	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(vi) Others	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	24528	..	..	..	..	..	..	..	..	..	..	..	24528	..
		Net	..	..	-24528	..	..	..	..	..	..	..	..	..	..	..	-24528	..
	(vii) Track Machine	Gross	27465	..	255037	..	..	..	..	..	..	..	..	..	..	..	282502	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	27465	..	255037	..	..	..	..	..	..	..	..	..	..	..	282502	..
9.	LA-LC TO IRFC, ETC.	Gross	2765200	..	..	..	..	..	2073800	..	..	..	..	..	..	..	4839000	
	(22)	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	2765200	..	..	..	..	..	2073800	..	..	..	..	..	..	..	4839000	..
10.	RD-SFT-UN-MAN	Gross	..	..	..	..	..	..	..	..	399430	6	..	..	..	..	399430	6
	(29)	Credit	..	..	..	..	..	..	..	..	1081	..	..	..	..	..	1081	..
		Net	..	..	..	..	..	..	..	..	398349	6	..	..	..	..	398349	6
11.	RD-SFT-OB/UB	Gross	..	..	..	..	..	..	..	..	2968772	145	..	..	..	..	2968772	145
	(30)	Credit	..	..	..	..	..	..	..	..	770	..	..	..	..	..	770	..
		Net	..	..	..	..	..	..	..	..	2968002	145	..	..	..	..	2968002	145
12.	Track Renewals	Gross	..	..	2149780	1993	..	..	..	..	2495300	..	..	..	..	..	4645080	1993
	(31)	Credit	..	..	569387	..	..	..	..	..	..	..	..	..	..	..	569387	..
		Net	..	..	1580393	1993	..	..	..	..	2495300	..	..	..	..	..	4075693	1993
13.	Bridge Works	Gross	..	..	461606	..	..	..	..	..	..	..	..	..	..	..	461606	..
	(32)	Credit	..	..	611	..	..	..	..	..	..	..	..	..	..	..	611	..
		Net	..	..	460995	..	..	..	..	..	..	..	..	..	..	..	460995	..
14.	Signalling and Tele-communication	Gross	..	..	334466	..	224705	..	..	..	..	..	..	..	..	..	559171	..
		Credit	..	..	14700	..	12	..	..	..	..	..	..	..	..	..	14712	..
	(33)	Net	..	..	319766	..	224693	..	..	..	..	..	..	..	..	..	544459	..
15.	Taking of lines from P. & T.	Gross	..	..	..	..	12222	..	..	..	..	..	..	..	..	..	12222	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(34)	Net	..	..	..	..	12222	..	..	..	..	..	..	..	..	..	12222	..
16.	Electrification Project.	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(35)	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17.	Other Electrical Works. Excluding Traction Distribution	Gross	..	..	22055	..	9555	..	..	..	..	..	..	..	..	..	31610	..
		Credit	5	..	994	..	..	..	..	..	..	..	..	..	..	..	999	..
	(36)	Net	-5	..	21061	..	9555	..	..	..	..	..	..	..	..	..	30611	..

Statement showing the expenditure—Plan head-wise for the year 2014–2015—(Concld.)

(Figures in thousands of ₹)

Sl. No.	Plan Head		Capital		DRF		DF		Capital Fund		R.S.F.		S.R.S.F.		OLWR		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
18.	Other Electrical Works.	Gross	9970	..	82593	..	297	..	..	..	..	..	..	..	..	..	95860	..
		Credit	..	..	10209	..	..	..	..	..	..	..	..	..	..	..	10209	..
	Traction distribution (37)	Net	9970	..	72384	..	297	..	..	..	..	..	..	..	..	..	82651	..
19.	Machinery & Plant	Gross	73984	..	156368	..	41513	..	..	..	..	..	..	..	..	..	271865	..
	(41)	Credit	591	..	..	..	..	..	..	..	..	..	..	..	..	..	591	..
		Net	73393	..	156368	..	41513	..	..	..	..	..	..	..	..	..	271274	..
20.	Workshops	Gross	187611	443	64980	..	154967	..	..	..	..	..	..	..	..	..	407558	443
	(42)	Credit	1318	..	..	..	..	..	..	..	..	..	..	..	..	..	1318	..
		Net	186293	443	64980	..	154967	..	..	..	..	..	..	..	..	..	406240	443
21.	Staff Quarters	Gross	935	..	226676	..	..	..	..	..	..	..	..	..	..	..	227611	..
	(51)	Credit	..	..	1986	..	..	..	..	..	..	..	..	..	..	..	1986	..
		Net	935	..	224690	..	..	..	..	..	..	..	..	..	..	..	225625	..
22.	Amenities for Staff	Gross	482	..	45663	320	189122	..	..	..	..	..	..	..	..	..	235267	320
	(52)	Credit	2	..	..	..	-42	..	..	..	..	..	..	..	..	..	-40	..
		Net	480	..	45663	320	189164	..	..	..	..	..	..	..	..	..	235307	320
23.	(I) Passenger Amenities.	Gross	..	..	92509	..	613495	812	..	..	..	..	..	..	..	..	706004	812
		Credit	..	..	178	..	..	..	..	..	..	..	..	..	..	..	178	..
	(53)	Net	-..	..	92331	..	613495	812	..	..	..	..	..	..	..	..	705826	812
24.	(II) Other Railway Users Amenities	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(53)	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25.	Investment in	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Govt. commercial	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	under taking public under takings. (62)	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26.	Other specified Works.	Gross	29459	336	13932	..	72008	..	..	..	..	..	..	..	688	..	116087	336
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	(64)	Net	29459	336	13932	..	72008	..	..	..	..	..	..	..	688	..	116087	336
27.	Stores Suspense	Gross	8203340	..	..	..	..	..	..	..	..	..	..	..	..	..	8203340	..
		Credit	8708048	..	..	..	..	..	..	..	..	..	..	..	..	..	8708048	..
		Net	-504708	..	..	..	..	..	..	..	..	..	..	..	..	..	-504708	..
28.	Manufacture	Gross	10877455	..	..	..	..	..	..	..	..	..	..	..	..	..	10877455	..
	Suspense	Credit	11105953	..	..	..	..	..	..	..	..	..	..	..	..	..	11105953	..
		Net	-228498	..	..	..	..	..	..	..	..	..	..	..	..	..	-228498	..
29.	Miscellaneous	Gross	-3000	..	..	..	..	..	..	..	..	..	..	..	..	..	-3000	..
	Advance	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	-3000	..	..	..	..	..	..	..	..	..	..	..	..	..	-3000	..
30.	Grand Total ..	Gross	25974369	196447	4652062	2313	1557779	1484	2073800	..	11460971	76041	5997272	..	688	..	51716941	276285
		Credit	19830016	..	905478	..	209	..	..	..	26362	..	9400	..	..	..	20771465	..
		Net	6144353	196447	3746584	2313	1557570	1484	2073800	..	11434609	76041	5987872	..	688	..	30945476	276285

Statement showing the break-up- of expenditure under the plan head "Rolling Stock" for the year 2016–2017.

21. Rolling Stock—

(Figures in thousands of ₹)

Sl. No.	Plan Head		Capital		DRF		DF		Capital Fund		RSF		SRSF		OLWR		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
		B.O.Gr. & Net.	159890	..	98943	..	..	..	..	..	..	..	..	..	..	..	258833	..
		O. B. O.Gross	43998	..	77549	..	16708	..	..	..	..	..	..	..	..	..	138255	..
(i)	Locomotives	Credit	1775	..	..	..	..	..	..	..	..	..	..	..	..	..	1775	..
		Net	42223	..	77549	..	16708	..	..	..	..	..	..	..	..	..	136480	..
		B.O.Gr.& Net.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		O.B.O.Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(ii)	Loco spares	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		B.O.Gr.& Net.	1648176	..	80531	..	1266	..	..	..	..	..	..	..	..	..	1729973	..
		O.B.O.Gross	-3745	..	232511	..	651	..	..	..	..	..	..	..	..	..	229417	..
(iii)	Carriages	Credit	..	..	51148	..	..	..	..	..	..	..	..	..	..	..	51148	..
		Net	-3745	..	181363	..	651	..	..	..	..	..	..	..	..	..	178269	..
		B.O. Gr. & Net.	1481	..	77709	..	..	..	..	..	..	..	..	..	..	..	79190	..
		O.B.O.Gross	-40253	..	118738	..	..	..	..	..	..	..	..	..	..	..	78485	..
(iv)	Wagons	Credit	..	..	29943	..	..	..	..	..	..	..	..	..	..	..	29943	..
		Net	-40253	..	88795	..	..	..	..	..	..	..	..	..	..	..	48542	..
		B.O.Gr.& Net.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		O.B.O.Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(v)	Rail-cum-Road	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Service.	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		B.O.Gr. & Net.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		O. B. O.Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(vi)	Others	Credit	..	..	24528	..	..	..	..	..	..	..	..	..	..	..	24528	..
		Net	..	..	-24528	..	..	..	..	..	..	..	..	..	..	..	-24528	..
		B.O.Gr. & Net.	27465	..	255037	..	..	..	..	..	..	..	..	..	..	..	282502	..
		O. B. O. Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(vii)	Track	Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Machine	Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		B.O.Gr. & Net.	1837012	..	512220	..	1266	..	..	..	..	..	..	..	..	..	2350498	..
	Total	O.B.O.Gross	..	..	428798	..	17359	..	..	..	..	-	..	..	..	..	446157	..
		Credit	1775	..	105619	..	..	..	..	..	..	..	..	..	..	..	107394	..
		Net	1775	..	323179	..	17359	..	..	..	..	..	..	..	..	..	338763	..
		Gross	1837012	..	941018	..	18625	..	..	..	..	..	..	..	..	..	2796655	..
	Rolling Stock Grand Total	Credit	1775	..	105619	..	..	..	..	..	..	..	..	..	..	..	107394	..
		Net	1835237	..	835399	..	18625	..	..	..	..	..	..	..	..	..	2689261	..

Statement showing the break-up of Expenditure under the Plan Head " Machinery and Plant " for the year 2016–2017.

(Figures in thousands of ₹.)

Sl. No.	Plan Head		Capital		D R F		D F		Capital Fund		R.S.F.		S.R.S.F.		O L W R		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
MACHINERY AND PLANT																		
(i)	Mechanical	Gross	68574	..	100143	..	19782	..	..	..	..	..	-	..	..	..	188499	..
		Credit	591	..	..	..	..	..	..	..	..	..	..	..	..	..	591	..
		Net	67983	..	100143	..	19782	..	..	..	..	..	-	..	..	..	187908	..
(ii)	Electrical	Gross	5410	..	16107	..	3451	..	..	..	..	..	..	..	..	..	24968	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	5410	..	16107	..	3451	..	..	..	..	..	..	..	..	..	24968	..
(iii)	Civil Engineering	Gross	..	..	11089	..	187	..	..	..	..	..	..	..	..	..	11276	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	11089	..	187	..	..	..	..	..	..	..	..	..	11276	..
(iv)	General Stores	Gross	..	..	..	..	..	..	..	..	..	..	..	-	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Statement showing the break-up of Expenditure under the Plan Head " Machinery and Plant " for the year 2016–2017—(Concld.)

Sl. No.	Plan Head		Capital		DRF		DF		Capital Fund		R.S.F.		S.R.S.F.		OLWR		Total	
			Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged	Voted	Charged
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(v)	Accounts	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(vi)	Signal and Tele-communication	Gross	..	..	..	..	255	..	..	..	..	..	..	..	..	..	255	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	255	..	..	..	..	..	..	..	..	..	255	..
(vii)	Medical	Gross	..	..	28287	..	17628	..	..	..	..	..	..	..	..	..	45915	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	28287	..	17628	..	..	..	..	..	..	..	..	..	45915	..
(viii)	Security	Gross	..	..	742	..	..	..	..	..	..	..	..	..	..	..	742	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	742	..	..	..	..	..	..	..	..	..	.	..	742	..
(ix)	Operating	Gross	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(x)	General	Gross	..	..	..	..	210	..	..	..	..	..	..	..	..	..	210	..
		Credit	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Net	..	..	..	..	210	..	..	..	..	..	..	..	..	..	210	..
Total	Machinery and Plant	Gross	73984	..	156368	..	41513	..	..	..	..	..	..	..	..	..	271865	..
		Credit	591	..	..	..	..	..	..	..	..	..	..	..	..	..	591	..
		Net	73393	..	156368	..	41513	..	..	..	..	..	..	..	..	..	271274	..

11. Correction of Expenditure of Performance

Grant No. 5—Abstract ' C '—Repairs and Maintenance of Motive Power

Grant No. 6—Abstract ' D '—Repairs and Maintenance of Carriages and Wagons

(Figures in lakhs of ₹)

Sl. No.	Particulars	2014–15	2015–16	2016–17
1.	Expenditure actually booked	1,30,458.92	1,39,997.64	**1,66,329.23**
2.	Total extraneous factors contributing to increase in expenses such as payment of Productivity Linked Bonus, increase in Cost of Materials, Dearness Allowance, Interim Relief, Net effect of increment, etc.	13,554.08	13,903.71	**39,516.50**
3.	Locomotives :			
	I. Steam—			
	(i) Expenditure on Locomotives Workshop Repairs.	68.67	110.78	**122.72**
	(ii) Proportionate amount of extraneous factors.	7.13	11.00	**29.16**
	(iii) Debits raised by South Central Railway for Work done.	..	..	..
	(iv) Comparable expenditure (Item [(i) minus item (ii) minus (iii)].	61.54	99.78	**93.56**
	(v) Index of Comparable expenditure (per cent).	213.07	162.15	**152.05**
	(vi) (a) Performance measured in terms of standard Ist Class or units repaired—			
	Broad Gauge ..	..	..	..
	Metre Gauge ..	0.00	0.00	0.00
	(b) Performance measured per million equated engine kilometres—			
	Broad Gauge ..	..	..	..
	Metre Gauge ..	0.00	0.00	0.00
	II. Diesel—			
	(i) Expenditure on Locomotives Workshop Repairs.	5,108.10	4,744.69	**4,268.69**
	(ii) Proportionate amount of extraneous factors. ..	530.71	471.21	**1,014.16**
	(iii) Debits raised by CLW/CRJ, DLW, etc.	0.00	387.16	**916.98**
	(iv) Comparable expenditure item (i) Minus item (ii) Minus (iii).	4,577.39	3,886.32	**2,337.55**
	(v) Index of comparable expenditure (Per cent).	89.38	84.90	**51.07**
	(vi) (a) Performance measured in terms of standard Ist Class or units repaired—			
	Broad Gauge	50.00	14.00	**8.00**
	Metre Gauge	1.00	1.00	**1.00**
	(b) Performance measured per million equated engine kilometres—			
	Broad Gauge ..	0.27	0.27	**0.05**
	Metre Gauge ..	7.87	7.63	**7.35**
4.	Weighted index of performance weightage given for the different gauges on the basis of cost of repairs per unit in the base year, equal weightage being given for fusion of passenger carriage and other coaching vehicle (percentage).	99.91	115.52	**111.42**
5.	***Wagons—***			
	(i) Expenditure on Wagons work - shop Repairs.	5,169.19	5,834.58	**9,460.72**
	(ii) Proportionate amount of extraneous factors. ..	537.05	579.45	**2,247.68**
	(iii) Debits raised by other Railways for POH of S. Rly. Wagons.	4,640.19	5,120.23	**7,882.81**

Sl. No.	Particulars	2014–15	2015–16	2016–17
(iv)	Comparable expenditure (Item (i) Minus item (ii) Minus (iii)).	-8.05	134.90	**-669.77**
(v)	Index of comparable expenditure (Per cent).	-4.58	-1,674.68	**8,314.94**
(vi)	(a) Performance measured in terms of number repaired			
	Broad Gauge	133.00	202.00	**248.00**
	(b) Performance measured per million wagon Kms. (in terms of four wheelers)—			
	Broad Gauge ..	0.24	0.41	**0.50*** **
	(c) Performance measured per million net tonne kilometres—			
	Broad Gauge ..	0.007	0.013	**0.016**
6.	Weighted index of performance (weightage given on the basis of unit cost of repairs for the different gauge) (Per cent).	144.23	148.51	**42.80**
7.	Expenditure on other than loco carriage and wagon workshop repairs as booked.	76,768.56	83,924.63	**1,01,240.91**
8.	Proportionate amount of element of extraneous factors.	7,975.90	8,334.88	**24,052.82**
9.	Comparable expenditure (Item VII—Item VIII)	6,8792.66	75,589.75	**77,188.09**
10.	Index of comparable expenditure (Per cent).	108.80	109.88	**112.20**
11.	Gross tonne kilometres (All traction goods and proportionate of mixed plus passenger EMU and Rail Cars) (in millions).	96,941	95,376	**94,634**
12.	Index of Performance ..	105.10	98.39	**97.62**

***** In terms of 8 wheelers**

III. Electrical—

(i)	Expenditure on Locomotives work shop Repairs.	9,790.65	10,392.26	**13,064.57**
(ii)	Proportionate amount of extraneous factors.	1,017.20	1,032.10	**3,103.88**
(iii)	Debits raised by South Central Railway for work done.	..	..	..
(iv)	Comparable expenditure item (i) Minus item (ii) Minus (iii).	8,773.45	9,360.16	**9,960.69**
(v)	Index of comparable expenditure (Per cent).	119.32	106.69	**113.59**
(vi)	(a) Performance measured in terms of standard Ist Class or units repaired—			
	Broad Gauge..	375.20	**322.80**	**364.80**
	Metre Gauge ..	..	..	..
	(b) Performance measured per million equated engine kilometres—			
	Broad Gauge ..	1.39	1.20	**1.28**
	Metre Gauge ..	..	..	..
	(c) Performance measured per million Gross tonne kilometres—			
	Broad Gauge ..	0.672	0.537	**0.607**
	Metre Gauge ..	..	..	..

Sl. No.	Particulars	2014–15	2015–16	2016–17
IV. Carriages—				
(i)	Expenditure on Carriage Workshop Repairs.	33,553.75	34,990.70	**38,171.62**
(ii)	Proportionate amount of extraneous factors.	3,486.08	3,475.06	**9,068.81**
(iii)	Comparable expenditure [(Item (i) minus Item (ii) minus (iii).]	30,067.67	31,515.64	**29,102.81**
(iv)	Index of Comparable expenditure (Per cent)	110.60	104.82	**96.79**
(v)	(a) Performance measured in terms of number repaired.			
(1)	Passenger Carriages (in terms of four-wheelers)			
	Broad Gauge	3,901.00	3,266.00	**3,252.00**
	Metre Gauge	0.00	3,252.00	**0.00**
(2)	Other Coaching Vehicles			
	Broad Gauge	616.00	677.00	**674.00**
	Metre Gauge	0.00	0.00	**0.00**
(3)	Performance of passenger carriage measured per million passenger train kilometres—			
	Broad Gauge	58.56	62.11	**61.85**
	Metre Gauge	0.80	0.00	**0.00**
(4)	Performance of other coaching vehicles measured per million vehicle kilometres—			
	Broad Gauge	6.35	7.05	**7.02**

***Grant No. 8—Operating Expenses.*—Rolling Stock and Equipment—**

(Figures in lakhs of ₹)

Particulars	Actuals 2014–15	Actuals 2015–16	Actuals 2016–17
1. Gross expenditure under Grant No. 08-F.	64,797.73	68,942.55	**79,248.54**
2. Extraneous items to be excluded.—			
(a) Expenditure on Electrical services.	12,018.05	**13,485.16**	**12,908.89**
(b) Effect of Additional D. A. & I. R.	0.00	1,618.17	**-14,317.75**
(c) Effect of PLB	0.00	-23.87	**904.63**
(d) Increase in Cost of Stores	0.00	380.01	**589.82**
Total Item II ..	12,018.05	15,439.47	**85.59**
3. Comparable expenditure (Item 1 minus Item II).	52,779.68	53,951.18	**79,162.95**
4. Index of comparable -expenditure (Per cent)	100.00	102.22	**149.99**
5. Performance measured in terms of Train kilometres.	76,542.00	**76,260.00**	**76,539.00**
6. Index of performance (per cent)	100.00	99.63	**100.00**

Grant No. 9—Operating Expenses—Traffic—

(Figures in lakhs of ₹)

Particulars	*Actuals 2014–15*	*Actuals 2015–16*	*Actuals* ***2016–17***
1. Gross expenditure under Grant No. 08-F.	1,10,023.6	1,15,638.5	**1,32,194.14**
2. Extraneous items to be excluded.—			
(a) Effect of Additional D.A.&I.R.	0.00	3,700.80	**-31,150.59**
(b) Effect of PLB	0.00	-139.55	**1,739.10**
(c) Effect of IRCA & IRFC transaction			
I. R. C. A.	0.00	2,964.03	**-6,338.12**
I. R. F. C.	0.00	4,791.00	**9,251.00**
Total Item II ..	0.00	5,388.22	**-26,498.61**
3. Comparable expenditure (Item I, minus Item II)	1,10,023.59	1,10,250.32	**1,58,692.75**
4. Index of comparable —expenditure (Per cent).	100.00	100.21	**144.24**
5. Performance measured in terms of Train kilometres	76,542.00	76,260.00	**76,539.00**
6. Index of performance (Per cent).	100.00	99.63	**100.00**

Grant No. 10—Operating Expenses—Fuel

(Figures in lakhs of ₹)

Particulars	*2014–15*	*2015–16*	***2016–17***
I. Gross expenditure under under Grant No.10— Operating Expenses— Fuel.	1,68,882.09	1,59,731.95	**1,63,864.88**
II. Extraneous factors contributing to increase/decrease in Gross expenditure —			
(1) Increase in rates of D. A.and I. R.	..	11.32	**-166.61**
(2) Annual scale increase, Operating of posts and restructuring of cadre.	..	-13.18	**237.65**
(3) Increase in other allowances.	..	-14.42	**0.78**
(4) Variation of sea-rail freight due to change in freight structures including reduction in subsidy.	..	..	..
(5) More/Less adjustment of storages.	..	..	..
(6) Increase/Decrease due to change in average rate of freight.	..	191.81	**-279.77**
(7) Increase in prime cost of Coal.	..	6.26	**5.49**
(8) Increase in prime cost of Diesel.	..	-23,774.54	**-31,899.73**
(9) Increase in average cess and sales tax on coal (due to revision of cess rate).	..	9.78	**2.02**
(10) Increase in average cess and Sales tax on H. S. D. oil (due to change of supply point).	..	8,586.29	**15,592.69**
(11) Revision of Electricity charges including penal levy.	..	10,050.42	8,940.52
(12) Throw forward debits of K. P. Dock.	..	..	..
(13) Increase in average issue rate of H. S. D. oil.	..	..	..
(14) Reduction in average rate due to change in pattern.	..	..	..
(15) Arrears payment freight charges on Bengal Rail Borne coal.	..	..	..
Total II	..	-4,946.22	**-7,566.96**
III. Comparable Expenditure (Item I— Item II).	1,68,882.09	1,64,678.17	**1,71,431.84**
IV. Index of Comparable expenditure.	100.00	97.51	**101.51**
V. Performance measured in terms of Gross Tonne Kilometer of all tractions (in Millions).	96,941	95,376	**94,634**
VI. Index of Performance	100.00	98.39	**97.62**

IV. नए निर्माण एवं इंजीनियरी कार्य
NEW CONSTRUCTION AND ENGINEERING WORKS

New Lines Opened

Sl. No.	*Divn.*	*Name of Work*	*Estimate Cost ₹. in Lakhs*	*Remarks*
a) New lines opened during the year 2016–2017				
1.	MAS	5th & 6th line opened (MMC-BBQ)	240.00	
2.	SA	Nil		
3.	PGT	Nil		
4.	TVC	Nil		
5.	TPJ	Nil		
6.	MDU	Nil		
7.	CE/CN/ERS	Nil		
8.	CE/CN/MS	Nil		
9.	MTP	Nil		

2. New Lines Under Construction

Sl. No.	*Division*	*Name of Works*	*Cost ₹. in crores*	*% of over all progress as on 31/03/17*	*Remarks*
1(a). New Lines Under Construction					
1.	MAS	New stabling Line @ GSN yard	0.998		Work in progress
2.	SA	Nil			
3.	PGT	Nil			
4.	TVC	Nil			
5.	TPJ	Nil			
6.	MDU	Nil			
7.	CE/CN/ERS	Angamali-Sabarimala new BG line.	1566	9.00%	AFK-Kaladi section work targetted for 31.01.2018 Kaladi-Peumbavoor section Periyar bridge 99% completed.
		Guruvayur - Tirunavaya new BG line.	13.71	1.50%	GUV Yard work Phase II Completed.
8.	CE/CN/MS	Karur - Salem New line (85 kms) (PB No.2)	870.00	99%	Section commissioned for passenger services on 25.05.2013. The section handed over to Open Line Department on 26.07.2013.
		Tindivanam-Gingee Tiruvannamalai (70 kms)-New line (PB No.4)	490.00	6%	Detailed estimate sanctioned. Land top an extent of 267.29 has required. Out of which 25.66 hs acquired. Administrative sanction given for all 41 villages. Full amount of Rs. 11.51 crore paid but no land is received so far. Only major bridges in progress.
		Tindivanam-Nagari (179.20 km)-New line (PB No.5)	1080	10%	Detailed estimate has been sanctioned. Land to an extent of 739.90 ha. of land required. LPS placed in June 2010. Part amount of Rs.57.36 crore deposited and only 1.90 ha received. Walajah Road - Ranipet (6 km) completed. Works are in progress in Ranipet-Arcot section. Govt. of Tamilnadu has been requested to acquire land at Vepur Village under "Tamilnadu Acquisition of land for Industrial Purposes Act 1997".
		Attipattu-Puttur (88.3 kms) (PB No.6)	528.00	1%	Detailed Estimate sanctioned. EPT has withdrawn cost sharing offer & Board advised. Board's orders awaited. Land requirement furnished to TN & AP Govts. No land received so far. Tenders not called for want of Board's decision.

Sl. No.	Division	Name of Works	Cost ₹. in crores	% of over all progress as on 31-03-17	Remarks
New Lines Under Construction—Contd.					
		Erode-Palani (91-05 kms.) (PB No. 7)	603.22	1%	Detailed estimate sent to Board in 2010-11 but not sanctioned. Project not started. Project is frozen by Board in 2011 on account of poor viability. As directed by Board, State Government was requested to share the cost but State Government has not agreed to.
		Chennai-Cuddalore (via) Mamallapuram (179.28 Kms) (PB No.8)	1200.00	7%	The proposal to approve the revised alignment as suggested by Govt. of Puducherry and Varakkalpattu for a length of 26.40 Km. at a cost of Rs.198.55 cr. has been submitted to Railway Board. Part detailed estimate between Mahabalipuram to Puducherry for a length of 106 km. (with retention of LC) at a cost of Rs.992.28 cr. has been sent to Board for sanction. Detailed estimates for other stretches are under preparation.
		Madurai-Tuticorin (via) Aruppukottai (143.5 km.) (PB No.9)	800.00	5%	Milavittan-Melamarudur (18 km) part detailed estimate for Rs.120.70 cr. sanctioned by Board. State Govt. Officers have been pursuaded for early land acquisition of this section between Milavittan & Melamaruthur. Land acquisition is proposed under TN Land acquisition & Industrial Purpose Act 1997. Notification under section 3(2) was issued. The issuance of Notification under section 3(1) for 74 ha. of land in 6 villages in Tuticorin district is pending. Total extant of land required for this section alone is 73.8644 Ha. and an amount of Rs.12.70 Cr. has been deposited towards establishment charges and cost of land. Final Local Survey has been completed from Melmarudur to Madurai for which estimate is under preparation. Milaviittan-Melamarudur section targetted for completion in 2016-17 has been postponed to 2017-18. In this section, all works are in progress.
		Sriperumbudur-Gudavanchery with spur to Irungattukottai-Avadi - Sriperumbudur (60 Km) (PB No.10).	1500.00	0%	Survey completed. Index plan & working plan for the section between Avadi and Sriperumbudur & Guduvanchery are also approved. Detailed estimate is under preparation. GOTN gave consent to share up to 50% of the project cost for Irungattukkottail - Sriperumbudur-Oragadam-Guduvancherry. GOTN had been advised to share 50% of the cost of the project and provide land free of cost. GOTN on 04.03.2016 have communicated their acceptance to share 50% of the cost of the project to (a) Forming a SPV between Railways and Government of Tamilnadu and (b) Sharing the project in ratio of 50:50 including the land cost as State Govt. equity in SPV.
9.	MTP	Extension of MRTS Phase II from Velacheri to St. Thomas Mount - 5 km. Cost of the work is shared by rlys. and Govt. Tamil Nadu in the ratio 1:2 i.e. Rs. 16,524.67 lakhs by Rlys. and Rs. 33,049.33 lakhs by Govt. of Tamil Nadu.	495.74	80%	1) New work sanctioned in 2006-07 Physical work commenced in 2008-09, The works have been held up for various Court cases for a distance of 500m. Substructure and Superstructure works for section from Velacherry to Adambakkam for distance of 4 km. has been completed. For Reach IV for a length of 0.495 Km. land acquisition is under progress by the State Government. Balance 0.5 KM length is proposed as an integrated Station building and is being executed by M/S CMRL Ballast less Track Work to the length of 7622 M out of 8400 M has been completed.

Sl. No.	Division	Name of Works	Cost ₹. in crores	% of over all progress as on 31-03-17	Remarks
New Lines Under Construction—Contd.					
					2) The award for land acquisition was passed by the District Collector, Kanchipuram Dist. vide Order No.1/16 dated 20.09.16. Immediately 22 House dwellers has approached the Honourable High Court of Madras and obtained stay by challenging the award. The above stay is yet to be vacated. The Govt. of Tamil Nadu has appointed AAG to vacate the above stay to process further. Secretary/Housing and Urban Development of Tamil Nadu Government is being followed up in this regard. 3) Contract for Construction of Puzhuthivakkam and Adambakkam Stations platform works and Station building works have been awarded and works are in progress. 4) Land for Adambakkam station buildiong (a small portion) has not been handed over. 5) Revised estimate - II for Rs.732.89 Crores has been sent to Railway Board vide Letter No.MTP/W/3/Ph.II Extn.Vol.IV dated 05.04.2017 for sanction. Clarification asked by Railway Board vide letter No.2017/Proj./MAS/5/2 dated 21.04.2017. Clarification will be sent shortly.
2.		Chennai-Cuddallore via. Mahabalipuram - (179 Km) a) New Puducherry to Cuddalore (Varakalpattu) (with (with retension of LC) - 26.4 km. b) Mahabalipuram to Puduchery (wirth retension of LC) - 106 Kms. c) Chennai (Perungudi)-Mahabalipuram - 45 Km. d) Chengalpattu - Mahabalipuram - 27.5 Kms.	2670 (198.56) (992.28) (1154.35) (324.81)	0.08%	a) Due to the changes in alignment between Cuddalore and Puducherry new line and North of Villupuram - Puducherry line towards north side and alignment south of Villupuram-Pudhucherry line before Gadilam River along with double line as requested by the Govt. of Pudhucherry. Railway Board has accorded approval to the revisions in alignment vide lr.No.2006/W-I/NL/SR/CMC dated 11.05.2017. FLS has to be taken and accordingly estimate has to be revised. b) Part Detailed Estimate between Mahabalipuram and Puducherry was sent to Railway Board. c) Part detailed estimate for Chennai to Mahabalipuram is in progress. d) Chengalpattu - Mahabalipuram - 27.5 Kms sent to Railway Board. Clarification asked by Railway Board. Remarks for clarification will be sent shortly.
1 (b) New lines sanctioned works during 2016-17					
MAS	Nil				
SA	Nil				
PGT	Nil				
TVC	Nil				
TPJ	Nil				
MDU	Nil				
CE/CN/ERS	Nil				
CE/CN/MS	Morappur-Dharmapuri (36 Km) (PB No.11)		134.00	0%	New work included in the Pink Book 2016-17. Detailed estimate (with Detailed Project Report) for Rs.358.95 Cr. sent to Railway Board for sanction vide letter No.W.193/VII/5/CN dt.05.12.2016. Part survey estimate sanctioned. Agency fixed for final locatioon survey and work is in progress. In the mean time, meeting held on 09.02.2017 in Railway Board. ED committee advised that the project is financially unviable and to be processed for execution through state JV.
MTP	Nil				

Sl. No.	Division	Name of Works	KM	Cost in lakhs of ₹.		Remarks
(a) Surveys sanctioned works during 2016-17						
1.	MAS	Nil				
2.	SA	Nil				
3.	PGT	Nil				
4.	TVC	Nil				
5.	TPJ	Nil				
6.	MDU	Nil				
7.	CE/CN/ERS	Nil				
8.	CE/CN/MS	Reconnaissance Engineering cum Traffic survey for new line between Dindigul and Sabarimala via Bodinayakkanur.	30.15			RET Survey ordered by Board vide Demands for Grants - Railways, 2016-17 as item No. 23. The survey estimate is vetted by fiance and sanctioned by CAO/CN. Tender schedule is under process.
9.	MTP	Nil				
(b) Surveys in progress during the year 2016-17						
1.	MAS	Nil				
2.	SA	Nil				
3.	PGT	Nil				
4.	TVC	Nil				
5.	TPJ	Nil				
6.	MDU	Nil	59.13			
7.	CE/CN/ERS	TVC-CAPE doubling	9.15			
		ERS-KUMM doubling	10.42			
		KUMM-TUVR doubling	16.24			
		TUVR-ALLP	8.5			
		ALLP-AMPZ doubling	46.43			
		Anthinadu-Erumeli	6.51			RET Survey ordered by Board vide Demands for Grants - Railways, 2015-16 as item No. 25. The survey estimate is vetted by fiance and sanctioned by CAO/CN. Tender called for survey work, opened on 02.06.2015 and discharged. Re-tender awarded. Field survey under process.
8.	CE/CN/MS	Reconnaisance Enginering cum Traffic Survey for new line between Kallakurichchi and Ulundurpet.				
		Reconnaissance Engineering cum Traffic survey for new line between Dindigul and Sabarimala via Bodinayakkanur.	30.15			RET Survey ordered by Board vide Demands for Grants - Railways, 2016-17 as item No. 23. The survey estimate is vetted by fiance and sanctioned by CAO/CN. Tender schedule is under process.
9.	MTP	Nil				
(c) Surveys completed during the year2016-17						
1.	MAS	Nil				
2.	SA	Nil				
3.	PGT	Nil				
4.	TVC	Nil				
5.	TPJ	Nil				
6.	MDU	Nil				
7.	CE/CN/ERS	Nil				
8.	CE/CN/MS	Reconnaisance Enginering cum Traffic Survey for a new BG line from Morappur to Dharmapuri vis. Ranimukkanur and Mukkanur.	35.9	Civil Engineering Electrical OHE S&T Total cost ROR : (-) 8.040% (Land Cost Rs.22.38 Cr.)	206.15 5.62 5.50 21.67 Rs.238.95	Survey Report submitted to Railway Board on 11.02.2008. Railway Board asked for recast vide letter Dt.08.05.2008. Cost updated (Rs.146.42 cr. & IRR: (-) 6.682%) and report submitted to Railway Board on 27.06.2008. Further, Railway Board has ordered for updating in 2013-14. Updated survey report submitted to Railway Board on 28.02.2014. Railway Board has shelved the project on 09.09.2015. Again the project has been sanctioned by the Railway Board during the year 2016-17.

Sl. No.	Division	Name of Works	KM	Cost in lakhs of ₹.		Remarks
(c) Surveys completed during the year2016-17—Contd.						
		Reconnaisance Engineering cum Traffic Survey for a new BG line from Madurai to Karaikkudi via. Melur and Tiruppattur Road.	85.7	Civil Engineering Electrical OHE S&T Total cost RR : (-) 7.742% (Land Cost Rs.89.07 Cr.)	577.08 24.73 4.04 43.65 Rs.649.50l	Survey Report submitted to Railway Board on 29.07.2008. Railway Board has ordered for updating in 2013-14. Updated survey report was submitted to Railway Board on 27.11.2014. Railway Board has shelved the project vide letter No.2015/W-1/NL/SR/MKD dated 15.01.2016.
		Updating of Reconnaissance Engineering cum Traffic Survey fpr a new BG line from Thanjavur to Ariyalur via. Tirumanur.	50.35	Civil Engineering Electrical OHE S&T Total cost ROR : (-) 0.048% (Land Cost Rs.47.86 Cr.)	416.07 6.12 1.76 28.14 452.09	Survey Report submitted to Railway Board on 09.07.2008. Further, Railway Board has ordered for updating in 2013-14. Updated survey report was submitted to Railway Board on 30.06.2014. Further, clarifications sought by Railway Board vide leter dated 22.02.2016 and replied on 28.03.2016 with revised cost of Rs,461.52 cr. Railway Board has shelved the project vide letter No.2014/W-1/NR/SR/TA dated 01.08.2016.
		Preliminary Engineering cum Traffic Survey for a new BG line (3rd & 4th) between Attipattu and Gummidipundi.	25.37	Civil Engineering Electrical OHE S&T Total cost ROR : (-) 0.565% (Land Cost Rs.8.57 Cr.)	418.66 4.44 64.76 87.27 305..13	Report submitted to Board on 29.10.2010. Clarificatons sought by Railway Board vide letter dated 28.12.2011. Based on the Board's letter the remarks are received from CTPM on 22.02.2012. Updated abstract estimate sent to Railway Board on 23.11.2012 at a cost of Rs.315.85 Cr. The revised IRR is (+) 4.819% also sent to Board on 03.04.2013. And again clarifications sought by Railway Board vide letter dated 12.09.2013 is replied. Further, clarifications sought by Railway Board vide letter dated 21.01.2016 is replied on 14.03.2016 at a revised cost of Rs.308.03 Cr. Now, Railway Board asked for IRR. The IRR is (+) 3.048 sent to Railway Board asked for IRR. The IRR is (+) 3.048% sent to Railway Board on on 27.06.2016. Again clarifications sought by Railway Board vide letter dated 12.07.2016. Remarks received from COM/MAS and revised estimate also vetted by finance at a cost of Rs.368.72 Cr. IRR is under vetting.
		Updating survey for a new Bg line between Chennai and Sriperumbudur via. Saidapet, Kulapaklkam, Poonamalle & Pudupper.	38.6	Civil Engineering Electrical OHE S&T Total cost ROR : (-) 9.534% (Land Cost Rs.679.25 Cr.)	818.12 16.64 56.20 24.23 915..19	Survey Report was submitted to Railway Board on 31.01.2014. Further, clarifications sought by Railway Board vide leter dated 21.01.2016 and replied on 08.03.2016 at revised cost of Rs,926.97 cr. Railway Board has shelved the project vide letter No.2014/W-1/NR/SR/CSP dated 27.05.2016.
		Updating of RETS for a new line from Dindigul to Kumuli via Bodinayakkanur and alternative via. Teni.	134 (Bodi)	Civil Engineering Electrical OHE S&T Total cost ROR : (-) 3.669% (Land Cost Rs.55.15 Cr.)	707.52 44.53 1.22 74.95 828.22	Surey report was submitted to Railway Board on 22.05.2014. Observations asked by Board is replied. Railway Board's decision in this connection is awaited.
			123 (Teni)	Civil Engineering Electrical OHE S&T Total cost ROR : (+) 0.445% (Land Cost Rs.57.12 Cr.)	618.39 41.19 1.22 66.77 757.57	

Sl. No.	Division	Name of Works	KM	Cost ₹. in Lakhs	Remarks
(c) Surveys completed during the year2016-17—Contd.					
		Preliminary Engineering cum Traffic Survey for a doubling between Salem and Omalur.	10.7	Civil Engineering 32.53 Electrical 1.40 OHE 11.50 S&T 16.32 Total cost 61.75 ROR : (+) 4.629% (Land Cost Rs.14.87 Cr.)	Railway Board has sanctioned vide letter No.2012/W-1/Genl/Surveys/Budget dated 27.02.2014 (Sl.No.4/DL). Survey report was submitted to Railway Board on 30.09.2014. Further, clarifications sought by Railway Board vide letter cited 22.02.2016 is replied on 07.04.2016 with revised cost of Rs.7643.03 lakhs. Railway Board has sanctioned the project in the year 2016-17 (Supplimentary)
		PETS between Podanur - Palghat 3rd line (Exg. Double line).	52.44	Civil Engineering 322.94 Electrical 6.68 OHE 32.64 S&T 48.11 Total cost 410.37 ROR : (+) 4.678% (Land Cost Rs.34.87 Cr.)	Surey report was submitted to Railway Board on 31.10.2014. Clarifications sought by Railwlay Board vide letter dated 30.09.2015 is replied on 09.11.2015. Railway Board's decision in this connection is awaited.
		Updating for a new BG line between Portblair and Diglipur.	240	Civil Engineering 1791.61 Electrical 133.05 S&T 62.80 Total cost 1987.46 ROR : (-) 9.004% (Land Cost Rs.15.67 Cr.)	Surey report was submitted to Railway Board on 16.12.2014. Clarifications sought by Railwlay Board vide letter dated 11.04.2016 is replied. Railway Board's decision in this connection is awaited.
		Reconnaisance Engineering cum Traffic Survey for extention of Tindivanam - Nagari new line upto Pondicherry.	44.5	Civil Engineering 219.78 Electrical 6.73 OHE 2.64 S&T 33.56 Total cost 262.71 ROR : (-) 15.215% (w.o.c.t) (-) 12.483% (w.c.t) (Land Cost Rs.48.79 Cr.)	Survey Report was submitted to Railway Board on 11.05.2015. Railway Board has shelved the project vide letter No.2015/W-1/NL/SR/TNP dated 29.03.2016.
		Reconnaisance Engineering cum Traffic Survey for a new line between Karaikudi and Dindigul via. Nattam.	105.6	Civil Engineering 1231.55 Electrical 25.71 OHE 2.08 S&T 54.95 Total cost 1314.29 ROR : (-) 10.647% (Land Cost Rs.128.09 Cr.)	Survey Report was submitted to Railway Board on 06.07.2015. Railway Board has shelved the project vide letter No.2015/W-1/NL/SR/DK dated 31.03.2016.
		Reconnaisance Engineering cum Traffic Survey for a new line between Thanjavur and Pudukkottai via. Gandarvakkottai, Adanakkottai, Perungalur Ichadi and Dharga.	71.72	Civil Engineering 536.82 Electrical 13.24 OHE — S&T 69.42 Total cost 619.48 ROR : (-) 8.2747% (Land Cost Rs.195.70 Cr.)	Survey Report was submitted to Railway Board on 29.02.2016. Railway Board has shelved the project vide letter No.2016/W-1/NL/SR/TPG dated 06.05.2016.
		Reconnaisance Engineering cum Traffic Survey for a new line between Tirunelveli and Sankarankoil via. Pettai, Pudur, Sendamaram Veerasigmamani.	77.41	Civil Engineering 575.49 Electrical 12.79 OHE — S&T 67.38 Total cost 655.84 ROR : (-) 12.662% (Land Cost Rs.176.10 Cr.)	Survey report was submitted to Railway Board on 30.06.2016. Clarification sought by Railway Board on 22.07.2016 and replied on 19.08.2016. Again, Board observations vide letter, dated 13.10.2016 . Revised abstract estimate and IRR vetted by Finance at a cost of Rs.960.85 Cr. & IRR (-)13.536%, the same estimate & IRR was sent to Railway Board on 24.02.2017. Railway Board decision awaited.

Sl. No.	Division	Name of Works	KM	Cost ₹. in Lakhs	Remarks
(c) Surveys completed during the year2016-17—Concld.					
		Reconnaisance Engineering cum Traffic Survey for a new line between Kumbakkonam and Vriddhachalam via. Jayankondacholapuram, Andimadam.	74.31	Civil Engineering 938.54 Electrical 11.55 OHE 1.95 S&T 56.64 Total cost 1008.68 ROR : (-) 7.512% (Land Cost Rs.256.57 Cr.)	Survey report was submitted to Railway Board on 26.07.2016. Clarification sought by Railway Board and replied on 26.08.2016 at a cost of Rs.1020.89 Cr. along with IRR (-) 7.03% . Railway Board has shelved the project vide letter No.2016/W1/NL/SR/KV dated 17.01.2017.
		Reconnaisance Engineering cum Traffic Survey for a new line between Tiruppattur and Krishnagiri via. Kandili.	41.25	Civil Engineering 306.44 Electrical 11.09 OHE 2.08 S&T 34.72 Total cost 354.33 ROR : (-) 8.445% (Land Cost Rs.40.91 Cr.)	Survey report was submitted to Railway Board on 29.07.2016. Clarification sought by Railway Board and replied on 16.11.2016 at a cost of Rs.405.86 Cr. Railway Board has shelved the project vide letter No.2016/W1/NL/SR/TKK dated 14.03.2017.
		Reconnaisance Engineering cum Traffic Survey for a new line between Viranialur - Nagercoil - Alagappapuram- Chettikulam.	20.5	Civil Engineering 248.04 Electrical 8.35 OHE 13.36 S&T 23.60 Total cost 293.35 ROR : (-) 8.038% (Land Cost Rs.82.57 Cr.)	Survey report was submitted to Railway Board on 31.08.2016. Clarification sought by Railway Board and replied on 18.11.2016 at a cost of Rs.403.48 Cr. Railway Board has shelved the project vide letter No.2016/W1/NL/SR/ANC dated 17.01.2017.
		Reconnaisance Engineering cum Traffic Survey for a new line between Kanchipuram - Tiruvannamalai-Katpadi via. Vandavasi.	116.76	Civil Engineering 1711.52 Electrical 21.52 OHE 4.63 S&T 72.28 Total cost 1815.95 ROR : (-) 10.059% (Land Cost Rs.748.13 Cr.)	Survey report was submitted to Railway Board on 31.10.2016. Clarification sought by Railway Board during January 2017, the revised cost of Rs.2522.26 Cr. was sent to Railway Board on 13.02.2017. Railway Board decision awaited.
9	MTP	Nil			

Sl. No.	Divn.	Name of Work	Estimate Cost ₹. in Lakhs	Remarks

4. *Lines closed during the year*

1.	MAS	Nil
2.	SA	Nil
3.	PGT	Nil
4.	TVC	Nil
5.	TPJ	Nil
6.	MDU	Nil
7.	CE/CN/ERS	Nil
8.	CE/CN/MS	Nil
9.	MTP	Nil

PROGRESS OF MAJOR PROJECTS COSTING OVER RS.20 LAKHS & ABOVE UNDER VARIOUS PLAN HEADS UP TO 31/03/2017

Amount in lakhs of Rs.

SNo.	Name of work	Anticipated Cost	Started in the year	Completed in the year	Expenditure up to 31/03/2016	Physical Progress	Remarks
1.0	**NEW LINES**						
1	Karur - Salem (85 kms) New Line (PB No.2)	**870.00**	1996 - 97	2013	**849.35**	99%	Estimate for Rs.229.88 crores sanctioned by Board. Revised estimate for Rs.774.90 cr. vetted by finance & submitted to Railway Board for sanction. Railways have taken physical posssesion of required land except at a few locations of ROBs. Extra compensation court cases - out of 1300 cases, 240 cases finalised and the balance are pending in various courts.
2	Tindivanam - Gingee - Tiruvannamalai (70 km) - New line (PB No.4)	**490.00**	Supp.D.No. 2006-07		**59.90**	6%	Detailed estimate sanctioned by Railway Board for Rs. 227.40 crores vide letter No.2008/W1/ NL/SR/TT dated 21/07/2008.
3	Tindivanam - Nagari (184.99 km) - New line (PB No.5)	**1080.00**	Supp.D.No. 2006-07		**209.66**	10%	Detailed estimate has been sanctioned by Railway Board for Rs.582.83 crores for the entire project vide Railway Board vide letter No. 2007/W1/NL/SR/TN dated 21/07/2008. In Walajah Road - Arcot section (13 km),Walajah Road-Ranipet (6.5 km) completed.
4	Attippattu - Puttur (88.3 kms) (PB No.6)	**528.00**	2008-09		**3.34**	1%	Work included in Pink Book in the year 2008-09 at a cost of Rs.446.87 crores.
5.	Erode - Palani (91.05 kms) New Line	**603.22**	2008-09		**1.63**	1%	New work included in Pink Book in the year 2008-09 at a cost of Rs.288.87 crores.
6	Chennai - Cuddalore (via) Mahabalipuram (179.28 kms) (PB No.8)	**1200.00**	2008-09		**2.27**	7%	Work included in Pink Book in the year 2008-09 at a cost of Rs.523.52 crores & revised to Rs.1200 crs. during 2014-15.
7	Madurai - Tuticorin (via) Aruppukkottai (143.5 km) (PB No.9)	**800.00**	2011-12		**55.20**	5%	New work included in the year 2011-12. State Government of Tamilnadu has been requested to convey their consent to provide land free of cost and also to share 50% of the balance cost of the project vide this office letter No.W.337/1/203/CN dt.31/12/2010 but TN Govt. has turned down the request.
8	Sriperumbudur-Guduvanchery with spur to Irungattukkottai - Avadi - Sriperumbudur (60 km) (PB No.10)	1500.00	2013-14		**0.61**	0%	New work included in the year 2013-14. Tender schedule for FLS sanctioned by GM. Contract awarded. Railway Board permission for incurring expenditure for the project is yet to be communicated. Survey work is in progress. Index plan & working plan for the section between Avadi & Sriperumbudur is approved. Working plan & working section between Sriperumbudur & Guduvanchery are also approved.
9	Morappur-Dharmapuri (36 km) (PB 11)	13.00	2016-17		0.00	0%	...
2	**GAUGE CONVERSION**						
1	Tiruchchirappalli - Thanjavur - Nagore -Karaikal (145.33 Km) with extension Nagappattinam-Velankanni-Tiruthuraipundi via Thirukuvalai (43 Kms.) and new material modification of Peralam-Karikal new line (23 km) Total=211.33 km (PB No.12)	980.00	1995 - 96		630.89	70%	Thiruchchirappalli - Thanjavur - Tiruvarur - Nagore - Karaikal & Nagappattinam - Velankanni sections commissioned. Nagappattinam - Tiruturaipundi (via) Thirukkuvalai: GOTN has approved the land acquisition and fund deposited for Nagappattinam District only towards land cost. Fund deposited for Thiruvarur District. Acquisition of land was completed by the State Govt. and 105 ha of land has been handed over to Railways. Only transfer of Govt. land of abour 10 ha is yet to be received. Bridge works are progressing. Regarding Karaikkal-Peralam (MM), DE for Rs.177.69 cr. is under sanction in Board. Now, Railway Board has advised RVNL to conduct Bankability study and Financial feasibility. RVNL has appointed M/s.KPMG Advisory Services Pvt. Ltd., as a consultant to conduct Bankability study & financial feasibility. Subsequently, M/s.KMPG submitted report to RVNL. Now, it is under scrutiny of Railway Board.

PROGRESS OF MAJOR PROJECTS COSTING OVER RS.20 LAKHS & ABOVE UNDER VARIOUS PLAN HEADS UP TO 31/03/2017

Amount in lakhs of Rs.

S.No.	Name of work	Anticipated Cost	Started in the year	Completed in the year	Expenditure up to 31/03/2016	Physical Progress	Remarks
2 2	**GAUGE CONVERSION** Quilon - Tirunelveli - Tiruchendur & Tenkasi - Virudunagar - Gauge Conversion (357 Kms) (P.B.No.13)	1170.00	1997 - 98		1119.89	86%	All sections commissioned excepot Sengottai - Punalur (49 km). In this section, Sengottai-New Aryankavu (20 km) & Edmana-Punalur (8 km) have been completed and commissioned for passenger traffic on 31/03/2017. The remaining 21 km (New Aryankavu-Edamann) stretch is targeted for commissioning in 2017-18.
3	Madurai - Rameswaram - Gauge Conversion (161 kms) (PB No.14)	441.69	1997 - 98	2007	371.66	99%	Section Commissioned.
4	Thanjavur - Villupuram Gauge Conversion (192 Kms) (RVNL Project) (PB No.15)	665.01	1998 - 99	2010	122.05	100%	Section Commissioned.
5	Cuddalore - Salem via Vriddhachalam-Gauge Conversion (191 kms) (RVNL Project) (PB No.16)	556.64	1999-2000	2007	303.72	93%	Cuddalore - Salem section commissioned. Chinnasalem-Kallakurichi (16 km) was sanctioned by Railway Board for Rs.37.13 crores as material modification. Revised estimate for Chinnasalem-Kallakurichchi new line (MM) for Rs.116.62 cr. sanctioned by Board during December 2015. Tamilnadu Government has agreed to share 50% of project cost. Tamilnadu Govt. has remitted their share. Survey completed and the proposed alignment submitted along with LP schedule. Land acquisition is proposed under "Tamilnadu Acquiistion of Land for Industrial Purposes Act 1997". The Land acquisition notification 3(2) has been published by Revenue Department. 3(1) notification is to be issued. On receipt of land, works can be started.
6	Tiruchchirappalli - Manamadurai - Gauge Conversion (150 Kms.) (PB No.17)	503.99	2000 - 01	2008	394.17	100%	Section Commissioned.
7	Villupuram - Katpadi - Gauge Conversion (161 Kms) (PB No.18)	780.00	2000 - 01	2011	668.53	100%	Section Commissioned.
8	Manamadurai - Virudunagar - Gauge Conversion (66.55 Kms) (PB No.19)	231.58	2006-07	2013	207.76	98%	Section commissioned.
9	Dindigul - Pollachi - Palaghat & Pollachi-Coimbatore-Gauge Conversion (224.88 Kms) (PB No.20)	1065.00	2006-07	2017	1026.42	90%	Podanur-Coimbatore & Dindigul-Palani-Pollachi & Pollachi-Palakkad sections commissioned. In the only remaining section viz., Pollachi-Podanur, work has been completed. CRS inspected the section on 23/03/2017 & 24/03/2017 and authorised the section for opening.

PROGRESS OF MAJOR PROJECTS COSTING OVER RS.20 LAKHS & ABOVE UNDER VARIOUS PLAN HEADS UP TO 31/03/2017

Amount in lakhs of Rs.

S.No.	Name of work	Anticipated Cost	Started in the year	Completed in the year	Expenditure up to 31/03/2016	Physical Progress	Remarks
2	**GAUGE CONVERSION**						
10	Mayiladuturai - Thiruvarur-Karaikkudi and Tiruturaipundi - Agastiyampalli (223.69 km) & restoration of Nidamangalam - Mannargudi line (13.25 km), Mannargudi - Pattukkottai (41.00 km) & Thanjavur-Pattukkottai (47.20 km) Total = 325.14 km(PB No.21) (PB No.21)	2072.50	2007-08		832.99	31%	Nidamangalam- Mannargudi (NL) & Mayiladuturai - Thiruvarur (GC) sections commissioned already. In Thiruvarur-Pattukottai-Karaikkudi & Tiruturaipundi-Agastiyampalli GC sections, earthwork & bridge works are in progress. As per revised Board's target, Karaikkudi-Pattukkottai (73 km) section originally targeted for completed during 2016-17 has been postponed to 2017-18, in which all works are progress well. Reg. Mannargudi-Pattukkottai (only part DE for Rs.19.03 cr. for major bridges sanctioned) & Thanjavur-Pattukkottai new lines (MM) both DEs sent to Board for sanction. DE for Mannargudi-Pattukkottai has been returned by Board recently.
11	Madurai - Bodinayakkanur (90.41 kms) (PB No.22)	302.90	2008-09		29.78	6%	Detailed estimate sanctioned by Railway Boad vide letter No.2005/W1/NL/SR/1 dt.15/12/2016 for Rs.302.90 cr. Major bridge works are in progress. Other activities are in tender stage.
2	**DOUBLING**						
1	Irugur - Coimbatore Doubling (17.70 kms) (PB No.24)	120.00	1996 - 97		100.35	100%	Section Commissioned.
2	Attippattu - Korukkupet Third line (18 Kms) (RVNL Funded Project, being executed by S.RLY) (PB No.25)	160.40	1999 - 2000		267.31	83%	Korukkupet - Ennore section (12 kms) opened for traffic and handed over to the open line. Ennore-Attippattu Pudunagar section (4.3 km) passenger traffic commissioned on 10/11/2014 and balance section between Attippattu Pudunagar & Attippattu is in progress.
3	Chennai Beach - Korukkupet III line (4.1 kms) (PB No.26)	141.87	2003 - 04		79.57	1%	Detailed estimate sanctioned only in January 2014. Works are in progress and the section initially targeted for completion in 2016-17 has been postponed to 2017-18.
4	Chennai Beach - Attippattu 4th Line (22.1 Kms) (PB No.30)	158.50	2003-04		115.46	9%	Ennore-Attippattu Pudunagar section (4.3 km) passenger traffic commissioned on 10/11/2014. Works are in progress in Ennore- Korukkupet- Chennai Beach (16 km) section and is originally targeted for completion in 2016-17. But, as per revised target given by Board, only Tiruvottiyur-Ennore (7 km) section is targeted for the current year in which all the works are completed and the section commissioned on 31/03/2017. The remaining sections are targeted for 2017-18
5	Madurai - Dindigul (62.05 kms) (PB No.31)	330.32	2003 -04		236.54	100%	Section Commissioned.
6	Chengalpattu - Villupuram doubling (103 km) - with new Material Modification for Tambaram - Chengalpattu - 3rd line by GC of existing MG line along with electrification (30 km). (PB No.35)	951.24	Supp. Demands for grants 2006-07	61515	88%		Revised estimate sanctioned. About 22 hectares of land is yet to be acquired by Tamilnadu state Government and handed over to Railways. Chengalpattu-Villupuram stretch (103 km) commissioned. Detailed estimate for Tambaram-Chengalpattu (30 km) 3rd line (MM) for Rs.255.68 cr. sanctioned by Board. Tenders for various activities have been called. Tender for major & minor bridges have been opened and are under finalisation.

PROGRESS OF MAJOR PROJECTS COSTING OVER RS.20 LAKHS & ABOVE UNDER VARIOUS PLAN HEADS UP TO 31/03/2017

Amount in lakhs of Rs.

S.No.	Name of work	Anticipated Cost	Started in the year	Completed in the year	Expenditure up to 31/03/2016	Physical Progress	Remarks
2	**GAUGE CONVERSION**						
7	Villupuram- Dindigul (with Electrification. 273 Kms) (PB No.38) [RVNL project]	1280.83	2008-09		1245.14	-	Project is being executed by RVNL. Detailed estimate prepared at a cost of about Rs.1258.60 cr. 151 Hec. of land to be acquired and handed over by Tamilnadu State Government. Valadi-Kallakudi Palanganatham (25 km) commissioned on 10/07/2013. Kallakudi Palanganatham-Ariyalur (25 km) commissioned on 06/08/2014. Vriddhachalam-Tiruvennainallur Road (39 km) commissioned on 05/11/2015. Tiruchchirappalli-Manaparai (36 km) section commissioned on 01/04/2016. Tamaraipadi - Dindigul (8 km) section commissioned on 27/05/2016. Ariyalur-Mathur (25.33 km) commissioned on 10/06/2016. Villupuram-Tiruvennainallur (16 km) section commissioned on 30/12/2016. • Vriddhachalam-Mathur (28 km) section commissioned on 29/03/2017, Valadi-Ponmalai (18 km) & Ponmalai-Kalpattiuchatram (23 km) has been authorised by CRS for passenger traffic. Works are in progress in the remaining sections.
8	Tiruvallur-Arakkonam 4th line(26.83 Kms) (PB No.39) [RVNL project]	149.09	2008-09		70.26	-	Project is being executed by RVNL Tiruvalangadu – Arakkonam section (10 km) commissioned in September 2012. Tiruvallur – Tiruvalangadu (17 km) section commissioned on 10/07/2016.
9	Omalur - Mettur Dam - doubling with electrification (28.93 km) (PB No.41)	231.67	2011-12		65.02	25%	Detailed Estimate at a cost of Rs.187.26 crs. sanctioned by Board in Oct. '13. The land acquistion (Land Plan Schedule) for 15 villages (29.2 ha) has been submitted to District Collector, Salem. An amount of Rs.9.0 cr. deposited towards land payment, but no land is received so far. Land acquisition is proposed under "Tamilnadu Acquiistion of Land for Industrial Purposes Act 1997". All works are in progress. Earthwork, bridge works, ballast collection & building works are in progress.
10	Thanjavur - Ponmalai - Doubling (46.96 km) with bye -pass line before Ponmalai (1.13 km) (PB No.43) (RVNL)	490.00	Supp. Demand of 2011-12		213.60	3%	Detailed estimate for main project for Rs.455.96 cr. have been sanctioned by Board during April 2014. Bye-pass line work completed. Ponmalai bye-pass line (2.13 km) connecting chord line & main line commissioned. Balance works are being executed by RVNL.
11	Madurai-Vanchi Maniyachchi-Tuticorin (158.81 km) (PB No.46) (RVNL)	1072.39	2015-16		0	0%	New work included in the Pink Book for 2015-16. Revised DPR and Detailed estimate for Rs.1072.39 cr. sent to Board vide letter No.W.193/III/23/CN dt.15/06/2015 for sanction. As per Board's letter No.2015/W-I/Genl./Presentation/Pt. dt.11/12/2015, this project has been transferred to RVNL for execution.
12	Vanchi Maniyachchi-Nagercoil (102.19 km) (PB No.48) (RVNL)	910.60	2015-16		0	0%	New work included in the Pink Book for 2015-16. Revised DPR & Detailed estimate for Rs.910.60 cr. sent to Board vide letter No.W.193/III/24/CN dt.17/08/2015 for sanction. As per Board's letter No.2015/W-I/Genl./Presentation/Pt. dt.11/12/2015, this project has been transferred to RVNL for execution.
13	Salem - Magnesite Juction - Omalur (11 km) (Supp. Demand)	76.43	Supp. Demand of 2016-17		0	0%	New work sanctioned vide Railway Board's letter No.2014/W-I/DL/SR/SOM dt.29/09/2016 at an estimated cost of Rs.76.43 cr. Detailed estimate is under process.

PROGRESS OF MAJOR PROJECTS COSTING OVER RS.20 LAKHS & ABOVE UNDER VARIOUS PLAN HEADS UP TO 31/03/2017

Amount in lakhs of Rs.

S.No.	Name of work	Anticipated Cost	Started in the year	Completed in the year	Expenditure up to 31/03/2016	Physical Progress	Remarks
2	**MTP Works**						
1	MRTS - PHASE - I : CHENNAI BEACH TO TIRUMAILAI (PB No.MTP-1)	306.19	1983-84	1997	285.92	100%	Section commisioned.
2	MRTS - PHASE - II - TIRUMAILAI TO VELACHERI (11 kms) (PB No.MTP-2)	950.00	1996-97	2004	904.92	98%	Section commissioned. Revised estimate sanctioned for 906.62 cr. All left over works are in progress.
3	Chennai Beach - Tambaram - Chengalpattu Suburban Gauge Conversion (60 kms.) (PB No.MTP-3)	520.00	1998 - 99	2004	464.30 0	89%	50% of the cost is borne by Government of Tamil Nadu. Provision of 14 ROBs/RUBs in lieu of existing level crossings is also part of the project so as to eliminate the level crossings in the Chennai Beach - Tambaram section. Out of 14 nos., 12 nos. were completed & commisisoned and 2 ROBs / RUBs are in progress.

6. Remodelling and construction of yard

(A) Works Completed

Sl. No.	Division	Station	Name of work	Estimate cost Rs. in lakhs
(a) Works costing more than ₹ 5 lakhs each–				
1.	MAS	BBQ Yard		100
2.	SA	-		
3.	PGT	-		
4.	TVC	-		
5.	TPJ	TPGY - TPJ Goods & Coaching yard CTR 4.438 km.		415.88
6.	MDU	-		
7.	CE/CN/ERS	-		
8.	CE/CN/MS	-		
9	MTP	-		
(b) Works costing less than ₹ 5 lakhs each–				
1.	MAS	Nil		..
2.	SA	Nil		..
3.	PGT	Nil		..
4.	TVC	Nil		..
5.	TPJ	Nil		..
6.	MDU	Nil		..
7.	CE/CN/ERS	Nil		..
8.	CE/CN/MS	Nil		..
9.	MTP	Nil		..

(II) Works in progress

(a) Works costing more than ₹ 5 lakhs each–

1.	MAS	-	
		-	
		-	
		-	
2.	SA	MTP extension of platform	61.2
3.	PGT	-	
4.	TVC	NJT Provision of two line crossing station in TVC-NCJ section.	617.95
5.	TPJ	TPGU-TPJ Goods yard, Ponmalai Diesel Shed & GOC Coaching Yard - TTR (P) 20 Nos.	535.40
		TPJ Jn. and Goods Yard and Ponmali Yard-TTR (S) 4.89 km.	263.06
6.	MDU	-	
7.	CE/CN/ERS	-	
8.	CE/CN/MS	-	
9.	MTP	-	

b) Works costing less than ₹ 5 lakhs each—

1.	MAS	Nil
2.	SA	Nil
3.	PGT	Nil
4.	TVC	Nil
5.	TPJ	Nil
6.	MDU	Nil
7.	CE/CN/MS	Nil
8.	CE/CN/ERS	Nil
9.	MTP	Nil

7. Line Capacity Work

Sl. No.	Division	Station	Name of work	Estimate cost Rs. in Lakhs
I. Provision of New loops				
(A) Works completed				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..		..
8.	CE/CN/MS		Nil	..
9.	MTP	..	Nil	..
(b) Works costing less than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	
(B) Works in progress				
(a) Works costing more than Rs. 5 lakhs				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing less than Rs. 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
II. Extension of Loops				
(A) Works completed				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	MMC-BBQ 5th and 6th line	240.00
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(B). Works in Progress				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing less than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
III. Provision of Crossing Station				
(A) Works Completed				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing less than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(B) Works in progress

(A) Works costing more than ₹ 5 lakhs each—

1.	MAS	..	MMC-BBQ 5th and 6th lane	240.00
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(b) Works costing less than ₹ 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

VI. Provision of Goods shed, Pit line, etc.,

(A) Works Completed

(a) Works costing more than ₹ 5 lakhs *each*—

1.	MAS	..	Improvement to unloading facilities at IRUGUR (Goods PF)	86.00
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
	MTP	..	Nil	..

(b) Works costing less than ₹ 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(B) Works in progress

(a) Works costing more than Rs. 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	ERM-Pit line	1378.25
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

b) Works costing less than Rs. 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	

ing of Lines *(Rs. in Crores)*

Sl. No.	Division	Section	Length in km.	Physical progress	Date of which the section offered		Remarks
					Goods Traffic	Passenger Traffic	
		ing the year 2016–17					
9.							
8. Doubli							
		(a) New doubling sanction dur					
		1	86.6	-			TVC-CAPDE doubling survey is inprogress.
		2 MAS					Estimate not sanctioned.
		3 SA					Estimate not sanctioned.
		4 PGT					
		5 TVC					
		6 TPJ					
		7 MDU					
		oublig	1.5	-			
		-		90%	MML-MLMR:28/03/2012		Revised estimate sanctioned. About 22 hectares of land is yet to be acquired by Tamilnadu Government and handed over to Railways.
		ubling			MYP-VM: 17/10/2011		
		a new			MLMR-TZD: 06/01/2014		
		icaitonf			TMV-PEL: 14/11/2014		
		-			TZD-OLA: 03/03/2015		Chengalpattu-Villupuram strectch (103 Km) commissioned. Detailed estimate for Tambaram - Chengalpattu (30 km) 3rd line (MM) for Rs.255.68 cr. sanctioned by Board. Tenders for various activities have been called. Tender for major & minor bridges have been opened and are under finalisation.
		3rd line			KGZ-MMK: 13/03/2015		
		ing MG			CGL-KGZ: 27/02/2015		
		)					
		(30 km)					

Sl. No.	Division	Station	Name of work	Estimate cost Rs. in Lakhs
(B). Works in Progress				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	NJT-Provision of two line crossing tation in TVC -NCJ section	617.95
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
IV. Conversion of ' D ' station in to crossing station				
(A) Works Completed				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing less than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(B) Works in progress				
(a) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..
(b) Works costing more than ₹ 5 lakhs *each*—				
1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(b) Works costing more than ₹ 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(B) Works in progress

(a) Works costing more than ₹ 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

(b) Works costing more than ₹ 5 lakhs *each*—

1.	MAS	..	Nil	..
2.	SA	..	Nil	..
3.	PGT	..	Nil	..
4.	TVC	..	Nil	..
5.	TPJ	..	Nil	..
6.	MDU	..	Nil	..
7.	CE/CN/ERS	..	Nil	..
8.	CE/CN/MS	..	Nil	..
9.	MTP	..	Nil	..

V. Additional Traffic Facilities

(A) Works Completed

(a) Works costing more than ₹ 5 lakhs *each*—

1.	MAS	..	Nil
2.	SA	..	Nil
3.	PGT	..	Nil
4.	TVC	..	Nil
5.	TPJ	..	Nil
6.	MDU	..	Nil
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	..	Nil
9.	MTP	..	Nil

(b) Works costing more than ₹ 5

1.	MAS	..	Nil
2.	SA	..	Nil
3.	PGT	..	Nil
4.	TVC	..	Nil
5.	TPJ	..	Nil
6.	MDU	..	Nil
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	..	Nil
9.	MTP	..	Nil

8. Doubling of Lines

(Rs. in Crores)

Sl. No.	Division	Section	Length in km.	Physical progress	Date of which the section offered		Remarks
					Goods Traffic	Passenger Traffic	
(a) New doubling sanction during the year 2016–17							
		Madurai - Vanchi-Maniyachchi-Tuticorin (158.81 m) (PB No.46)	0%				New work included in the Pink Book for 2015-16. Revised DPR and Detailed Estiamte for Rs.1072.39 cr. sent to Board vide letter Jno.W.193/III/23/CN dt. 15.06.2015 for sanction. As per Board's letter No.2015/W-I/Genl/Presentation/Pt. dt. 11.12.2015, this project has been transferred to RVNL for execution.
		Vanchi Maniyachchi-Nagercoil (102.19 km) (PB No.46)	0%				New work included in the Pink Book for 2015-16. Revised DPR and Detailed Estiamte for Rs.910.60 cr. sent to Board vdie letter Jno.W.193/III/23/CN dt. 17.08.2015 for sanction. As per Board's letter No.2015/W-I/Genl/Presentation/Pt. dt. 11.12.2015, this project has been transferred to RVNL for execution.
		Salem - Mangesite Junction - Omalur (11 km) Supp. Demand)	0%				New worksanctioned vide Railway Board's letter No.2014/W-I/DL/SR/SOM dt. 29.09.2016 at an estiamte cost of Rs.76.43 cr. Detailed estiamte is under process.
9	MTP	Nil					
2. Doubling in Progress							
1	MAS	Nil					
2	SA	Nil					
3	PGT	Nil					
4	TVC	Nil					
5	TPJ	Nil					
6	MDU	Nil					
7	CE/CN/ERS KRPP- CGU	26.5	20%				KRPP-ETM targetted for commissioning on 28.2.18.
	CGV-CGY	10	80%				
	AMPA-HAD	18.1	68%				
	ERS-KUMM	7.71	0%				
	KUMM-TUVR	15.59	0%				Survey in progress.
	TUVR-AMPA	45.86	0%				Survey in progress.
	MAJN-Jokatte	13	35%				Survey in progress.
8	CE/CN/MS	Attipattu-Korukkupet Third line (18 Kms) (RVNL, Funded Project, being executed by S.RLY) (PB No.25)	93%	KOK-ENR: 09.03.09 26.03.12 09.03.09 10.11.14.	KOK-ENR: ENR-AIPP: ENR-AIP:		Korukkupet - Ennore section (12 kms) opened for traffic and handed over to the open line. Ennore - Attipattu Pudunagar section (4.3 km) passenger traffic commissioned on 10.11.2014 and balance section between Attipattu Pudunagar & Attipattu is in progress.
		Chennai Beach - Korukkupet III line (4.1 Kms) (PB No.26)		40%			Detailed estimate sanctioned only in January 2014. Works are in progress and the section initially targeted for completion in 2016-17 has been postponed on 2017-18.

8. Doubling of Lines

(Rs. in Crores)

Sl. No.	Division	Section	Length in km.	Physical progress	Date of which the section offered		Remarks
					Goods Traffic	Passenger Traffic	
(a) New doubling sanction during the year 2016–17							
		Chennai Beach - Attippattu 4th line (22.1 Kms) (PB No.30).		55%			Ennore - Attipattu Pudunagar section (4.3 km) passenger traffic commissioned on 10.11.2014. Works are in progress in Ennore-Korukkupet. Chennai Beach (16 km) section and is originally targetted for completion in 2016-17. But, as per revised target given by Board, only Tiruvottiyur-Ennore (7 km) section is targetted for the current y year in which all the works are completed and the section commissioned on 31.03.2017. The remaining sectios are targetted for 2017-18.
		Villupuram - Dindigul (with Electrification 273 Kms) (PB No.38) (RVNL-project)		82%	VLDE-KKPM KKPM-ALU VRI-TVNL TPJ-MPA TMP-DG ALU-MTUR VM-TRVL VRI-MTUR	10.07.13; 06.08.14; 05.11.2016 01.04.2016 27.05.2016 10.06.2016 30.12.2016 29.03.2017	Project is being executed by RVRL. Detailed estimate prepared at a cost of about Rs.1258.60 cr. 151 Hec. of land to be acquired and handed over by Tamilnadu State Government. Valadi-Kallakudi Palanganatham (25 km) commissioned on 10.07.2013. Kallakudi Palanganatham-Ariyalur (25 km) commissioned on 06.08.2014. Vriddhachalam-Tiruvennainalur Road (39 km) commissioned on 05.11.2016. Tiruchchirappalli-Manaparai (36 km) section commission ed on 01.04.2016. Tamaraipadi-Dindigul (8 km) section commissioned on 27.05.2016. Ariyalur-Mathur (25.53 km) commissioned on 10.06.2016. Villupuram-Tiruvennainallur (16 km) section commissioned on 30.12.2016. Vriddachalam-Mathur (28 km) section commissioned on 29.03.2017. Valadi-Ponmalai (18 km) & Ponmalai-Kalpattichatram (23km) had been authorised by CRS for passenger traffic. Works are in progress in the remaining sections.
		Omalur-Mettur Dam - doubling with electrification (28.93 km) (PB No.41)		28%			Detailed estimate at a cost of Rs.187.26 crs. Sanctioned by Board in Oct.13. The land acquistion (Land Plan Schedule) for 15 villages (29.2 ha) has been submitted to District Collector Salem. An amount of Rs.9.0 cr. deposited towards land payment, but no land is received so far. Land acquisition is proposed under "Tamil Nadu Acquisition of Land for Industrial Purposes Act.1997". All works are in progress. Earthwork, bridges works, ballast collection & building works are in progress.
		Thanjavur-Ponmalai - Doubling (46.96 km) with bye-pass line before Ponmalai (1.13 km) (PB No.43) (RVNL).		30%			Detailed estimate for main project for Rs.455.96 cr. have been sanctioned by Board during April 2014. Bye-pass line work completed. Ponmalai bye-pass line (2.13 km) connecting chord line & main line commissioned. Balance works are being executed by RVNL.
9	MTP				-		

8. Doubling of Lines

(Rs. in Crores)

Sl. No.	Division	Section	Length in km.	Physical progress	Date of which the section offered		Remarks
					Goods Traffic	Passenger Traffic	
Doubling completd							
1	MAS	-					
2	SA	-					
3	PGT	-					
4	TVC	-					
5	TPJ	-					
6	MDU	Doubling track between MPA-KFC stations.	22km.				Commissioned on 7.6.17 with electrification.
7	CE/CN/ERS	Gauge conversion					
		Punalur Edamon	8	100%			
		GC work					
		PVRD-KRPP Sec.	12.8	100%	1.10.16	1/10	
		CNGR-TRVl	9.025	100%	3.9.16	3/9	
		TRVL-CGY	7.625	100%	28.3.17.	28/3	
		Jokatte -PNMB	6	100%	31.01.17	Nil	
8	CE/CN/MS	Irugur - Coimbatore Doubling (17.70 kms) (PB No.24)		100%	-	20.08.2010	Section commissioned. Project being executed by RVNL
		Tiruvallur-Arakkonam 4th line (26.83 Kms) (PB No.39) (RVNL project)	99%	AJJ-TO: Sep 2012. TO-TRL : 10.07.2016.			Tiruvalangadu-Arakkonam section (10 km) commissioned in September 2012. Tiruvallur-Tiruvalangadu (17 km) section commissioned on 10.07.2016.
9	MTP	-					

Siding

Sl.No.	Divn.	Name of Work	Estimated cost Rs.in lakhs
I	**Private siding.**		
A	**Works Completed.**		
(a)	**Works costing more than Rs. 5 lakhs each.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	

Siding

Sl.No.	Divn.	Name of Work	Estimated cost Rs.in lakhs
I	**Private siding.**		
B.	**Works in Progress**		
(a)	**Works costing more than Rs. 5 lakhs each.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	V.O. Chidamabram Port Trust siding: Proposed Complete Track Renewal (S) exg. 90R/52Kg rails on steel/CST/9 wooden sleepers of m+4 dnesity with 52 kg. class II SWP rails and PSC CI.II sleepers of m+4 dnesity includign deep screening lifting and packing of track in Road No.1 to 5 of Marshalling yard to wharf and mini yard inside the Green Gate for a total length of 10.40 km.	290.00
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
II.	**Assisted siding**		
A	**Works Completed.**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	

Siding

Sl.No.	Divn.	Name of Work	Estimated cost Rs.in lakhs
II.	**Assisted siding**		
B.	**Works in Progress**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU		
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
III	**Works under development.**		
A	**Works Completed.**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
B.	**Works in Progress.**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	

Siding

Sl.No.	Divn.	Name of Work	Estimated cost Rs.in lakhs
III	**Works under development.**		
B.	**Works in Progress.**		
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
IV.	**Railway Sidings**		
A	**Works Completed.**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
B.	**Works in Progress.**		
(a)	**Works costing more than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	
(b)	**Works costing less than Rs. 5 lakhs.**		
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	-	
7	CE/CN/ERS	-	
8	CE/CN/MS	-	
9	MTP	-	

10. Strengthening of Track

Sl. No.	Division	Works Completed				Works in Progress			
		more than ₹ 5 lakhs		less than ₹ 5 lakhs		more than ₹ 5 lakhs		less than ₹ 5 lakhs	
		No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).
1	All Divisions	18	4120.68	24	316.16	57	8389.02	7	10.77

10. Strengthening of Track

Sl. No.	Division	Works Completed				Works in Progress			
		more than ₹ 5 lakhs		less than ₹ 5 lakhs		more than ₹ 5 lakhs		less than ₹ 5 lakhs	
		No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).	No. of Works	Aggregated Cost (₹ in lakhs).
1	MAS	2	296.94	—	—	19	1680.94	—	—
2	SA	3	502.41	—	—	—	—	—	—
3	PGT	9	2509.85	1	291.05	16	3622.14	—	—
4	TVC	—	—	—	—	2	318.38	—	—
5	TPJ	2	22.48	23	25.11	17	232.66	7	10.77
6	MDU	2	789.00	—	—	3	2435.00	—	—
7	CE/CN/ERS	—	—	—	—	—	—	—	—
8	CE/CN/MS	—	—	—	—	—	—	—	—
9	MTP	—	—	—	—	—	—	—	—
	Total	18	4120.68	24	316.16	57	8389.12	7	10.77

11. Fencing

Sl. No.	Division/Station		Name of work	Cost of ₹ (in Thousands)
	(A) Works Completed :-			
	(a) Works Costing more than ₹5 lakhs each :—			
1.	MAS	-	MPK section work	74.022
			AJJ-JTJ-Construction of boundry wall to prevent on encroachement Railway land ..	35.76
2.	SA			
3.	PGT	-	-	
4.	TVC	-	-	
5.	TPJ	-	-	
6.	MDU	-	SSE/W/DG Section - Repairs to platform surface and fencing at PUG, KFC, AYR, VDM & TMP stations. ..	22.27
			Construction of compound wall in between Goods Shed and SIDCO at DG. 6.5 ..	6.5
7.	CE/CN/ERS	-	-	
8.	CE/CN/MS	-	-	
9.	MTP	-	-	
	(b) Works Costing less than ₹ 5 lakhs each :—			
1.	MAS	-	-	
2.	SA	-	Repairs to chain link fencing in Railway Institute at ONR Railway Colony.	1.79
3.	PGT	-	-	
4.	TVC	-	-	
5.	TPJ	-	-	
6.	MDU	-	Repairs to boundary wall to Qrs. No.176 A-F at DG	1.6
7.	CE/CN/MS	-	-	
8.	CE/CN/ERS	-	-	
9.	MTP	-	-	

11. Fencing

Sl. No.	Division/Station		Name of work	Cost of ₹ (in Thousands)
	(A) Works in Progress :–			
	(a) Works Costing more than ₹5 lakhs each :—			
1	MAS	-	Repairs to Staff Quarters and includng compound wall	90.35
		-	MPK section work	5.00
		-	TBM Section work	165.30
		-	Construction of compound wall to building No. PER/99	9.21
			NBK - Reconstruction of compound wall at Sterling Road officers colony	107.06
2	SA	-	Boundary wall/Fencing to prevent encroachement on Railway land at Km.13/600-710 Up 110 m, 13/790-905 Up 115 m, 14/035-100 Up 65 m between CBF-PLMD 300 m at Km. 16/450-750 beween CBE-CBE and 1000 m at Km.443/150-444 between TUP.	63.02
3	PGT	-	1. Construction of boundary wall/fencing at TIR	42.86
			2. SSE/PW/KGQ section - Proposal of barricase to avoid roaid vechicles falling down ..	15.12
4	TVC	-	-	
5	TPJ	-	-	
6	MDU	-	SSE/W/DG Section - Proposed construction of boundary wall at KLS station ..	9.5
7	CE/CN/MS	-	-	
8	CE/CN/ERS	-	-	
9	MTP	-	-	
	b. Works costing less than Rs.5 lakhs each.			
1	MAS	-	-	
2	SA	-	Boundary wall MTP colony adjacent to 59A-D	1.88
		-	Boundary wall at MTP colony adjacent to 60 A-F	1.89
		-	Boundary wall at MTP colony adjacent to 78	1.73
		-	Fencing at boundary of Railway land at SUU yard	1.97
3	PGT	-	-	
4	TVC	-	NCJ - Provision of rail fencing for a length of 450 m.	4.6337
5	TPJ	-	-	
6	MDU	-	-	
7	CE/CN/MS	-	-	
8	CE/CN/ERS	-	-	
9	MTP	-	-	
12 - Running Shed Facilities				
I Works Completed				
a)Works costing more than Ruppes 5 lakhs each.				
1	MAS	-	Zonal work RPM AC Loco Shed and BBQ Coaching Yard	22.00
		-	Reparis to approach road to ANNR Railway Station & AVD Car shed	37.252
2	SA	-	-	
3	PGT	-	-	
4	TVC	-	-	
5	TPJ	-	-	
6	MDU	-	SSE/W/TEN TCN - New Running Room with 15 beds capacity	83.76774
7	CE/CN/ERS	-	-	
8	CE/CN/MS	-	-	
9	MTP	-	-	
b) Works costing less than Rupees 5 lakhs each.				
1	MAS	-		
2	SA	-		
3	PGT	-		
4	TVC	-		
5	TPJ	-		
6	MDU	SSE/W/DG	Augmentations of water supply to Running Bungalow at DG	0.80
7	CE/CN/ERS	-		
8	CE/CN/MS	-		
9	MTP	-		

11. Fencing

Sl. No.	Division/Station	Name of work	Cost of ₹ (in Thousands)
II.	**Works in Progress.**		
a)	**Works costing more than Ruppes 5 lakhs each.**		
1	MAS	- -	
2	SA	- -	
3	PGT	- -	
4	TVC	- -	
5	TPJ	- GOC - Diesel shed - Proposed store shed with covered high roof and Service building to an area of 15mx30m. ..	115.68
6	MDU	- -	
7	CE/CN/ERS	- -	
8	CE/CN/MS	- -	
9	MTP	- -	
b)	**Works costing less than Rupees 5 lakhs each.**		
1	MAS	-	
2	SA	- Repairs to damaged flooring at IOH shed, MTP	1.81
		Repairs to NMR pit line	1.35
		Brightening of CBE pit line	0.95
3	PGT	- -	
4	TVC	- -	
5	TPJ	- -	
6	MDU	- SSE/W/DGProvision of Rain Water harvesting arrangements at Running Bungalow at DG	0.70
		Repairs to kitchen and toilets of Running Bungalow	0.75
7	CE/CN/ERS	- -	
8	CE/CN/MS	- -	
9	MTP	- -	
13	**PROVISIONAL IMPROVEMENTS TO OFFICES, STORES AND WORKSHOP ETC.**		
A.	**Works completed.**		
a.	**Works costing more than Rs.5 lakhs each.**		
1	MAS	- PER section work	219.45
		RPM section work	11.00
2	SA	- Mettupalayam - Basic infrastructural facilities for NMR coah & Loco maintenance ..	156.00
		(id-1000/09-10 CE/OL	
		12 Nos. - Through 2 and D-2	17.42
		16 Nos. - Through 2 and D-3 (Workshops)	27.00
3	PGT	- -	
4	TVC	- -	
5	TPJ	GOC - Improvements of POH facilities extension of AC shop with pit line, alternator testing faciliteis etc. ..	138.24
6	MDU	- -	
7	CE/CN/ERS	- -	
8	CE/CN/MS	- -	
9	MTP	- -	
b.	**Works costing less than Rs.5 lakhs each**		
1	MAS	- -	
2	SA	- -	
3	PGT	- -	
4	TVC	- -	
5	TPJ	- -	
6	MDU	- -	
7	CE/CN/ERS	- -	
8	CE/CN/MS	- -	
9	MTP	- -	

11. Fencing

Sl. No.	Division/Station		Name of work	Cost of ₹ (in Thousands)
13 PROVISIONAL IMPROVEMENTS TO OFFICES, STORES AND WORKSHOP ETC.				
B. Works in Progress				
a. Works costing more than Rs.5 lakhs each.				
1	MAS	-	Zone-RM EWS/PER maintenance of all buildings	19.75
2	SA	-	Zone G - S&T Workshop/PTJ - Throguh Work Orders not more than two lakhs each. ..	48.00
			ADEN/PTJ - sub-division zone F2(TUP (Excl.) - PTJ (incl.) CBF - MTP (incl.) service building through work orders not more two lakhs. ..	59.20
3	PGT	-	SRR - Proposed combined crew booking centre.	30.39
			PGT - Widening of exg. Rail level goods unloading PF and repairs to approach road from RRI cabin to IOC Office, Construction of SSE/PW/East office etc. ..	419.50
			PGT - Replacement of panel interlocking by route setting type PI at Mannanur, Mankarai, Ottapalam, Parli & Lakkitti stations.	134.54
			PGT - Brightening up of station building, Service building, PF walls, copings, PF shelters, staff welfare buildings etc.	97.00
4	TVC	-	-	
5	TPJ		GOC - Workshop - Improvements to toilets at various shop.	85.13
			GOC Diesel Shed - Proposed store shed with covered high roof & service building to an area of- 15mx30m	115.68
			TPJ - Improvemetns and augmentation to the existing water recycling plant at BG coaching complex/TPJ.	54.65
6	MDU		SSE/W/MDU - MDU Jn. - Reconstruction of Divisional Stores Depot building on age cum condition basis.	87.12839
7	CE/CN/ERS	-	-	
8	CE/CN/MS	-	-	
9	MTP	-	-	
b. Works costing less than Rs.5 lakhs each				
1	MAS	-	-	
2	SA	-	-	
3	PGT	-	-	
4	TVC	-	-	
5	TPJ	-	-	
6	MDU	-	-	
7	CE/CN/ERS	-	-	
8	CE/CN/MS	-	-	
9	MTP	-	-	

14. Flood Investigation and related subjects 2016–17

A. A Review of Vulnerable Bridges and Reaches :

(i) A special organization was setup on this Railway in the year 1957 for carrying out review and rehabilitation of vulnerable bridges and reaches as well as for gauging of selected rivers and streams at various locations as per the directives of the Research Design and Standards Organization/Lucknow for evolving suitable formula to compute flood discharge in various zones.

The Divisions have been carrying out regular critical review of vulnerable bridges and reaches every year and updating the lists of such bridges and reaches.

(ii) During the year 2016-2017, Flood Organization has carried out the following investigation/studies.

a. Detailed investigation to assess the waterway requirement for 21 Nos. bridges for Rebuilding/ Doubling/RVNL etc.,

b. Detailed studies to clear the 67 Nos. GADs which includes 47 major bridges executed by construction and open line and 20 bridges executed by RVNL.

c. Clearance from flood point has been issued for 23 Nos. of proposals submitted by State/Private parties.

d. Detailed studies done to clear 2 No. of siding proposal on flood point of view submitted by Division.

e. Detailed studies carried out for 1 No. of breached location and the proposals were made on flood point of view and advised to Division/CN for execution.

f. Detailed studies carried out for 1 No. of causeway location and the proposals were made on flood point of view and advised to Division/CN for execution.

g. Detailed studies carried out for 2 No. of over flow location and the proposals were made on flood point of view and advised to Division/CN for execution.

B. River Gauging and Survey Works :

During the monsoon of 2016-2017 3 bridge sites were gauged in the Southern Railway as per the direction of RDSO/LKO. Hydro meteorological data were collected from the 3 bridge sites and were submitted to RDSO/LKO for further analysis.

C. State Committee of Engineers :

Southern Railway is a member in the Co-ordination committee for the safety of the Railway Bridges, track, etc., otherwise known as State Committee of Engineers' in the state of Tamilnadu, Kerala, Puduchery, Andhra Pradesh and Karnataka.

During the year 2016-17 the above meeting was held for Tamilnadu, Andhra Pradesh, Karnataka, Keral and Puduchery on 20.10.2016, 27.05.2016, 09.056.2016, 30.06.2016 and 08.10.2016 respectively.

D. Manual of instruction for Railway affecting tanks :

The Manual of Instructions for Railway Affecting Tanks pertaining to Tamilnadu, Andhra Pradesh, Karnataka, Union Territory of Puduchery and Keralahave been approved by the concerned State Government and Government Orders issued and circulated among concerned officials.

E. Breaches and washaways

Details of breaches and washaways occurred during the year 2016–17 as follows :

Sl. No.	Division	Section	Date	Month	Year	Location (Km./Post)	Description of Damages
1.	TVC	TVC-NCJ	20	3	2016	268/400-500	About 10 m Retaining wall collapsed and there is no damage to Track
2.	TVC	ERS-KTYM-	24	7	2016	62/600-700	Boulders fallen due to heavy rain (Rainfall-63mm)
3.	MAS	MSB-VM	13	12	2016	36/300-700	Traked breached at 4 different locations Km. 36/300-700. For approximately 100 m Length.

14B Rehabilitation of Bridges : 2016–16

Sl. No.	Name of Work	No. of Bridges where work has been completed.	No. of Bridges where work in progress.
	(a) Regirdering	2	0
	(i) Replacement of weak/corroded girders with new girders ..	10	4
	(ii) Strengthening of weak/ corroded girders	1	0
	(b) Replacement of existing girders/ timber top with RCC slab ..	22	7
14. B	Repl. of existing weak/ corroded girders with		
	(d) New girders including Strengthening of Substructures.. ..	1	0
	(e) Rebuilding of existing weak bridges	23	5
	(f) Miscellaneous Bridge works including provision of centralised bearing, renewal of bed blocks, etc.,	9	0
	Total items (a) to (f)	59	16
14.C	Extension of existing bridges	0	0
14.D	Construction of new bridges	1	0

14 (E) (i) Road over Bridge and Road under Bridges in lieu of Level Crossings Cost sharing Basis 2016–17

(a) Work completed during 2016–17 : No. of Bridges : 9 (Nine)

1. MAS Division – Proposed ROB in lieu of LC No. 40 @ Km. 40/2-4 in between Urapakkam and Guduvancheri stations in MS-VM section.
2. MDU Division – Pro ROB in lieu of LC No. 366 @ Km. 496/16-467/1 in between Thiruparangundram and Madurai stations in MDU-VPT section.
3. MDU Division – Proposed ROB in lieu of LC No. 18 @ Km. 27/500-600 (talaiyuthu) in Tirunelveli yard station in MEJ-TEN BG section.
4. MDU Division – Proposed ROB in lieu of LC No. 439 (Kovilpatti) @ Km. 587/400-500 in between Kovilpatti and Kumarapuram stations in VPt-MEJ section.
5. MDU Division – ROB in lieu of LC No. 441 at km. 535/300-400 near Sivaganga in bet Sivaganga and Melakkonnakkulam stations.
6. SA Division – Proposed ROB in lieu of LC No. 146 (Vellore Gate) @ Km. 479/22-24 between Irugur-Podanur stations in ED-CBE-PTJ section.
7. TPJ Division – ROB in lieu of LC No. 228 at km. 313/2-3 in between Kattur-Lalgudi stations in VM-TPJ section.
8. SA Division – Proposed ROB in lieu of LC No. 216 (Sirkhazi) @ Km. 262/600 in between Kollidam and Sirkazhi stations in VM-MV section.
9. Proposed RUB in lieu of LC No. 146 B at Km. 6/200-300 at Kankanady.

(b) Work in Progress : No. of Bridges : 82 (Eighty Two)

1. SA Divn : Pro 2L ROB in lieu of LC No. 7 at Km. 6/4-5 in between Magnesite and Omalur Rly. stations.
2. MAS Divn : Pro 2L ROB in lieu of LC No. 72 at km. 168/12-14 in bet Valathoor and Melpatti Rly. Stns.
3. TPJ Divn : Pro 2L ROB in lieu of LC No. 80 at km. 99/100-200 at Polur yard.
4. TPJ Divn : Pro 2L ROB in lieu of LC No. 48 at km. 77/700-800 in bet. Nagappatinam and Nagore Rly. Stns. with LUS.
5. TPJ Divn : Pro 2L ROB in lieu of LC No. 144 at km. 182/3-4 in bet. Thiruvennai Nallur Road and Parikkal Rly. Stns.
6. TPJ Divn : Pro 2L ROB in lieu of LC No. 55 at km. 67/100-200 in bet. Tandarai and Thiruvannamalai Stations.
7. TPJ Divn : Pro 2L ROB in lieu of LC No. 323 at km. 399/500-600 in bet. Tiruverumbue and Ponmalai Rly. Stns.
8. TPJ Divn : Pro 2L ROB in lieu of LC No. 20 at km. 30/000-100 in bet. Nidamangalam Yard.
9. SA Divn : Pro 2L ROB in lieu of LC No. 21 at km. 31/9-10 in bet. Mecheri Road and Mettur Dam Rly. Stns.
10. MAS Divn : Pro 2L ROB in lieu of LC No. 26 at km. 35/6-8 in bet. Ponneri and Kavaraipettai Rly. Stns.
11. SA Divn : Pro 2L ROB in lieu of LC No. 15 at km. 15/13-14 in bet. Omalur and Mecheri Road Rly. Stns.
12. TPJ Divn : Pro 2L ROB in lieu of LC No. 157 at km. 204/400-500 in bet. Nellikuppam and Tiruppadiripuliyur Rly Stns.
13. TPJ Divn : Pro 2L ROB in lieu of LC No. 16 at km. 15/400-500 in bet. Mayiladuthurai and Peralam Rly Stns.
14. MAS Divn : Pro 2L ROB in lieu of LC No. 59 at km. 142/14-16 in bet. Latteri and Virinchipuram Rly Stns.
15. MAS Divn : Pro 2L ROB in lieu of LC No. 67 at km. 160/2-4 in bet. Melalathur and Valathoor Rly Stns.
16. PGT Divn : Pro 2L ROB in lieu of LC No. 217 (Kunjipally) at km. 721/400-500 in bet. Mahe and Badagara Rly Stations in SRR-MAQ section.
17. PGT Divn : Pro 2L ROB in lieu of LC No. 251 (Pappinisseri) at km. 761/900-762/000 in bet. Valapattinam and Pappinisseri Rly Stations.
18. MAS Divn : Pro 4L ROB in lieu of LC No. 29 at km. 35/800-900 in bet. Kanchipuram East and Kanchipuram Rly Stations.
19. TPJ Divn : Pro 2L ROB in lieu of LC No. 123 at km. 147/100-200 in bet. Kaniyambadi and Vellore Cantonment stations.
20. TPJ Divn : Pro 2L ROB in lieu of LC No. 34 at km. 50/800-900 in bet. Kulikarai and Thiruvarur Rly Stns.
21. TVC Divn : ROB in lieu of LC No. 12 at km. 16/200-300 in between Thirupunithura and Mulamthuruthy stations.
22. MDU Divn : RUB in lieu of LC No. 6 at km. 3/100-200 in between Dindigul and Akkaraippatti stations.
23. TPJ Divn : ROB (4 lane) in lieu of LC No. 43A at km. 35/6-7 in between Chinnababu Samudram and Puducherry stations.
24. MAS Divn : Proposed RUB in lieu of LC No. 4 (Villivakkam) at km. 11/30-32 in between Villivakkam and Korattur stations in MAS–AJJ section.

25. MAS Divn : ROB in lieu of LC No. 37 at km. 80/3-5 in between Anavardikhanpettai station.
26. TVC Divn : ROB in lieu of LC No. 3 at km. 6/7-8 in between Eranakulam and Tirupunithtura stations.
27. TPJ Divn : Proposed ROB in lieu of LC No. 39 (PDY) at km. 31/7-8 in between Chinnababu Samudram and Puducherry stations in VM-PDY section.
28. MDU Divn : ROB in lieu of LC No. 8 at km. 5/300-400 in between Dindigul and Akkaraippatti stations with LUS.
29. MAS Divn : Proposed ROB in lieu of LC No. 1 (ICF Gate) at km. 8/34-36 in between Perambur and Villivakkam stations in MAS-JTJ section.
30. MDU Divn : ROB in lieu of LC No. 346 at km. 473/600-700 in Sholavandan Yard.
31. SA Divn : ROB in lieu of LC No. 162 at km. 160/3-4 near Podanur Jn. in betPodanur Jn, and Pollachi section.
32. SA Divn : ROB in lieu of LC No.10 at km. 25/6-7 near Karaimadai in bet Coimbatore North and Karaimadai stations.
33. MAS Divn : ROB in lieu of LC No. 70 at km. 165/16-18 near Valathur in bet Melpatti and Melalathur stations with LUS.
34. SA Divn : ROB in lieu of LC No. 187 at km. 192/400-500 near Salem Jn. in bet Salem Market and Salem Junction.
35. SA Divn : ROB in lieu of LC No. 183 at km. 189/500-600 near Salem Town in bet Ayodhyapattanam and Salem Town stations.
36. Salem Market - Salem Town - Road Over Bridge in lieu of LC No. 184.
37. MDU Divn - ROB in lieu of existing LC No. 308 at Km. 431/0-100, bet. Tamaraipadi and Dindigul stations, LC No. 27 at Km. 72/200-300 bet. Eriodu and Dindigul stations and LC No. 2 at Km. 1/10-11 bet. Dindigul and Akaraipatti stations.
38. MDU Divn - ROB in lieu of existing LC No. 308 at Km. 431/0-100, bet. Tamaraipadi and Dindigul stations, LC No. 27 at Km. 72/200-300 bet. Eriodu and Dindigul stations and LC No. 2 at Km. 1/10-11 bet. Dindigul and Akaraipatti stations.
39. MDU Divn - ROB in lieu of existing LC No. 308 at Km. 431/0-100, bet. Tamaraipadi and Dindigul stations, LC No. 27 at Km. 72/200-300 bet. Eriodu and Dindigul stations and LC No. 2 at Km. 1/10-11 bet. Dindigul and Akaraipatti stations.
40. MDU Divn : Proposed RUB in lieu of LC No. 518 at km.717/2-3 in between Edaman and Punalur stations in SCT-QLN section.
41. MAS Divn : Proposed ROB in lieu of LC No. 111at km. 150/7-8 in near Vikaravandi in bet. Pernai and Mundiyambakkam stations.
42. MAS Divn : ROB in lieu of LC No. 102 (ICF Gate) at km. 134/28-30 in Mailam Yard.
43. MAS Divn : Pro ROB in lieu of LC No. 14 (Veppampattu) at km. 32/10-12 in between Thiruniravur and Tiruvallur in MAS-AJJ section.
44. MAS Divn : ROB in lieu of LC No. 88 at km. 114/1-2 in Olakkur Yard.
45. PGT Divn : Proposed ROB in lieu of LC No. 257 at km. 774/300-400 in between Kannapuram and Payangadi stations in SRR--MAQ section.
46. MAS Divn : ROB in lieu of LC No. 64 at km. 81/2-4 near Karunguzhi station in bet Padalam and Ottivakkam stations.
47. MAS Divn : ROB in lieu of LC No. 59 at km. 68/10-11 near Ottivakkam station in bet Chengalpattu and Ottivakkam stations.
48. TPJ Divn : ROB in lieu of LC No. 126 , km. 149/900-150/0 at Vellore Yard and RUB in lieu of LC No. 127 (M) at Km. 150/600-700 in bet Vellore Cantonment and Katpadi Junction.
49. MAS Divn : ROB in lieu of LC No. 2A at km. KOKG12-14 in bet Korukkupet-Veysarpadi stations.
50. MAS Divn : ROB in lieu of LC No. 32 at km. 32/16-18 at Perungalathur in between Tambaram and Vandalur stations.
51. TPJ Divn : Proposed ROB in lieu of LC No. 135 at km. 182/000-100 in between Serndanur - Panruti in VM-MV Main line section.
52. MAS Divn : Proposed ROB in lieu of LC No. 21 at km. 47/14-16 in between Tiruvalangadu and Kadambattur stations in MAS - AJJ section.
53. MAS Divn : ROB in lieu of LC No. 16 at km. 24/16-18 in between Minjur - Anuppambattu stations.
54. MAS Divn : ROB in lieu of LC No. 28 at km. KOKG 22-24 in bet Korukkupet-Veysarpadi stations.
55. MAS Divn : Proposed ROB in lieu of LC No. 7 at km. 17/34-18/2 in between Ambattur - Avadi station in MAS - AJJ section.
56. MAS Divn : ROB in lieu of LC No. 13 at km. 31/12-14 in between Thiruninravur and Veppambattu stations.
57. MAS Divn : Road over Bridge in lieu of LC No. 80 at km. 195/28-30 in between Vinnamangalam and Vaniyambadi stations in Arakkonam - Jolarpettai section.

58. MAS Divn : Proposed ROB in lieu of LC No. 47 at km. 51/4-5 in between Maraimalai Nagar and Singaperumal Koil stations in MS - VM section.

59. MAS Divn : Road Over Bridge in lieu of LC No. 78 at km. 186/12-14 in between Ambur and Vinnamangalam stations in AJJ - JTJ section.

60. MAS Divn : ROB in lieu of LC No. 75 at km. 97/15-16 in between Acharapakkam station in bet.akkam and Acharapakkam stations.

61. MAS Divn : Proposed ROB in lieu of LC No. 18 at km. 19/600-700 in between Guindy - St. Thomas Mount stations in MSB - TBM section.

62. TPJ Divn : ROB in lieu of LC No. 22 at km. 31/300-400 in between Nidamangalam - Koradacheri stations in TJ-NCR section.

63. MDU Divn : ROB in lieu of LC No. 309 at km. 431/900-432/0 in between (Dindigul Yard) Tiruchchirappalli-Dindugal stations in TPJ-DG section.

64. MAS Divn : Proposed RUB in lieu of LC No. 81 at km. 197/36-198/2 in Vaniyambadi Yard stations in MAS - JTJ section.

65. MAS Divn : Proposed RUB in lieu of LC No. 14 at km. 16/8-10 between Guindy - St. Thomas Mount stations in MSB - TBM section. (Pachaiamman Koil Street)

66. SA Divn : Proposed RUB in lieu of LC No. 133 Kongu Nagar Gate) at km. 441/10-12 between Uthukuli - Thiruppur stations in ED - CBE - PTJ section.

67. SA Divn : Proposed ROB in lieu of LC No. 131 at km. 438/4-6 between Uthukuli - Thiruppur stations in ED - CBE - PTJ section.

68. SA Divn : Proposed ROB in lieu of LC No. 7 at km. 8/1-3 in between Irugur - Pilamedu stations in Irugur - Coimbatore section.

69. TPJ Divn : ROB in lieu of LC No. 304 at km. 354/8-9 in Thajavur yard in TPJ - MV section.

70. TPJ Divn : Proposed ROB in lieu of LC No. 2 at km. 2/2-3 in between Venkatesapuram - Villupuram stations in VM - KPD section.

71. SA Divn : Proposed ROB in lieu of LC No. 132 (SRC Mill Gate) at km. 440/26-28 between Uthukuli - Thiruppur stations in ED - CBE - PTJ section.

72. SA Divn : Proposed ROB in lieu of LC No. 5 (Neelikonanpalayam Salai) at km. 3/21-23 between Singanallur - Pilamedu stations in ED - CBE - PTJ section.

73. SA Divn : Pro ROB in lieu of LC No. 124 at km. 394/10-11 in between Thottipalayam - Erode stations in ED - IGU section.

74. MAS Divn : Proposed ROB in lieu of LC No. 36 at km. B. 36/12-14 in between Vandalur - Guduvancgeri stations in MS - VM section.

75. MAS Divn : Proposed ROB in lieu of LC No. 16 at km. 38/22-24 in between Veppambattu - Puttlur stations in MAS - AJJ section with LUS.

76. MAS Divn : Proposed ROB in lieu of LC No. 86 at km. 211/4-6 in between Kettandapatti - Jolarpettai stations in MAS - JTJ section.

77. MDU Divn : ROB in lieu of LC No. 403 at km. 538/500-600 in Virudhunagar - Tulukkapatti stations in VPT - MEJ section.

78. SA Divn : Proposed RUB in lieu of LC No. 13 (Kannappa Nagar) at km. 13/25-27 between Pilamedu - Coimbatore North stations in ED - CBE - PTJ section.

79. MAS Divn : Proposed ROB in lieu of LC No. 15 at km. 35/30-32 between Tiruvallur - Tiruninravur stations in MAS - AJJ section.

80. MAS Divn : Proposed ROB in lieu of LC No. 38 at km. 52/8-10 in between Elavur - Akkampet stations in MAS - GDR section.

81. TPJ Division : Proposed ROB in lieu of LC No. 201 at km. 270/0-100 in between Ariyalur - Sillakudi stations in VM - TPJ (Chord line) section.

82. MAS Divisionn : Proposed ROB in lieu of LC No. 93 at km. 124/2-3 in between Olakkur - Tindivanam stations in MS - VM section.

(ii) Road Over Bridges and Road Under Bridges on Deposit terms (NHAI) - 2016–17

(a) Work completed during 2016–17 : Nil

(b) Work in Progress : No. of Bridges : 12 (Twelve)

1. 2L ROB to the exg. ROB No. T/23A at Km 645/200-300. (Milevattan)
2. RUB at Km. 181/500-600 (Br. No. 663) bet Bantwal and Kanakanadi stns.
3. 4L ROB at Km. 18/700-800 bet Silaiman and Tiruppuvanam stns.
4. 2L ROB to exg. ROB : 207-A at Km 559/500-600 bet Manamadurai and Arupukottai Stns.
5. 4L ROB at Km 582/700-800 bet Paramakkudi and Sattirakkudi Stns.
6. Addl. 2L ROB by the side of exg. ROB No. 673 at Km. 3/700-800 bet Mangalore and Kankanady.
7. 2L ROB at Rly. Km 122/386 bet Olakkur and Tindivanam.
8. 2L ROB at Rly. Km 242/856 bet Kagankarai and Samalpatti.
9. 6L ROB in lieu of LC No. 351 at Rly Km. 429/3-4 bet Kumaramangalam - Keeranur stns.
10. Pro 4/6L ROB at Rly. Km. 75/090 in Theni yard.
11. addl 2L ROB to existing ROB 194/A at Km. 132/16-18 Pudi - Renigunta.
12. 4L ROB at Rly Km. 346/000 between Punggudi - Trichy stations.

(iii) Road Over Bridges and Road Under Bridges on other Deposit terms - 2016–17

(a) Work completed during 2016–17 : 1 (One)

1. TPJ Division - TRSP Project - Pro ROB bye pass extension at km. 313/300-400 between Kumbakonam and Tirunageshwaram stations in MV - TJ sections.

(b) Work in Progress : No. of Bridges : 13 (Thirteen)

1. Pro ROB in lieu of LC No. 178 at Rly km. 662/400-500 in bet Ferok and Kallayi Rly. Stn. in SRR - MAQ section (Panniyankara).
2. Proposed ROB at km. 32/400-500 near existing ROB No. 77 (Poothole) between Thrissur and Punkunnam stations.
3. Ernakulam - Alleppey - Kayankulam section - Proposed 1x21.50 clear span, 3.75m carriage (4.85m overall) width (single lane) composite girder Limited Use ROB - Thirunettur at km. 4/100-200 between Ernakulam Jn. and Kumbalam stations under MOLAS Scheme.
4. SRR-MAQ section - Proposed 1x33m span composite girder ROB at km. 623/300-400 between Tirur - Tirunavaya stations for widening of existing ROB No. 872A. (Deposit Work).
5. SRR-MAQ section - Proposed construction of 1x22500 (sk) (22332 SQ) composite girder ROB at km. 672/300-400 between West Hill and Elathur Railway stations (Pavangad) (Deposit Work).
6. SRR-MAQ section - Proposed 1x25m span composite girder ROB at km. 621/700-800 between Tirur and Tirunavaya stations (Bye Pass) (Deposit Work).
7. Proposed ROB at km. 81/100-200 (Athani-Airport Road) in between Angamali and Aluva stations in Shoranur - Ernakulam section.
8. PGT Division - Pro ROB at km. 653/9-654/0 in between Kadalundi and Ferok stations in SRR - MAQ section.
9. TVC Division - Proposed construction of existing ROB No. 290 at km. 58/900-59/00 between Ettumanur - Kottyam stations (Nagamadam) in ERS - KYJ section.
10. Salem Division - ED - IGU section Pro ROB at km. 397/300-400 outer ring road (Jeeva Nagar)
11. Salem Division - SA - ED section Pro ROB at km. 384/800-385/000 between Sankaridurg and Erode stns.
12. TPJ Divn. - Pro ROB at Km. 361/300-400 between Thanjavur Jn. and Alakudi stns.
13. MDU - BDNK section - Pro ROB at Km. 13/7-8 between Madurai - Usilampatti stns. (ELCOT)

Commissioned ROB / RUB's during 2016–17

Sl. No.	State	Divn.	Section	LC No.	Name of Work	Sancd	Type
1.	TN	MDU	MEJ-TEN	18	ROB in lieu of LC No. 18 Tirunelveli Yard at km. 27/500-600	CS	ROB
2.	TN	MAS	VPT-MEJ	439	RUB in lieu of LC No. 439 (Kovilpatti) at km. 587/400-500 in between Kovilpatti and Kumarapuram stations.	CS	RUB
3.	TN	MAS	MS-VM	40	ROB in lieu of LC No. 40 at km. 40/2-4 in between Urapakkam and Guduvanchei stations.	CS	ROB
4.	TN	SA	IGU-PTJ	146	Salem Division - proposal ROB in lieu of LC No. 146 at km. 479/22-24 between Irugur and Pothanur.	CS	ROB
5.	TN	TPJ	VM-MV	216	ROB in lieu of LC No. 216 (Sirkhazhi) at km. 262/600 in between Kollidam and Sirkhazhi stations.	CS	ROB
6.	TN	MDU	TPJ-MNM	441	ROB in lieu of LC No. 441 at km. 535/300-400 in between Sivaganga and Melakkonnakkulam stations.	CS	ROB
7.	TN	TPJ	VM-TPJ(C)	228	Kattur - Lalgudi at km. 313/2-3 in VM-TPJ(C) section	CS	ROB
8.	TN	MDU	MDU-VPT	366	Madurai - Tiruparankundram at km. 496/16-497/1 3 in MDU-VPT section	CS	ROB
9.	TN	MAS	MAS-GDR	NEW	MAS Divn - Pro ROB adjacent to exg ROB at km. 19/400-500 at Attipattu - Deposit work for M/s Toshiba JSW Turbine and Generator Pvt. Ltd.	DEP	ROB
10.	KA	PGT	HAS-MAQ	ADDL	Pro. Addl 2L ROB at Rly km. 24/10-11 of Goodsline to New Mangalore Port	NHAI	ROB
11.	KA	PGT	SRR-MAQ	146B	Proposed RUB in lieu of LC No. 146 B at km. 6/200-300 Kankanady	CS	RUB

15. Bridge Workshops (2016-17)

Sl. No.	Description of Item	T&P/GOC in tonnes	EWS/AJJ in tonnes	RCC Depot/ GOC in Nos.
1.	Fabrication of Bridge Girders	0	694.798	0
2.	Fabrication of Steel works - other than Girders like Foot Over Bridges, Platform Shelters, Flood Light Towers, Tanks & Steel Cribs, etc.,	121.000	2279.200	0
3.	Fabrication of other Steel items like Single Cranks, Boiler Tube Gates, Platform Push- Trolleys, Cash Chests, Lamps of Sorts, Combination Fish Plates and Rack Bars, etc.,	0	0	0
4.	Fabrication of Permanent Way Items like Points & Crossings, Glued joints, Points & Crossing Sleepers, CST 9 Sleepers, Reconditioning of Bearing Plates & Fish Plates, Hook/ Anchor Bolts, Jimcrow, Lifting Barriers, Winches, Push Trolleys, Dip Lorries and Motor Trolleys, etc.,	0	0	0
5.	Other items like Reconditioning of Sleepers, manufactureing of Skids, Beaters and other Miscellaneous items, etc.,	0	0	0
		0	0	0
6.	(1) Manufacture of RCC Bridge Slabs	0	0	0
	(i) Manufacture of RCC Bridge Slabs - MG	0	0	0
	(ii) Manufacture of RCC Bridge Slabs - BG	0	0	0
	(iii) Manufacture of PSC- MG Sleepers (Post Tensioned)	0	0	0
	(iv) Manufacture of PSC- MG Mono Block Sleepers (Pre Tensioned)	0	0	0
	(v) Manufacture of MG - RCC Twin Block Sleepers	0	0	0
	(vi) Manufacture of RCC pipes of various diameter and Length.	0	0	0
	(vii) Speed breaker	0	0	539
	(viii) Curve Board	0	0	173
	(ix) CC platform shelter 2'x2'x3"	0	0	482
	(x) RCC slab 1'-6" x 1'6" x 0-4"	0	0	3508
	(xi) CC paver blocks for LC's	0	0	760
	(xii) CC KM Post	0	0	1354
	Total	**121.000**	**2973.998**	**6,816**

16. Permanent Way Renewals and welding of Rail Joints :

1. Permanent Way Renewals.—The physical progress of Permanent Way Renewals during 2016–2017.

(a) Through Renewals :

(Fig. in Track Kilometres)

Gauge	Primary		Secondary	
	Through Rail Renewal	Through Sleeper Renewal	Through Rail Renewal	Through Sleeper Renewal
Broad ..	257.17	102.08	33.15	22.95
Metre ..	0.00	0.00	0.00	0.00
Total ..	**257.17**	**102.8**	**33.15**	**22.95**

(b) Renewals with PSC layouts under points and crossings:

Type of point	*BG*	*MG*	Total	TTR Weihtage
1 in 16	-	-	-	-
1 in 12	1	-	1	1
1 in 8.5	56	-	56	26
Special layouts	1	-	1	2
Traps	24	-	24	6
Switch + xing	41	-	41	20.5
Switch	150	-	150	37.5
Crossing	218	-	218	54.5
Total:	**491**	**-**	**491**	**178**

(c) Provision of Channel Sleepers :

Gauge	No. of Sleepers
Broad + Metre..	1137

(d) *Ballast put into the track during 2016-17 (in Thousands of cu.mts.)*

Total Ballast collection during the year : 644.47 Total Ballast inserted during the year : 619.97

16.2—Track Materials used during the year 2016–17

The permanent way materials used during the year 2016–17 at the time of track renewals (excluding casual renewals).

(a) Rails *(in track kilometres)*

Gauge	60 kgs.	52 kgs.	90 lbs.	75 lbs.	60 lbs.	50 lbs.	Total
Broad	165.69	91.48	0.00	0.00	0.00	0.00	257.17
Metre	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total :	**165.59**	**9148**	**0.00**	**0.00**	**0.00**	**0.00**	**257.17**

(b) Sleepers*(in track kilometres)*

Gauge	Concrete	Steel	CST-9	Wooden	others	Total
Broad	102.08	0.00	0.00	0.00	0.00	102.08
Metre	0.00	0.00	0.00	0.00	0.00	0.00
Total	**102.08**	**0.00**	**0.00**	**0.00**	**0.00**	**102.08**

(c) Composite wooden blocks and converted sleepers*(in track kilometres)*

Gauge	Concrete	Wonder Blocks in Nos.	Converted steel trough slepers Nos.	Total
Broad	390	0.00	0.00	390
Metre	0.00	0.00	0.00	0
Total	**390**	**0.00**	**0.00**	**390**

16.3–Materials in the track 2016-17–(Running Track) :

(a) Rails *(in Track Kilometres)*

Gauge	60 Kg.	52 kg.	90 lbs.	75 lbs	60 lbs.	50 lbs.	others	Total
BG ..	1600	5214	0	0	0	0	0	6814
MG ..	0	0	7	0	38	1	0	46
Total	**1600**	**5214**	**7**	**0**	**38**	**1**	**0**	**5890**

16.3–Materials in the track 2016-17–(Running Track) :

(b) Sleepers *(in Track Kilometres)*

Gauge	Concrete	Steel	CST-9	Wooden	Others	Total
Broad	6814	0	0	0	0	6814
Metre	7	19	19	1	0	46
Total	**6821**	**19**	**19**	**1**	**2**	**6860**

(c) Turnouts : (Main Lines) *(in Nos.)*

	1 : 20	1 : 16	1 : 12		1 : 8.5		Others	Total	
	BG	BG	BG	MG	BG	MG	BG	BG	MG
PSC ..	3	88	3419	0	1454	0	0	4964	0
Steel ..	0	0	0	1	0	2	0	0	3
Wooden ..	0	0	0	2	0	31	20	0	53
Total ..	**3**	**88**	**3419**	**3**	**1454**	**33**	**20**	**4964**	**56**

16. 4.–Welding of Rail Joints :

(a) Total No. of joints welded during the year 2016–17.

(Figures in Nos.)

Gauge	Total No. of Joints welded
Broad + Metre	15,311

(b) Total length of welded track as on 31st March 2017

(Figures in Track Kms.)

Gauge	Short Welded Panels	Long Welded Rails/Continuous Welded Rails	Total
Broad..	923	5850	6773
Metre ..	0	0	0
Total ..	**923**	**5850**	**6773**

(c) Flash Butt Welding Plant :

The work done at the Flash Butt Welding Plant in the Railway 2016-17.

Plant at	Number of joints Welded
Arakkonam	The ESAB Stationary welding plant commissioned during 1986 broke down during August 2013 The ESAB welding machine was repaired by replacing the control panel from the system of printed circuit board (PCB) to programmable logical controller (PLC) and by utillsing various parameters welding work have been restored to from 09/02/ 2016. The welding was done upto 10/12/2016. Again machine servo vlave failed and accumulator cylinder also failed. After that no production. **PCM Mobile welding machine** An agency is carrying out the welding by mobile Flash Butt welding Plant and the production for the year is 15613 joints for the year 2016-17.

16.5-Speed Restriction :

(a) Speed Restrictions in force on 31st March 2017 due to poor condition of track :–

(in Kilometres)

As on	Broad Gauge	Metre Gauge	Total
31–3–2017	-Nil-	-Nil-	-Nil-

(b) Speed Restriction in force as on 31st March 2017 due to reasons otherthan the above :–

(i) For trains with 100 km..ph. speed

(in kilometres)

As on	Broad Gauge	Metre Gauge	Total
31–3–2017	363.31	0.00	363.31

(ii) For trains with higher speed at 110/120 km.ph.

(in kilometres)

As on	Broad Gauge	Metre Gauge	Total
31–3–2017	311.87	0.00	311.87

17. Track Renewals

Renewals of the following track kilometres were carried during 2016–17:–

(i) Through rail renewals (Primary & Secondary):

Division	Broad Gauge	Metre Gauge
Chennai . ..	89.03	0.00
Salem	47.91	0.00
Palakkad	39.50	0.00
Thiruvananthapuram ..	76.26	0.00
Tiruchchirappalli	21.91	0.00
Madurai	15.71	0.00
Total	**290.32**	**0.00**

(ii) Through sleeper renewals (Primary & Secondary)

Division	Broad Gauge	Metre Gauge
Chennai	57.83	0.00
Salem	14.03	0.00
Palakkad	7.45	0.00
Thiruvananthapuram ..	11.66	0.00
Tiruchchirappalli	28.49	0.00
Madurai	5.57	0.00
Total	**125.03**	**0.00**

18. Natural Causes, Floods, Cyclones, Fire & Civil Disturbance etc. (Damages)

Sl. No.	*Division*	*Station-Section particulars*	*Approximate cost of damages (₹ in Lakhs)*
1.	MAS	CGL-Vardha Cyclone cused severe damage to road & Quartes.	20.00
		AJJ- Repairs to damaged roof of staff quarters in AJJ colony and PF shelter roofing at AJJ station due to vardha cyclone.	28.10
		ANNR	10.00
		Repair work at MAS, MPK, MSF, MSB & MMC	123.00
		AKM	5.00
		AKAT	8.00
		SPE	10.00
		DVR	5.00
		PEL	5.00
		PER & P.T. Colony	81.48
		TVT	30.00
		RPM BBQ to VLK stations and staff quarters in Vardha cyclone.	75.00
		MRTS section (all station)	38.65
		TBM section VDR-GI	30.00
		Vardha damages at KOK section	40.00
		CGL section work	3.00

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
(II) Improvements to Water supply.			
(A) Works Completed :—			
(a) Works costing more than ` 5 lakhs each.—			
1.	MAS	Improvements to water supply at SPE.	8.09
		Supply of drinking water by tanks mounted on lorry for railway colonies at JTJ.	33.08
		MAS - GDR supply of drinking water by tanks mounted on lorry for railway colony.	20.43
		TVT section work	10.00
		RPM section work	30.00
		MCPT seciton	10.00
2	SA	—	
3	PGT	CLT - Construction of OHT 9000 litre capacity & CAN - Construction of OHT 90000 litre capacity.	47.56
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
(b) Works costing less than Rs.5 lakhs each.			
1	MAS	—	
2	SA	PTJ - Supply of water supply and sanitary materials for Revenue maintenance.	2.00
		PTJ - Repairs and replacement of worn out main inlet pipe and delivery.	1.96
		PTJ - Repairs to the damaged over head water storage tank in camp area.	1.95
		PTJ - Repairs to the damaged water pipe line CBE staff quarters.	1.23
		PTJ - Repairs to the Raw water supply by providing addit8ional bore at 20 block area	0.84
		PY - Repairs to quarters water pipe line work at PY station.	1.15
		ED - Repairs to rain water pipe at ED colony.	0.54
		ED - Improvements to water supply system in Qrs. No.215, 216, 217 A-F & Ettna colony.	1.33
		ED Drilling of borewell near Railway Institute ground at ED.	1.99
		ED - Providing and lowering of casing pipe in borewell at ED section.	1.17
		ED - Summer watering arrangements drilling of borewell around at ED colony main road.	1.99
		ED - Summer waterign arrangements drilling of borewell around dormitory at ED colony.	1.99
		ED - SSE/W/ED section - Water supply arrangements and quarters mainteance and borewell connection fittings at ED.	1.99
		ONR - Repairs to GLR in Down colony at ONR.	0.95
		ONR - Repairs to retaining wall in block No.38 (A-F) at ONR.	1.76
		ONR - Repairs to retaining wal in block N.39 (A-F) at ONR.	1.86
		ONR - Repair sto mangalore roof on GI sheet roof in quarters No.12A & 12B.	1.94
		ONR - Repairs to mangalore roof on GI sheet roof in quarters No.12C & 12D.	1.94
		ONR - Repairs to mangalore roof on GI sheet roof in quarters No.12E, 12F & 12G.	1.64
3	PGT	SRR - Repairs to water supply arrangements at SRR Running Room.	1.18
		CAN - Repairs to the well near Health Unit.	0.90
		CAN - Repairs to the well at BRI Qrs.	1.14
		CAN - Repairs to the goods shed tank well.	0.43
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
(B) Works in Progress.			
(a) Works costing more than Rs.5 lakhs each.			
1	MAS	1. Repairs to existing GLR at AJJ & PUT.	63.46
		2. Water supply arrangements at CGL section	209.00
		3. Improvements to water supply at SPE.	36.87
		4. Repairs and maintenance of water supply arrangements and distribution system in JTJ sec.	35.22
		5. Supply of drinking water by tanks mounted on lorry for railway colonies and stations in at JTJ Phase II.	89.52
		6. Repairs to maintenance of auto chlorination plants at JTJ, VN, GYM & AB for a period of 2 years.	23.45
		7. MAS-GDR repair and maintenance of water supply arrangements and auto chlorination plants.	27.31
		8. MAS-GDR supply of drinking water by tanks mounted on lorry for Railway colony and station.	7.02
		9. MAS-GDR section provision of 150mm deep borewell and RCC OHT of 30,000 capacity at PON.	69.94
		10. PER & PT colony Repairs and water supply arrangements.	63.45
		11. Improvements of water supply arrangements at PER/PT colony.	122.39
		12. Improvements of water supply arrangements at PER/PT.	38.27
		13. RPM section work	20.00
		14. Provision of deep bore wells at MS-SG.	21.24
		15. MCPT section work.	10.00
2	SA	SSE/W/PTJ: ADEN/PTJ sub division maintenance of water supply arrangements in SSE/W/PTJ section for a period of two years.	32.8
3	PGT	DEN/West portion - Provision of toilets and borewells for gate lodges at LCs.	20.48
		MHE & CLT - MHE - Repairs to collapsed pitching and damaged protection wall of existing pond. CLT - provision of new pond near running room.	19.73
		PGT - Provision of separate OHT with 2.25 lakh litre capacity and 20 m height for coach watering arrangement.	100.03
		PGT - Provision of new borewells along with pumping installations and distribution system at PGT South, north and old colonies - Constn. of OHT 2.25 lakh litre capacity.	92.41
4	TVC	TVC - Drainage arrangements at Pooja ppura, Thampanoor and Pettah colonies.	179.39
		Ernakulam coaching complex - Watering arrangements by laying 200mm dia.pipe from Mvvatupuzha river near Piravam Road station.	806.00
5	TPJ	TPJ - Improvements and augumentation to the existing water recycling plant at BG Coaching complex/ TPJ.	54.00
6	MDU	RMM - Repairs to ROD pipeline.	96.84
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b. Works costing less than Rs.5 lakhs each.			
1	MAS	—	
2	SA	PTJ - Repairs and strengthening of existing staging of over head tank at camp area	1.93
		Repairs to water supply and sanitary work in Quarters No.71 (A-B)	1.97
		Repairs to Raw water supply by providing bore at MTP colony.	1.2
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
I. Improvements to Sanitation.			
A. Works completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	AJJ-JTJ cleaning and maintenance of exision sewer lines.	27.14
		MAS-GDR section construction of rest room with toilet facility at PON.	8.94
		TVT section work	15.00
		RPM section work.	5.00
		MCPT section work.	5.00
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	Improvements of sanitation work at CGL section.	100.00
		Improvements of sanitation work at SPE section.	39.61
		AJJ-JTJ cleaning and maintenance of exision sewer lines.	39.10
		Repairs to damaged staff quarters of vardha cyclone.	46.55
		Construction of track machine staff rest house at PON.	26.98
		Improvements to running room.	33.95
		Cleaning and maintenance of existing sewer lines at PER, PT colony, PWQ & RH/PER.	46.00
		PER-PTC improvements to sewerage system.	95.50
2	SA	—	
3	PGT	SRR - Renewal of damaged sewer line of underground drainage system in colony area at SRR.	96.04
		CLT & CAN - Cleaning of underground sewage system in Railway colonies and station and maintenance for a period of 2 years.	34.08
		CLT - Repairs to the existing damaged underground drainage arrangements.	15.13
		MAQ - MAQ section - Cleaning of underground sewage system.	20.98
4	TVC	Improvements to drainage arrangements at Poojappura, Thampanoor & Pettah colonies.	179.39
5	TPJ	GOC workshop - Improvements to toilets at various shop.	85.13
6	MDU	RMM - Repairs to Sewer line in railway colony.	16.65
		KKDI - Repairs to underground sewer for railway colony.	23.92
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
Works costing less than Rs.5 lakh each.			
1	MAS	MCPT - Section work	1.00
2	SA	—	
3	PGT	CAN - Repairs to the drain near the Health Unit.	1.52
4	TVC	—	
5	TPJ	—	
	MDU	—	
	CE/CN/ERS	—	
	CE/CN/MS	—	
	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
III. Other Staff Amenity Works			
A) Works completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	1. Repairs to road surface at ANNR.	24.48
		2. Repaurs to approach road at ANNR.	37.25
		3. Repairs to approach road at SPE section.	59.23
		4. Repairs to Staff Quarters at East Colony.	80.52
		5. Maintenance of Officers Rest House at JTJ & Yelagiri.	6.02
		6. Repairs to road surface of East, Edayampatti, Post Office, Parcempet Colony approach road to station and IOH shed including repairs to drain.	105.87
		7. AJJ-JTJ - Brightening up of stations, service buildings and staff quarters.	94.83
		8. Repairs to staff quarters at Edayampatti colony.	85.50
		9. AB & JTJ upgradation as model station of AB & JTJ and extension of PF at Jolarpettai balance work.	144.90
		10. Chennai Division - Provision of benches.	21.22
		11. Reconstruction of compound wall at Edayampatti and East Colony.	45.97
		12. AJJ-JTJ section cleaning and maintenance of existion sewer lines.	27.14
		13. TVT section work.	10.00
		14. RPM section work.	6.00
2	SA	—	
3	PGT	CAN - Brightening up of staff quarters and service buildings.	65.67
		MAJN Repairs to compound wall and circulating area and Repairs to Type I Qrs. MAJN 1 A-D & compound wall of Qrs.2 AB.	36.92
		PGT - Deweeding and maintaining of Railway Colony, station, Divisional Office premises free of unwanted vegetation etc. for a period of one year.	7.00
		PGT - Re-roofing of staff quarters - Type II 100 units with rafters and reepers in place of perished wooden roof.	186.00
4	TVC	Repairs to toilet of Divisional Office.	44.93
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	Improvements to Dy.CE/O/CN/TVC	20.00
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	SRR - Repairs to plinth and court yard of Qrs.No.77AF, 87AD.	0.94
		SRR - Repairs to Qrs. No.133 & 290AB	1.46
		SRR - Repairs to Qrs.No.46	0.87
		SRR Repairs to Qrs.No.87AE, 88AD.	1.98
		SRR Repairs to floor and tank of Qrs. No.290 AB.	1.28
		TIR - Repairs to main hall flooring of Staff Qrs.	1.91
		TIR - Repairs to flooring of Qrs.No.13/AB, 15/A, 17 etc.	1.52
		TA - Repairs to roof and back yard of Qrs.No.6C & 10.	1.31
		TA - Maintenance of flooring of Qrs.No.8, 10, 12,20 etc.	1.17
		TA - Repairs to roof of Qrs. No.9D, 17 & 33.	1.8
		TUA - Repairs to roof of Qrs. No.5AB.	1.5
		TUA - Repairs to roof of Qrs.No.6AB.	1.9
		CAN - Repairs to Qrs.No.64 C (Type I) SC/ST Office.	0.8

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
III. Other Staff Amenity Works			
A) Works completed.			
b) Works costing less than Rs.5 lakh each.			
		CAN - Repairs to floor and sewage system of Qrs. No.149 & 156.	1.68
		CAN - Repairs to Qrs.No.164 (track machine staff rest room).	1.99
		ETK - Repairs to Qrs.No.ETK/3 (Type I)	1.77
		CAN - Repairs to open drain in Eastern Colony	1.63
		CAN - Brightening up of staff quarters.	1.46
		ETK - Repairs to the approach road to Colony.	1.70
		ETK - Repairs to floor & door of Qrs. No.5/A, B & C (Type I).	1.95
		ETK Repairs to the plinth area of Qrs.No.19,A,B, C, 5/A, C, 4,7 & 8 (Type I).	1.71
		CAN - Repairs to Qrs.No.120A-P (Type I).	1.47
		CAN - Repairs to roof of Qrs.No.161.	1.28
		ETK - Minor repairs to Qrs. No.50/B,C.	1.16
		TLY - Repairs to roof of Qrs. No.46, A&B (Type I).	1.20
		TLY - Repairs to roof of Qrs. No.45, A&B (Type I).	1.71
		CLT - Repairs to floors of QRs.No.178 A&D (Type I).	1.87
		CLT - Repairs to floors of Qrs.No.133 A&D. (Type I).	1.78
		CLT - Repairs to floor of Qrs.No.67 A&C (Type II).	1.97
		ETR - Repairs to floor and plinth protection of Qrs.No.19 A&B (Type II).	1.60
		CLT - Repairs to damaged culvert road near Qrs.No.38 A&C.	1.55
		CLT - Repairs to floor of QRs.No.132A&D (Type I).	1.74
		CLT - Repairs to floor of Qrs.No.136 A&D (Type I).	1.91
		CLT - Repairs to floor of Qrs.No.131 A&D (Type I)	1.96
		CLT - Repairs to floor of Qrs.No.71 A&C (Type I).	1.74
		CLT - Repairs to the damaged floor of Qrs.No.53 A&B (Type III).	1.97
		CLT - Repairs to the plinth protection of Qrs.No.67A C, 71A C,187 A D, Bath wc.of 67A C, 178A D.	1.91
		CLT - Repairs to floor of Qrs.No.134 C D, 138 C D (Type I).	1.96
		FK Repairs to gang rest room.	1.08
		CLT - Repairs to leaky Verandah of Qrs.No.47/A B.	1.43
		CLT - Repairs to leaky Verandha of Qrs.No.53/A B.	1.29
		CLT - Repairs to leaky Verandah of Qrs.No.51/A B.	1.68
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	CGL section 511	44.30
		Toilets and water arrangements.	49.31
		Repairs to gate lodges.	107.92
		Repairs and brightening of staff Qrs.	9.88
		Construction of ladies rest room.	32.38
		Rest house of track machine staff.	57.00
		Supply of drinking water through lorry.	17.50
		C-2 Zonal work.	35.71

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
III. Other Staff Amenity Works			
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
		C-3 Zonal work.	14.20
		AMC	40.18
		Staff amenity work at CGL section.	51.00
		Staff work in SPE section.	38.80
		AJJ-JTJ standardization of cuttings making up low cess/eroded bank forming of trolly refuges.	79.85
		AJJ-JTJ repairs to staff quarters and station buildings at GYM, VN and AB.	93.24
		AJJ-JTJ improvements of LC gate lodge winch platform providing roof covering in working area for GK.	79.06
2	SA	—	
3	PGT	CAN - Rebuilding of staff quarters. Type II - 40 Units in lieu of Type I Qrs.-16 units (1 Block of 12 Units & 1 Block of 4 units).	152.93
		CLT, CAN & TLY - Repairs to Railway Colony road with CC paving - Resurfacing of PF No.2/3 with dewatering concrete - Repairs to Railway Colony Road and approach road at CAN & TLY stations.	50.93
		CAN - Rebuilding of Staff Qrs. Type II - 7 units & Type III - 6 units on age cum condition basis in lieu of Type I Qrs.No.41/A, 64A B, 85/A B, 86/A B & Type III Qrs.No.58A D & 62 A B.	205.93
		CAN Rebuilding of Staff Qrs. Type II - 24 units on age cum condition basis in lieu of Type I Qrs. No.82A D, 83 A D, 99A D, 100A C & 10A D.	325.89
		CAN Rebuilding of Staff Qrs. Type II - 40 Units in lieu of Type I Qrs. - Construction of Type II Qrs.-24 units (2 blocks of 12 units) - Balance work.	270.52
		MAQ - Re roofing of staff quarters Type I - 20 units Type II - 15 units.	49.00
		MAQ - Brightening up of Staff Quarters in SSE/W/MAQ section.	14.48
		PGT - Brightening up of all staff quarters Type I & II in Railway Colony.	70.00
4	TVC	1. Repairs to Staff Quarters aat Thampanoor & Poojappura	55.48
		2. Repairs to staff quarters at Poojappura.	76.61
		3. TVC coaching depot - Building for staff canteen.	12.70
5	TPJ	1. PDY - Reconstruction of Staff Qrs. at PDY stations, Type III 2 Nos. in lieu of Qrs. No.PDY/26 and PDY/30.	27.38
		2. PDY - Construction of one block of 8 units of Type II qrs.(still + 2 floors).	109.42
		VM (North & South) Improvements of Quarters colony roads watering and drainage arrangements.	545.10
6	MDU	SSE/W/KKDI Staff Qrs. At PDKT, KKDI, SVGA, MMM, Type II - 8, Type III 3, Type IV 3, Total - 14.	193.84
		SSE/W/MDU I. MDU Jn. i. Repairs to pit line drainage. Ii. MDU : Repairs to Officers colony approach road and repairs to the plinth protection for Qrs.o.506 A-D, 498 A-D, 465 A-F, 468 A-D, 497 A-D, 482 A-D, 256 A-D, 229, 257, 511 A-D, 529 A-D at MDU railway colony. iii. MDU Jn. Repairs to existing Gutters of platform shelter in PF No.1.	99.52
		2. I) Repairs to Existing Hourdis Bloc/Jack arch roof and flooring in Type Qrs.No.259 A-P, 258, 260 A-P,261 A-P, 264A-P, 265A-P, 266A-P, 267A-P, in 'C' area at MDU Colony (Type I Qrs).II. MDU: Repairs to Ladder arrangements for cleaning of roof and over head tank at MDU colony.	66.49
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
IV. Hospitals and Health Units.			
A. Works completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	1. Repairs to Divisional Railway Hospital.	70.23
		2. TVT section work	6.00
2	SA	—	
3	PGT	—	
4	TVC	Repairs to Railway Hospital building and premises.	77.98
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	RPM section work.	2.00
2	SA	—	
3	PGT	CAN - Repairs to the reof of Health unit.	1.93
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	Trivandrum Pettah - Provisional of ICU in space near Operation Threatre (four bed).	'9.9
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	-	
2	SA	-	
3	PGT	-	
4	TVC	-	
5	TPJ	-	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
V. Schools and Hostels.			
A. Works Completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	Nagercoil Sub-ordinates rest room in first floor of station building.	9.9
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	Multi disciplinary Divisional Training Centre (MDTC) Balance works.	216.32
4	TVC	NCJ- Sub-ordinates rest room in first floor of station building.	9.9.
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
VI. Running room.			
A. Works Completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	NCJ - Construction of new running room.	57.00
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS		
2	SA	—	
3	PGT	Repairs to running room window.	0.38
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	Improvements to hot water arrangements in the running room.	10.00
		Improvements to ventillation and lighting arrangements in the running Bunalows & Rest houses.	9.9
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
VII. Miscellaneous works			
A.Works completed.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	Improvements to Thampanoor railway station.	9.9
		TVC Dn - Replacememt of age old ceiling fans/provision of additional fans in Qrs.	27.00
5	TPJ	—	
	—		
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	—	
4	TVC	—	
5	TPJ	—	
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	
B. Works in Progress.			
a) Works costing more than Rs.5 lakhs each.			
1	MAS	Vardha damage work at SPE section.	33.60
		Repairs to Type I qrs. To convert as Type II in PT colony phase I.	63.45
		Improvements to Staff Quarters at PT colony Phase II.	161.25
		Improvements to Staff Qrs. at PT Colony Phase IV.	122.39
		Repairs to mosquito fly proof mesh door and window shutters in Officers Quarters in PER.	255.73
2	SA	—	
3	PGT	TLY & TIR - Construction of boundary wall/fencing to prevent encroachement in Railway land.	42.86
4	TVC	Ernakulam - Construction of Railway Institute cum Women's Welfare organisation.	9.9
		Improvements to control office.	17.74
5	TPJ	Construction of barracks for RPF staff	89.34
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
VII. Miscellaneous works			
b) Works costing less than Rs.5 lakh each.			
1	MAS	—	
2	SA	—	
3	PGT	CAN - Repairs to the ORH gate and compound wall.	1.94
		ETK - Repairs to the ladies rest room.	1.94
		CAN - Repairs to the KWA water connection to colony.	1.99
		ETK - Repairs to the water storage tank, well and pathway.	1.76
		CAN - Repairs to the drain near second entry.	1.96
		CAN - Repairs to the approach road of SSE/W/O/CAN.	1.63
		CAN- Repairs to the CN ORH ceiling.	0.98
		CAN - Repairs to the floor and ceiling of ADEN Office.	1.14
		CAN - Brightening u of open well walls and repairs to the compound walls.	0.92
		CAN- Repairs to VIP lounge, Booking office, ORH gate, brightening up of SRMU office compound wall.	0.94
		ETK - Repairs to the PF surface in front of S&T building, Pay & Use toilet.	1.35
		CAN - Repairs to the approach road and gate of ADEN Office.	1.83
		ETK - Repairs to the roof and floor of gang rest room.	1.05
		'TLY - Repairs to the ladies toilet in the waiting room, PF No.2, roof and floor of gang rest room.	1.38
		TLY - Repairs to the HI Office.	1.33
		TLY - Repairs to the circulating area and IC cover.	1.47
		TLY - Repairs to the waiting room, roof of PF No.1, circulating area and IC cover.	1.98
		TLY - Repairs to the Pay & Use toilet.	1.44
		TLY - Repairs to the second entry appraoch road and curve wall.	1.90
		TLY - Repairs to the leaky roof of VIP lounge at PF No.1.	1.59
		CAN - Repairs to the CCTV room.	0.31
		CAN - Repair to the pay and use toilet floor.	1.95
		CAN - Repairs to the passage of CN ORH office.	1.25
		CAN - Repairs to the floor and ceiling of retiring room.	1.75
		CAN - Repairs to the floor and ceiling of rest room.	1.22
		CAN - Repairs to the roof of HI Office.	1.73
		CS - Repairs to the open well and roof of the pump house.	1.99
		CS - Repairs to the PF surface PF No.2.	1.98
		CS - Repairs to the circulating area and PF surface PF No.1&2.	1.61
		CAN - Repairs to waiting room ceiling.	1.97
		CAN - Repairs to the LC No.233 roof & floor.	1.77
		CAN - Repairs to the ORH suite A, B, C & D toilet bath ceiling.	0.54
		CAN - Repairs to the ceiling of station building.	1.12
		CAN - ADEN office floor and compound wall repairs.	1.89
		CAN - Repairs to the Electrical sub statio.	1.97

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
VII. Miscellaneous works			
b) Works costing less than Rs.5 lakh each.			
		CAN - Repairs to the PF shelter.	0.76
		dmd - Repairs to the circulating area.	1.99
		CAN - Toilet for gang rest room.	0.60
		CAN - Repairs to the ladies toilet at PF No.1.	1.88
		ETK - Repairs to the circulating area.	'1.99
		ETK - Repairs to the PF surface on PF No.2/3.	1.85
		CAN - Repairs to the upper class waiting room roof near toilet.	0.68
		CS - Repairs to the pot holes near and station building.	1.99
		CAN - Repairs to the masonry walls on Booking Office	1.45
		ETK - Repairs to the floor of SM room front area.	1.73
		CAN - Repairs to the wall putty in station building.	1.90
		ETK - Repairs to water booth and PF benches.	0.79
		CAN - Repairs to the floor near reservation office.	1.78
		CZN - Repairs to the floor near lift area and compound wall.	1.74
		CAN - Minor repairs to the offices and service buildings.	0.58
		CAN - Repairs to water meter in delivery pipe line.	0.68
		TLY - Repairs to the CCTV room.	1.53
		JGE - Repairs to the station building.	1.93
		TLY - Repairs to the ceiling of waiting room at PF No.2.	1.93
		MHE - Repairs to the circulating area in front of booking office.	1.91
		MHE - Repairs to the circulating area in front of main entrance.	1.91
		TLY - Repairs to the approach road at CAN end of PF No.1.	1.90
		MHE - Repairs to the pathway at second entry.	1.76
		TLY - Repairs to the draiin and circulating area at CAN end of PF No.1.	1.78
		TLY - Repairs to the waiting hall ceiling & door at PF No.1.	0.75
		JGE - Repairs to the approach road and drain cover.	1.48
		TLY - Repairs to the booking office ceiling and grill.	1.99
		JGE - Repairs to the RCC benches at PF No.1&2.	1.58
		TLY - Repairs to the booking office & RPF box room.	1.99
		TLY - Repairs to the flooring of VIP lounge.	1.54
		TLY - Repairs to the SMR record room/VIP lounge toilet.	1.95
		TLY - Repairs to the cross drain on approach road at PF No.1 side.	1.10
		TLY - Repairs to the concourse ceiling on PF - 2, station building.	1.94
		TLY - Repairs to the abutment wall of Br.No.1070.	0.82
		TLY - Repairs to the trolley path at CLT end and battery room floor.	0.41
		CMC - CMC - PF surface with CC1.	1.98
		CMC - CMC - PF surface with CC2.	1.90

19. Staff Amenities

Sl. No.	Division	Name of work	Estimate Cost in lakhs
VII. Miscellaneous works			
b) Works costing less than Rs.5 lakh each.			
		CLT - False ceiling door RR 4 & 5	1.40
		CLT - Repairs to RR 5.	1.48
		CLT - Repairs to RR 4.	1.56
		WH - Wall and surface PF No.1.	1.90
		CLT - Upper class waiting room PF No.2/3.	1.84
		WH - PF paving @ MAQ end of PF No.1.	1.98
		CLT - Culvert across 38 A to C.	1.55
		CLT - Culvert near SSE/PW/O	1.70
		ETR - Floor of ladies staff room.	0.79
		CLT - Ceiling and door upper class wm 2/3 toilet of upper class wm 4.	1.50
		CLT - Cubicles of dormitory.	1.83
		CLT - Supply of wooden planks and scantlings for revenue maintenance.	1.99
		CLT - Loco heritage in PF No.4.	1.79
		CLT - Supply of cement sand bleaching powder scantlings.	1.97
		CLT Shed of diesel barrels and window grills.	1.15
		CLT - Surface of PF No.1.	0.30
4	TVC	Ernakulam - Construction of Railway Institute cum Women's Welfare organisation. Improvements to control office.	9.9 17.74
5	TPJ	Construction of barracks for RPF stall.	89.34
6	MDU	—	
7	CE/CN/ERS	—	
8	CE/CN/MS	—	
9	MTP	—	

20. LEVEL CROSSING

1	No. of Level Crossings category wise [As on 31-03-2017]			
	Special Class		:	481
	'A' Class		:	165
	'B' Class		:	190
	'C' Class		:	1031
	'C' Class Unmanned		:	451
	Canal Crossing		:	4
		Total	:	2322
2	No. of Level Crossings manned during 2016-2017		:	39
	a Safety Fund		:	Nil
	b At State Government's Cost [Reimbursable from 80% segment of RSWF]		:	Nil
	c Others [MPLADS]		:	Nil
		Total	:	39
3	No. of Level Crossings were additional men were provided without upgrading during 2015-2016		:	0
4	No. of Level Crossings provided with Lifting Barriers during 2016-2017		:	26
5	No. of Level Crossings provided with Lifting Barriers during 2016-2017		:	39
	a Interlocked Level Crossings		:	1219
	b Non-interlocked Level Crossings		:	656
		Total	:	1875
6	No. of Level Crossings where traffic census was taken in 2016-2017 and action taken in such cases.		:	591
7	No. of Level crossings downgraded during 2016-2017		:	Nil
8	No. of Level Crossings De-manned / Closed during 2016-2017		:	122

21 (a) Statistics of Rail Usage

Primary Rail renewal carried over on various sections during the year 2016–2017

Name of the Section	UP/DN/ SL	Year of sanction	Sanctioned Length	Exg. Rail Section	Rail Renewal done with	Length Renewed during the year
BROAD GAUGE						
ROUTE–' A '						
Chennai Central - Gudur	Down	2015-16	9.70	52	60	4.90
Chennai Central - Gudur	UP	2015-16	15.19	52	60	1.80
Chennai Central - Gudur	Down	2016-17	61.00	52	60	7.37
ROUTE–' B '						**14.07**
Chennai Central - Arakkonam	DN & UP	13 - 14	2.19	60	60	0.76
Chennai Central - Arakkonam	DN FAST	15 - 16	2.00	60	60	2.00
Chennai Central - Arakkonam	DN	16 - 17	25.73	52	60	10.64
Chennai Central - Arakkonam	BBQ YARD	16 - 17	7.27	90R	52	1.60
Arakkonam - Jolarpettai	KPD Yard	13 - 14	0.82	52	60	0.82
Arakkonam - Jolarpettai	DN	14 - 15	1.80	60	60	1.80
Arakkonam - Jolarpettai	UP	15 - 16	2.35	60	60	1.20
Arakkonam - Jolarpettai	UP & DN	15 - 16	4.70	60	60	0.77
Arakkonam - Jolarpettai	DN	15 - 16	0.98	60	60	0.98
Arakkonam - Jolarpettai	DN	16 - 17	29.24	60	60	18.26
Arakkonam - Renigunta	UP & DN	16 - 17	14.83	52	52	14.83
Tambaram - Chengalpattu	DN	16 - 17	8.15	52	60	4.06
Jolarpettai - Salem	UP	14 - 15	0.95	52	60	0.28
Jolarpettai - Salem	UP & DN	15 - 16	17.08	52	60	7.09
Jolarpettai - Salem	UP	15 - 16	5.20	52	60	1.28
Jolarpettai - Salem	UP	16 - 17	12.40	52	60	12.40
Salem - Erode	UP & DN	16 - 17	12.90	52	60	6.25
Salem - Erode	UP	16 - 17	5.80	52	60	1.00
Erode - Irugur	UP	15 - 16	0.15	52	52	0.15
Erode - Irugur	DN	15 - 16	1.38	52	52	1.38
Erode - Irugur	DN	16 - 17	8.00	52	52	8.00
Erode - Irugur - Coimbatore - Podanur	UP & DN	15 - 16	5.00	52	52	5.00
Podanur - Shoranur	DN	15 - 16	1.46	52	60	1.46
Podanur - Shoranur	UP	16 - 17	1.09	52	52	1.09
Shoranur - Ernakulam(PGT)	UP	16 - 17	0.70	52	52	0.70
Shoranur - Ernakulam	DN	15-16	3.41	52	52	0.16
Shoranur - Ernakulam	DN	15 - 16	3.97	52	60	2.68
Shoranur - Ernakulam	UP	15 - 16	1.61	52	60	1.61
Shoranur - Ernakulam	UP	16 - 17	2.65	52	52	2.40
Shoranur - Ernakulam	DN	16 - 17	19.45	52	60	3.38
Shoranur - Ernakulam	UP	16 - 17	18.59	52	60	9.52
Shoranur - Ernakulam	UP	16- 17	10.00	52	52	3.55
Villupuram - Tiruchchirappalli (Chord)	UP	15 - 16	4.20	52	52	1.70
Villupuram - Tiruchchirappalli (Chord)	SL	16 - 17	16.70	52	60	15.94
Tiruchchirappalli -Dindigul	SL	13 - 14	1.43	52	52	1.43
TOTAL						**146.17**
ROUTE–' C '						
Chennai Beach-Velachery	UP & Down	2013-14	6.62	60 kg	60kg	2.30
						2.30

Name of the Section	UP/DN/SL	Year of sanction	Sanctioned Length	Exg. Rail Section	Rail Renewal done with	Length Renewed during the year (in Km)
ROUTE–' D '						
Karur - Dindigul	SL	15 - 16	0.79	52	52	0.79
Shoranur - Kozhikode	DN	15 - 16	25.01	52	60	15.59
Kozhikode - Kannur	DN	16 17	5.40	52	60	5.40
Kozhikode - Kannur	DN	16 - 17	5.33	52	60	5.33
Kannur - Mangalore	DN	15 - 16	2.00	52	52	2.00
Kannur - Mangalore	DN	16 - 17	0.29	52	52	0.29
Kozhikode - Kannur - Mangalore	DN	15 - 16	1.00	52	52	1.00
Kozhikode - Kannur - Mangalore	DN	16 - 17	3.05	52	60	3.05
Mangalore - Thokur	SL	16 - 17	1.54	52	52	1.54
Eranakulam - Kottayam - Kayankulam - Kollam	BRIDGES	14 - 15	0.87	52	52	0.87
Eranakulam - Kottayam - Kayankulam	BRIDGES	15 - 16	0.45	52	52	0.45
Eranakulam - Kottayam - Kayankulam	SL	15 - 16	1.76	52	60	1.27
Eranakulam - Kottayam - Kayankulam	SL	16 - 17	19.80	52	60	6.36
Kayankulam - Kollam	DN	16 - 17	1.64	52	52	0.64
Kollam - Thriuvananthapuram Central	DN	13 - 14	3.61	52	52	1.07
Kollam - Thriuvananthapuram Central	DN	13 - 14	5.30	52	60	0.72
Kollam - Thriuvananthapuram Central	UP & DN	16 - 17	13.04	52	60	0.94
Kollam - Thiruvananthapuram Central	UP & DN	16 - 17	0.20	52	52	0.20
Kayankulam - Thriuvananthapuram Central	DN	13 - 14	4.68	52	52	2.72
Kayankulam - Thiruvananthapuram Central	UP & DN	15 - 16	13.86	52	52	4.24
Kayankulam - Thiruvananthapuram Central	UP & DN	16 - 17	16.05	52	60	3.61
Eranakulam - Kottayam - Thiruvananthapuram Central	BRIDGES	16 - 17	1.03	52	52	0.63
Eranakulam - Allapuzha - kayankulam	SL	15 - 16	13.90	52	52	0.62
Eranakulam - Allapuzha - kayankulam	SL	16 - 17	22.39	52	52	20.72
Eranakulam - Allapuzha - kayankulam	SL	16 - 17	7.97	52	60	1.25
Dindigul - Madurai	UP	15 - 16	2.00	52	52	2.08
Virudunagar - Vanchi Maniyachi	SL	14 - 15	11.50	52	52	0.70
Virudunagar - Vanchi Maniyachi	SL	15 - 16	6.00	52	52	6.00
Vanchi Maniyachi - Tirunelveli	SL	16 - 17	0.78	52	52	0.78
Karur - Dindigul (MDU)	SL	15 - 16	1.00	52	52	1.05
TOTAL						**91.91**
ROUTE–' C '						
Salem - Mettur Dam	SL	15 - 16	1.10	90R	52	1.10
Shoranur - Nilambur Road	SL	16 - 17	6.08	52	60	0.20
Eranakulam - Kochi	SL	16 - 17	2.60	52	60	1.42
TOTAL						2.72
GRAND TOTAL						**257.17**

Name of the Section	UP/DN/SL	Year of sanction	Sanctioned Length	Exg. Rail Section	Rail Renewal done with	Length Renewed during the year (in Km)
SECONDARY Rail renewal carried over on various sections during the year 2016–2017						
Chennai Central - Gudur	Yard	14 - 15	8.17	52Kg - II	52Kg - II	4.71
Chennai Central - Arakkonam	Yard	15 - 16	9.00	52Kg - II	52Kg - II	3.05
Chennai Central - Arakkonam	Yard	15 - 16	3.45	90R	52Kg - II	2.65
Arakkonam - Jolarpettai	Yard	14 - 15	2.83	90R	52Kg - II	1.31
Arakkonam - Renigunta	Yard	16 - 17	3.86	90R	52Kg - II	0.60
Jolarpettai - KSR Bengaluru	Yard	12 - 13	6.00	90R	52Kg - II	0.36
Jolarpettai - Erode	Yard	12 - 13	5.79	90R	52Kg - II	2.57
Erode - Irugur	Yard	13 - 14	4.47	90R	52Kg - II	0.70
Podanur - Shoranur	Yard	13 - 14	3.77	90R	52Kg - II	0.33
Podanur - Shoranur	Yard	15 - 16	1.03	90R	52Kg - II	0.22
Villupuram - Tiruchchirappalli (CHORD)	Yard	13 - 14	4.44	90R	52Kg - II	2.81
Villupuram - Tiruchchirappalli (CHORD)			4.81	90R	52Kg - II	1.47
Basin Bridge - Washermenpet	Up & Dn	13 - 14	2.80	90R	52Kg - II	0.70
Cannanore - Mangalore Central	Yard	12 - 13	1.40	90R	52Kg - II	0.38
Eranakulam - kottayam - Kayankulam	Yard	12 - 13	5.81	90R	52Kg - II	0.22
Eranakulam - Thiruvananthapuram Central	Yard	16 - 17	7.46	52Kg-II / 90R	52Kg - II	0.15
Kollam - Thiruvananthapuram Central	Yard	13 - 14	5.16	90R	52Kg - II	0.62
Kanyankulam - Thiruvananthapuram central	Yard	12 - 13	4.12	90R	52Kg - II	0.16
Nagercoil - Tirunelveli	Yard	14 - 15	2.27	90R	52Kg - II	0.78
Dindigul - Madurai	Yard		4.15	90R	52Kg - II	2.15
Chengalpattu - Arakkonam	Yard	14 - 15	1.60	52Kg - II	52Kg - II	1.47
Thiruvananthapuram central - Nagercoil	Yard	13 - 14	3.51	90R	52Kg - II	2.10
Thiruvananthapuram central - Nagercoil	Yard	13 - 14	3.13	90R	52Kg - II	0.68
Eranakulam - Kochi Harbour terminus		16 - 17	0.50	90R-II	52Kg - II	0.50
Eranakulam - Kochi Harbour terminus		13 - 14	3.00	90R-II	52Kg - II	0.50
Nagercoil - Kanniyakumari	Yard	14 - 15	1.50	90R	52Kg - II	0.45
Madurai Division	Yard	15 - 16	9.30	90R	52Kg - II	1.51
Secondary BG Total						33.15
Secondary MG Total						**NIL**

21. (b) Average traffic in Gross Million Tonnes per running track kilometrage carried over on various sections during the year 2016–2017.

Sl. No.	Section	Group	GMT carried during 2016-17 (in million Tonnes)		
			Double Line		Single Line
			UP	DN	
	Broad Gauge				
1	Chennaicentral-gummidipundi	A	23.84	22.17	-
2	Gummidipundi - Sullurpeta	A	19.44	17.77	-
3	Sullurpeta - Gudur	A	17.72	16.05	-
1	Chennai Central - Tiruvallur (Fast Line)	B	31.76	36.21	-
1a	Chennai Central - Tiruvallur (Slow Line)	B	17.54	17.54	-
2	Tiruvallur - Arakkonam	B	37.16	41.61	-
3	Arakkonam- Katpadi	B	34.97	42.71	-
4	Katpadi - Jolarpettai	B	34.93	42.67	-
5	Arakkonam - Tiruttani	B	31.54	23.35	-
6	Tiruttani - Renigunta	B	29.52	21.33	-
7	Jolarpettai - Salem	B	22.00	33.24	-
8	Salem-erode	B	21.91	26.43	-
9	Erode - Irugur	B	21.82	24.53	-
10	Irugur - Coimbatore - Podanur	B	21.82	24.53	-
11	Irugur - Podanur	B	-	-	-
12	Podanur - Palakkad	B	17.95	18.98	-
13	Palakkad - Shoranur	B	17.89	18.94	-
14	Shoranur - Ernakulam	B	21.37	21.03	-
15	Chennai Beach - Tambaram (Subn)	B	24.73	24.73	-
15a	Chennai Egmore - Tambaram	B	13.02	14.03	-
16	Tambaram - Chengalpattu	B	21.30	22.31	-
17	Chengalpattu - Villupuram	B	13.15	14.16	-
18	Villupuram - Valadi	B	9.92	9.04	
19	Valadi - Tiruchchirappalli	B	-	-	18.96
20	Tiruchchirappalli - Manaparai	B	8.67	6.15	-
21	Manaparai - Tamaraipadi	B	-	-	14.82
22	Tamaraipadi - Dindigul	B	8.67	6.15	
1	Chennai Beach - Velachery	C	9.39	9.39	-
2	Washermanpet - Chennai Beach	C	13.15	14.16	-

Sl No.	Section	Group	GMT carried during 2016-17 (in million Tonnes)		
			Double Line		Single Line
			UP	DN	
1	Erode -tiruchchirappalli Fort	D	-	-	12.07
2	Shoranur - Kozhikkode	D	13.76	14.93	-
3	Kozhikkode - Kannur	D	13.47	13.57	-
4	Kannur - Mangalore	D	12.09	12.51	-
5	Mangalore - Thokur	D	-	-	7.83
6	Ernakulam - Karuppantara	D	12.18	10.45	-
7	Karuppanatara - Changanaseri	D	-	-	22.63
8	Changanaseri - Kayankulam Jn.	D	12.18	10.45	-
9	Kayankulam - Kollam	D	12.30	10.57	-
10	Kollam - Tiruvananthapuram Central	D	13.50	13.76	-
11	Ernakulam - Alappuzha	D	-	-	14.22
12	Alappuzha - Haripad	D	-	-	12.37
13	Haripad - Kayankulam	D	6.97	5.52	-
14	Villupuram - Mayiladuthurai	D	-	-	11.32
15	Mayiladuthurai - Tiruchchirappalli	D	-	-	12.02
16	Villupuram - Vellore Cantonment	D	-	-	3.39
17	Vellore Cantonment - Katpadi	D	-	-	3.53
18	Karur - Dindigul	D	-	-	8.42
19	Dindigul - Madurai	D	11.34	11.44	-
20	Madurai - Virudunagar	D	-	-	18.40
21	Virudunagar - Vanchi Maniyachchi	D	-	-	18.40
22	Nagercoil - Tirunelveli	D	-	-	9.37
23	Tiruchchirappalli - Karaikkudi- Manamadurai	D	-	-	4.59
24	Madurai - Manamadurai	D	-	-	2.60
25	Manamadurai - Rameswaram	D	-	-	5.03
26	Virudunagar - Sengottai	D	-	-	3.25
27	Vanchi Maniyachchi - Tirunelveli	D	-	-	14.01
28	Tirunelveli - Tiruchendur	D	-	-	4.15

Sl No.	Section	Group	GMT carried during 2016-16 (in million Tonnes)		
			Double Line		Single Line
			UP	DN	
1	Walajah Road - Ranipet	E	-	-	-
2	Pattabiram - Pattabiram Military Siding	E	-	-	-
3	Villivakkam - Anna Nagar	E	-	-	-
4	Chengalpattu - Tirumalpur	E	-	-	3.22
5	Tirumalpur - Arakkonam	E	-	-	1.77
6	Salem - Metur Dam	E	-	-	20.70
7	Salem - Namakkal - Karur	E	-	-	8.23
8	Tiruchchirappalli Fort - Tiruchchirappalli Jn.	E	-	-	11.88
9	Coimbatore - Mettupalaiyam	E	-	-	2.79
10	Palakkad - Palakkad Town	E	-	-	1.38
11	Pollachi - Palakkad Town	E	-	-	2.48
12	Shoranur - Nilambur Road	E	-	-	3.62
13	Ernakulam - Cochin Harbour Terminus	E	-	-	-
14	Thrisur - Guruvayur	E	-	-	4.86
15	Tiruvananthapuram Central - Nagercoil	E	-	-	9.81
16	Nagercoil - Kanniyakumari	E	-	-	9.81
17	Villupuram - Puducherry	E	-	-	4.22
18	Cuddalore Port - Vriddhachalam	E	-	-	1.39
19	Vriddhachalam - Salem Market- Salem	E	-	-	2.11
20	Mayiladuturai - Tiruvarur	E	-	-	8.86
21	Thanjavur - Thiruvarur	E	-	-	8.21
22	Tiruvarur - Nagore	E	-	-	13.30
23	Nagore - Karaikal	E	-	-	2.98
24	Nagapattinam - Velankanni	E	-	-	0.53
25	Nidamangalam - Mannargudi	E	-	-	2.64
26	Vanchi Maniyachchi - Tuticorin	E	-	-	5.10
27	Tirunelveli - Tenkasi	E	-	-	2.29
28	Dindigul - Palani-pollachi	E	-	-	1.99
29	Manamadurai - Virudunagar	E	-	-	1.10
30	Punalur - Kollam	E	-	-	4.39

Sl No.	Section	Group	GMT carried during 2016-17 (in million Tonnes)		
			Double Line		Single Line
			UP	DN	
	Metre Gauge				
1	Tiruvarur - Tiruturaipundi	S1	Closed for GC		
2	Tiruturaipundi - Karaikkudi	S1	- Do -		
3	Sengottai - Punalur	S1	- Do -		
1	Pollachi - Podanur	S2	Closed for GC		
2	Pollachi - Palakkad Town	S2	- Do -		
1	Mettupalaiyam - Coonoor	S3	-	-	0.09
2	Coonoor-udagamandalam	S3	-	-	0.48
2	Madurai - Bodinayakkanur	S3	Closed for GC		
3	Tiruturaipundi - Agastiyampalli	S3	- Do -		

TRACK MODERNISATION:

As part of Track Modernisation, Southern Railway has been in the forefront in deployment of machines for Track laying as well as for maintenance activities. From the modest beginning made in 1975 with the introduction of 3 Universal Tie Tamping machines and 4 Portal Cranes, the Track Machine fleet has grown over the past four decades with 9 Duomatic Tamping machines, 6 High output capacity CSM tamping machines, 1 High output Express Tamper, 6 Unimat Points & Crossings Tamping Machines, 1 Multi Purpose Tamper, 8 Ballast Cleaning Machines, 2 Shoulder Ballast Cleaning Machines, 5 Ballast Regulating Machines, 8 Dynamic Track Stabilizers, 2 Points & crossing Laying Machines, 2 Track Relaying Train and 8 Utility Track vehicles, thus totaling to 58 machines.

Tamping of 7664 km (worksite & construction including) of track has been done by the High Output tamper and Work Site Tamping machine during 2016-17 in the Rajdhani, Shatabdhi and other high speed and high-density routes on the Railway.

Track relaying to the tune of 66.2 km and Turnout renewal to the tune of 79 Nos. in Open Line by Track Relaying Train and by T-28 respectively were also completed during the year 2016-17.

Deep screening to the tune of 463 km of plain track and 153 Nos. of turnout were completed during this year.

TRACK MONITORING:

Monitoring of track is carried out periodically using RDSO's track recording and Oscillograph cars and portable oscillations monitoring system (OMS 2000) at regular intervals to keep the track in good fettle and safe for passage of trains. 4 nos. of PC based digital OMS system (with LAPTOP) have been procured and put into operation as a part of modernization. Detailed analysis of results of these runs has enabled this Railway to progressively improve the quality of track. Computer program has been developed to generate exception reports to enable field staff for identification of location for planning maintenance.

TRACK MANAGEMENT SYSTEM (TMS)

A web based Track Management System is implemented in Salem division in July 2010 as part of E-Governance and inspections of field staff are made in E-form and computer based monitoring of various track maintenance activities is introduced. Staffs are provided with notebooks up to grass root level and necessary training is imparted.

INDIAN RAILWAYS PROJECTS SANCTIONS AND MANAGEMENT (IRPSM):

A web based IRPSM is implemented to process for works programme for all plan heads including Track Renewals as part of E-Governance. This facilitates access of data at all levels and progress monitoring of various sanctioned works, on line duly eliminating paper-pen culture and speed up the process at various levels.

Progress achieved in the various track improvement works during the year 2016-17 is as follows:-

Ballast collection (lac cum)	6.44
Ballast Insertion (lac cum)	6.20
Deep screening (km)	665.74
USFD Testing (km)	15249
Greasing ERC (km)	4305.3
Anticorrosive painting (km)	1337.66
Laying PSC turnouts (sets)	177.50
Destressing (km)	995.00

Stabilisation of Bad banks:

Progress achieved during the year 2016-17 : 2.30 Kms.

24. Length of Tunnels

Length of Tunnels

Sl. No.	Divn.	Section	Gauge	Tunnel No.	Location	Length in 'm'	Year of Const.	Line/ Unlined	Straight/ Curve	Remarks
1.	MDU	SCT-QLN	MG	1	680/8-681/4	906.78	1901	Lined	ST /Curve	Important
2.	MDU	SCT-QLN	MG	2	693/2-3	102.7	1901	UnLined	Curve	
3.	MDU	SCT-QLN	MG	3	693/4-5	86.3	1901	UnLined	Curve	
4.	MDU	SCT-QLN	MG	4	697/4-5	130.75	1901	UnLined	Curve	
5.	MDU	SCT-QLN	MG	5	703/2-3	144.70	1901	Part Lined	Curve	
6.	SA	MTP-UAM	MG	1	9/10-11	34.44	1897	Lined	Curve	
7.	SA	MTP-UAM	MG	2	11/10-11	19.51	1897	Un Lined	Curve	
8.	SA	MTP-UAM	MG	3	12/3-5	83.52	1897	Un Lined	Curve	
9.	SA	MTP-UAM	MG	4	12/7-8	46.94	1899	Lined	St/Curve	
10.	SA	MTP-UAM	MG	5	14/6-7	19.51	1899	UnLined	Curve	
11.	SA	MTP-UAM	MG	6	14/9-10	79.25	1899	Lined	Curve	
12.	SA	MTP-UAM	MG	7	15/3-4	88.39	1899	Lined	Curve	
13.	SA	MTP-UAM	MG	8	17/8-9	32.92	1899	Un Lined	Curve	
14.	SA	MTP-UAM	MG	9	17/10-11	30.48	1899	Un Lined	Curve	
15.	SA	MTP-UAM	MG	10	19/5-6	20.12	1899	Un Lined	Curve	
16.	SA	MTP-UAM	MG	11	19/11-12	62.48	1899	Un Lined	ST/Curve	
17.	SA	MTP-UAM	MG	12	21/3-4	95.10	1897	Un Lined	Curve	
18.	SA	MTP-UAM	MG	13	23/12-24/1	72.85	1904	Lined	Curve	
19.	SA	MTP-UAM	MG	14	39/9-10	76.20	1907	Un Lined	Straight	
20.	SA	MTP-UAM	MG	15	42/5-5	53.64	1907	Lined	Curve	
21.	SA	MTP-UAM	MG	16	44/7-9	137.46	1908	Lined	ST/ Curve	
22.	PGT	MAQ-PNMB	BG	4	8/8-9/5	589.63	1969	Lined	ST/Curve	Important
23.	PGT	SRR-MAQ	BG	1198 A DN 1198 Up	835/7-9	161.40	1905	Un Lined	Curve	Important
24.	PGT	SRR-MAQ	BG	1198 A DN 1198 Up	835/7-9	175.00	2003	Un Lined	Curve	Important
25.	TVC	ERS-KTYM	BG	1	60/4-5	66.68	1958	Lined	Straight	
26.	TVC	ERS-KTYM	BG	2	60/7-9	80.31	1958	Lined	Straight	
27.	TVC	TVC-NCJ	BG	3	231/15-232/2	204.10	1979	Lined	Straight	Important
28.	TVC	TVC-NCJ	BG	4	250/7-12	200.60	1979	Lined	2.5 deg.	Important
29.	TVC	TVC-NCJ	BG	5	254/8-9	40.10	1979	Lined	2.0.deg	
30.	TVC	TVC-NCJ	BG	6	256/14-257/3	130.05	1979	Lined	1.0 deg	
31.	TVC	TVC-NCJ	BG	7	261/14-16	80.00	1979	Lined	1.0 deg.	

Note : Any Tunnel longer than 150m may be considered as Important as per RDSO/Lucknow letter No.CBS/Imp.Br. & Tunnels dt.05.11.1999

Summary Division wise Tunnels

Sl. No.	Division	Gauge	Length
1	MAS	..	0.00
2	SA	MG	952.81
3	PGT	BG	926.03
4	TVC	BG	801.84
5	TPJ	..	0.00
6	MDU	MG	1371.23
Total Length of tunnels			**4051.91**

25. Details of Lineal Waterways

Gauge	*Broad Gauge*		*Metre Gauge*		*Narrow Gauge*		*Total*	
Year	2015 - 16	**2016-17**	2015 - 16	**2016-17**	2015 - 16	**2016-17**	2015 - 16	**2016-17**
Important	22755.17	22755.17	Nil	Nil	Nil	Nil	22755.17	22755.17
Major	45716.49	45716.49	1178.67	1178.67	Nil	Nil	46895.16	46895.16
Minor	33409.17	33409.17	482.24	482.24	Nil	Nil	33891.41	33891.41
Total ..	101880.83	101880.83	1660.91	1660.91	Nil	Nil	103541.74	103541.74

iii. Number of dwelling units/Staff Quarters (Permanent Structure) constructed and under construction during 2016-17

		1	2	3	4	5	6
Sl.No.	Division Name	Type I	Type II	Type III	Type IV	Type IV	Other
a	Progress	48	112	42	3	...	...
b	Completed	...	4	16	...	...	...

26. Building Activities for the year 2016-17.

(i) Statement showing number of projects, plinth area, estimated cost and value of work done during 2016-17

Sl. No.	Construction Stage	No. of Projects in Units	Total Plinth area in sq.mtrs.	Total floor area in sq. mtrs.	Estimate cost (in lakhs. of ₹.)	Value of the work done during the period (in lakhs of ₹.)	Value of the work done upto the end of the period (in lakhs of ₹.)
1. Residential building							
A. Family quarters.							
a	In progress	200	10689.44	8775.53	1759.63	2439.85	1375.62
b	Completed.	19	952.31	910	291.0	175	291
B. Non family dwelling barracks Etc.,							
a	In progress	1	272	227	31.47	-	-
b	Completed.	-	-	-	-	-	-
2.Industrial building. (Factories, Workshops, etc).							
a	In progress	-	-	-	-	-	-
b	Completed	-	-	-	-	-	-
3. Commercial building (Ware house, offices etc.)							
a	In progress	2	867	801.40	1100.00	303.43	683.33
b	Completed	1	428	407	4.47	29.57	109.47
4. Institutional buildings.							
a	In progress	1	1454.71	1164.71	216.32	-	-
b	Completed	2	440	440	14.00	45.33	138.87
5.Other buildings. (Public Libraries, Amusement buildting etc.)							
a	In progress	5	210.78	200.78	151.43	26.03	26.03
b	Completed	5	120.00	227.00	76.15	39.20	39.20

(ii) Statement showing number addition and alterations of projects, plinth area, estimated cost and value of work done during 2016-2017 on Building by construction type and stages of construction.

I. Residential building							
A. Family Quarters.							
a	In progress	73	6245.54	5797.14	696.71	491.85	805.33
b	Completed	39	3468	108	620.70	345.70	430.00
B. Non family dwelling barracks.							
a	In progress	1	272	227	31.47	-	-
b	Completed	-	-	-	-	-	-
2. Industrial building.							
a	In progress	-	5828	8581	48	42.8	42.8
b	Completed	-	-	-	-	-	-
3. Commercial building.							
a	In progress	2	710	656.40	595.17	290.14	401.04
b	Completed	1	20	17	10	10	10
4. Institutional buildings.							
a	In progress	1	250	225	8.75	7.5	-
b	Completed	2	440	440	14.00	45.33	138.87
5.Other buildings.							
a	In progress	2	170	160	36	20	20
b	Completed	5	120	227	76.15	39.20	39.20

27. Land Management

(a) Tree Plantation

Position for the year 2016–2017 is as under :

(in thousands) *(in Hectares)*

Name of States	Total No. of trees surviving as on 1/4/2016	Total No. of trees planted on Railway land			Total land handed over to Forest Deptt.	
		Departmentally	Forest Deptt.	Total	During the year	Total up-to-date 31/3/2016
Tamil Nadu						
Karnataka						
Kerala	2184.7	148.174	2332.874	..	..	
Andhra Pradesh						
Total	**2184.7**	**148.174**	**2332.874**	..	..	

(b) Encroachments—Position of Encroachments on Railway Land

(i) The position for the year 2016–2017 is as under :

Total No. of encroach-ments as on 31-3-2016	Total No. of encroachments			Total No. of cases pending with Estate Officer at the beginning of the year 31/3/2016	No. of cases filed during the year	No. of cases decided during the year	Total No. of cases pending with Estate Officer as on 31/3/2017
	Added	Removed	Total No. of encroach-ments as on 31/3/2017				
9,012	**0**	**44**	**8,968**	**2,337**	**0**	**44**	**2,293**

(ii) Special Measures taken to remove encroachments :

(c) Position of Licensing Agreement : (Nos.) 2016–17

Item	Total No. of cases	Total No. of cases agree-ments executed
a. G. M. F. ..	..	..
(i) Railway employees ..	7	6
(ii) Outsiders ..	..	..
b. Commercial plots including vending by Comml. Deptt.	16	14
c. Engineering plots ..	93	88
d. Shopping plots (Engg. Deptt.)	29	22
e. Oil plots ..	46	29
f. Others ..	298	283
Total ..	489	442

(d) Engineering Earnings from land resources (in Thousands of Rs.)

Sl. No.	Description	Actual earnings for last three years 2014-15	2015-16	2016–17	Remarks
1.	Licensing of land for G. M. F. .	0.00	0.00	**0.00**	
2.	Sale of Grass rights ..	0.00	0.00	**0.00**	
3.	Sale of Fruit rights ..	0.00	0.00	**0.00**	
4.	Sale of Fishery rights ..	0.00	0.00	**0.00**	
5.	Sale of matured green trees and dry trees.	5360	18800	**40650**	
6.	Licensing of land for shopping purposes including Tehbazari purposes.	137	1030.00	**2760**	
7.	Licensing of land for Oil Companies	80682	10040460	**65520**	
8.	Licensing of land for other purposes	292810	3409740	**6295212.00**	
9.	Way leave facilities & easement rights both along road & rail approaches.	750158	1520560	**8244940**	
10.	Other Misc. Earnings from Land	292810	3400000	**4196808**	
	Total ..	**1421957**	**18390590**	**18876890.00**	

(F) Total Land Area (in hectares)

Total land area at the begining og the year (in Hects)	Area of land acquired during the year	Area of land relinquished during the year	Balance area of land at the end of the year	Area of land under active use				2016–17	
				Under track structures & colonies etc	Afforestation	Comml. Licensing	G. M. F.	Any other use	Area of land lying vacant
1	2	3	4	5	6	7	8	9	10
26882.09	0	0	26882.09	21978.97	1662.14	273.91	85.86	95.12	2725.7

(e) Outstanding Dues (In thousand rupees) 2016–2017

Sl. No.	Item	Position as on 31/3/2016	Accretion during the year (+)	Clearance during the year (–)	**Balance Outstanding as on 31/3/2017**
1.	G. M. F. Scheme	0	0	0.00	..
	(a) Railway Staff	0	0	0.00	**0**
	(b) Outsiders	12.23	0	0.00	**12.23**
	(c) State Governments	..	0	0.00	**0**
2.	Temporary Commercial Licensing	0.550	7446.000	6260.55	**1186.000**
3.	Outstanding due Oil Companies..	55110.000	41048.364	7289.119	**88869.245**
4.	Outstanding dues from Government Department ..	225699.000	161825.048	263398.69	**124125.359**
	Total	**280821.78**	**210325.412**	**276954.36**	**214192.834**

28. Civil Engineering Assets

Sl. No.	*Year*	*Division Name*	*Plinth area of service building (in sq.m.)*	*Plinth area of residential buildings (in Sq. mts.)*	*Linear water way of bridges in mts.*			*Length of over and under bridges in mts.*				*Tonnage of steel girders bridges (Tonne)*	*Tonnage of steel structures other than girder bridges (Tonnes)*	*Number of water Pumping points Nos.*	*Number of Severage treatment plant Nos.*	*Number of ballast quarries Nos.*
					Major	*Minor*	*Total (m)*	*F.O.B.*	*R.O.B.*	*R.U.B.*	*Total (m)*					
1	2	3	4	5	6	7	8 =(6+7)	9	10	11	12(9+10+11)	13	14	15	16	17
1	2015-16	**MAS**	357218.00	470665.30	4830.66	4171.20	9001.86	1372.00	940.00	845.00	156.00	0.00	0.00	77	7	0
	2016-17		256625.68	227691.91	4569.62	2348.32	6917.94	1372.00	940.00	845.00	643.52	-	-	64	2	2
2	2015-16	**SA**	142807.00	126072.00	7210.73	5948.122	13159.65	787.16	1094.00	152.45	2033.68	0.00	0.00	20	5	1
	2016-17		46039.32	127011.34	4461.17	4045.83	6025.00	616.79	1056.10	289.9	1648.72	310.00	0.00	1	0	0
3	2015-16	**PGT**	11204.88	55111.42	9442.56	1291.59	11466.17	808.39	854.86	129.76	1772.01	5134.00	702.00	20	1	1
	2016-17		11204.88	132891.22	14111.97	3479.75	20129.00	1479.83	1293.16	245.36	3018.55	7167.90	702.00	35	7	1
4	2015-16	**TVC**	125985.00	102204.00	13238.00	4100.00	17338.00	1375.00	1999.00	431.00	3805.00	8100.00	4725.00	12	0	0
	2016-17		125985.00	102204.00	13842.64	4523.36	18366.00	2103.32	3564.13	626.21	6293.66	8100.00	4725.00	12	0	0
5	2015-16	**TPJ**	240887.45	377024.16	14083.81	5361.82	19445.63	1351.39	215.86	2055.49	3622.74	247.00	17570.20	20	14	0
	2016-17		240887.50	377024.16	19293.73	7033.19	26326.92	1339.44	271.86	2232.49	3843.79	247.00	17570.20	20	14	0
6	2015-16	**MDU**	233782.79	318320.74	-	-	-	549.06	-	-	-	-	-	31	8	0
	2016-17		103674.616	119621.58	8227.26	6253.04	14480.30	1039.55	1413.95	537.42	3212.00	69149.00	3079.85	53.00	8	1
7	2015-16	**CE/CN/ERS**	782.00	-	580.00	100.00	680.00	75.10	269.60	49.05	393.75	510.615	186.40	-	-	-
	2016-17		2502.00	1290.00	32.29	81.21	113.50	-	85.69	-	85.69	-	93.40	-	-	-
8	2015-16	**CE/CN/MS**	-	-	24.00	45.00	69.00	-	46.00	56.50	102.50	-	-	-	-	-
	2016-17		520.00	-	-	-	-	86.00	235.00	210.00	531.00	-	-	-	-	-
9	2015-16	**MTP**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2016-17		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2015-16		912667.12	1444397.52	49409.76	21018.532	71160.31	6318.10	5419.32	3719.25	12364.74	2101.615	23183.60	180	35	3
	2016-17		787438.996	1087734.81	64538.48	27764.70	92358.66	8036.93	8859.89	19276.9	19276.93	84973.90	26170.25	185	31	4

V. परिवहन/TRANSPORTATION

HIGHLIGHTS OF FREIGHT PERFORMANCE (2016-17)

1. Originating Revenue Earning Traffic:

- Originating Revenue Earning Traffic during the period 2016-17 was **32.35 MT.**
- Out of total **17.616 MT** Coal loading, **14.753 million tonnes** Coal loaded for TNEB, Private Power Houses and Other State Power Houses. (i.e. **84 %)**
- New traffic of Pet Coke of Mangalore Refineries Ltd. loading started from January 2016. **46 Rakes of 0.179 MT** loaded during 2016-17 to various cement plants.
- For the year 2016-17, **imported coal 2.676** Million tonnes loaded from Karaikal Port to Puduchatiram Power Plant. i.e., 138% increased compared with last year loading of 1.123 million tonnes.
- A new Traffic commenced from November 2016 onwards loading Oil from Irumpanam to Numoligarh Refinery Siding (NF Railway 3609 Km). Each rake freight amount **Rs 1.29 Crores**, which is the highest freight for a single rake in Southern Railway.
- Exim Container loading increased by **13%** compared with last year **(i.e., 0.855 MT to 0.967)**
- Automobile loading at MLPM is **142 Rakes** during 2016-17 as against 82 rake during 2015-16 with an increase of 73%
- Indigenous Fertilizer loading for this year is **2.500 MT** as against 2.393 MT last year (Increased by 4 **%**).
- Iron-Ore loading for this year is **0.554 MT** as against 0.071 MT last year (Increased by 680 **%**).

2. Originating Revenue Earning Traffic (In Million Tones) for 2016-17 & 2015-16 compared with Board's BE target for 2016-17 are as under :—

(In Million Tonnes)

Commodity	2015–16 Actual	2016–17 (Target)	**2016–17 (Actual)**	%Varia-tion over Target	%Varia tion over Last year
COAL	18.718	22.320	**17.616**	-21	-6
RMSP	2.447	2.650	**2.773**	+5	+13
IRON & STEEL	0.153	0.150	**0.164**	+9	+7
IRON-ORE	0.071	0.080	**0.554**	+593	+680
CEMENT	1.067	1.200	**1.127**	-6	+6
FOODGRAINS	1.314	1.480	**0.857**	-42	-35
FERTILISER	3.393	3.720	**3.245**	-13	-4
POL	3.654	3.950	**3.488**	-12	-5
CONTAINER	1.500	1.650	**1.525**	-8	+2
OTHERS	1.057	1.300	**1.003**	-23	-5
TOTAL	33.374	38.500	**32.350**	-16	-3

2.1. The Daily average receipt and dispatch position of wagons at Inter-change points are as under. (In 8w Units)

Daily average	2015–16	**2016–17**	% Variation over Last year
Receipts	1605	**1599**	–0.4
Despatch	1611	**1600**	–1

2.2. The daily average TU releases (In 8w Units)

2015–16	**2016–17**	decrease by
1789	**1696**	-5%

2.3. The followng Operating Indices shows improvement during 2016-17 compared to 2016-17 :

	2015–16	**2016–17**	% Var over Last year
EKM/Engine day (Diesel)	369	**390**	**+ 6**
EKM/Engine day (Elect.)	467	**477**	**+ 2**
Holding Diesel Loco	44	**39**	**- 11**
Holding AC. Loco	79	**75**	**- 5**

2.4. Clearance of Traffic from Ports: (April-2016 to March –2017)

There are six major ports in Southern Railway Viz, Chennai Harbour (HOM), Kamarajar Ennore Port (AIPO&AIPS), New Mangalore Port (NMPT), V.O.Chidambaranar Tuticorin Port (VOC TNHP), and Cochin Harbour (CHTS) and Karaikal Port (KIKP).

The traffic originated from various ports during 2016-17 compared to previous year 2015-16 are:

(In Million Tonnes)

Port-wise Loading for the year 2016-17 compared with last year

Name of Port	Year	Coal	Fert	Cont	RMSP	Gyp	I-ore	Others	Total	% Vari over last year
HOM	**16-17**	**0**	**0**	**0.61**	**2.7**	**0**	**0.04**	**0.06**	**3.41**	**+7**
	15-16	0	0.04	0.63	2.45	0	0	0.07	3.19	
ENR	**16-17**	**6.23**							**6.23**	**-27**
	15-16	8.52							8.52	
KIKP	**16-17**	**4.96**	**0.08**				**0.51**	**0.03**	**5.58**	**+82**
	15-16	2.63	0.35		0.02		0.07	0	3.07	
TNHP	**16-17**	**0.16**	**0.45**		**0.03**			**0.02**	**0.66**	**-38**
	15-16	0.81	0.24		0.02	0		0	1.07	
NMPT	**16-17**	**4.66**	**0.22**	**0**	**0.07**	**0.14**		**0.04**	**5.13**	**-1**
	15-16	4.48	0.38	0.01		0.33			5.20	
CHTS	**16-17**	**0.06**		**0.04**					**0.10**	**-47**
	15-16	0.10		0.08				0.01	0.19	
TOTAL	**16-17**	**16.07**	**0.75**	**0.65**	**2.80**	**0.14**	**0.55**	**0.15**	**21.11**	**-1**
	15-16	16.54	1.01	0.72	2.49	0.33	0.07	0.08	21.24	

PUNCTUALITY DETAILS

	2016-17			
	Mail / Exp	Pass (BG)	Pass (MG)	Suburban
Target	95	95	95	95
Total trains reported	98158	135414	2892	228085
RT trains	85339	115109	2869	174510
Trains lost	12819	20305	23	53575
RT%	86.9	85.0	99.2	76.5

13. VOLUME OF TRAFFIC HANDLED AND TRANSPORTATION OUT PUT.

(Figures in thousands)

Sl. No	Description	2015–2016	2016-2017
(a)	No. Passenger Carried (System)..	**854623**	868489
(b)	Passenger Kms. ..	**85395846**	85032901
(c)	Passenger train Kms. *Excl. Deptl. (incl. MEMU, DEMU, EMU	**65713**	66436
(d)	Total Coaching Vehicle Kms. ..	**1995567**	2040130
(e)	Total freight tonne Kms. ..	**15590840**	14379364
(f)	Goods train Kms. Excluding Depart-mental.	**10107**	9655
(g)	Total Wagon Kms. Excluding Dept. & Brake-van.	**479555**	447893
(h)	Total train Kms. (Excl. Deptl.) .. * (incl. Pass & Goods and also MEMU, DEMU, EMU).	**75820**	76091
(i)	Total Engine Kms. ..	**78217**	77329
(j)	Total Gross Tonne Kms. (incl.weight of Engine & Deptl.). and inclu. coaching, goods EMU MEMU DEMU).	**93942805**	93354624

(*) Includes proportion of mixed & Train Kms. of EMU stock as the trains are run and also Rail Car Kms. Converted at the rate of 3 Rail Car Kms. Per train Kms. but excluding departmental.

OPERATING EFFICIENCY

The important efficiency statistics are given below :-

Sl. No.	Description	Broad Gauge		Metre Gauge	
		2015–16	2016–17	**2015–16**	2016–17
I	Wagon Kms. Per wagon day on line (in tems of eight wheelers)	**203.37**	178.09	**0**	0
II	Coaching vehicle Kms. Per Vehicle day :				
	(a) Passenger	**583.03**	522.49	30.76	35.94
	(b) Other Coaching	**392.8**	468.09	**0**	0
III	Percentage of loaded to total Wagon Kms.	**59**	60	**0**	0
IV	Speed of all Goods trains (Kms. Per hour)	**28.8**	28.9	0	0
V	Average starting wagon load (Tonnes)	**61.6**	61.2	**0**	0
VI	Loads of Goods trains (Tonnes)				
	(a) Net or freight load	**1542**	1488	**0**	0
	(b) Gross load (incl. Weight of engine)	**2915**	2838	**0**	0
	(c) Gross load (Excl. Weight of engine)	**2729**	2656	**0**	0
VII	Net tonne km. Per wagon day on line	**7805**	5713	**0**	0
VIII	Net tonne km. Per locomotive day in use	**294355**	246482	**0**	0
IX	Net tonne Km. per engine hour	16712	15807	0	0
X	Gross tonne Km. Per engine hour	78522	81058	0	0

Note :—* All Wagon related items are in terms of 8 wheelers.

15. Originating Tonnage under plan heads:-

The break-up of freight traffic under the Plan head in terms of Originating tonnes handled during the current year compared with the previous years is as follows :–

(Figures in Millions)

Sl. No	Tonnage Originating	2013-14	2014-15	2015-16	**2016-17**
1	Coal				
	(i) Coal for Railway use ..	0.00	0.00	0.00	**0.00**
	(ii) Coal for Steel Plant ..	0.67	2.23	0.79	**1.01**
	(iii) Coal for other use ..	22.84	17.86	17.93	**16.61**
	(iv) Total Coal ..	23.51	20.09	18.72	**17.62**
2	Raw materials for steel plants (Other than coal).	3.19	3.3	2.5	**3.33**
3	Finished products from steel plants.	0.00	0.00	0.00	**0.00**
4	Cement ..	3.21	2.7	1.3	**1.10**
5	Export Ores:				
	(i) Iron Ores ..	0.00	0.00	0.00	**0.00**
	(ii) Manganese Ore ..	0.00	0.00	0.00	**0.00**
6	Miscellaneous Goods :				
	(i) Railway Materials ..	0.35	0.32	0.17	**0.46**
	(ii) Foodgrains ..	2.01	1.48	1.31	**0.86**
	(iii) Mineral Oils ..	3.30	3.46	3.65	**3.48**
	(iv) Fertilizers ..	3.12	3.47	3.39	**3.14**
	(v) Other Goods ..	3.95	4.55	2.75	**2.52**
	(vi) Total Misc. Goods ..	12.73	13.28	11.27	**10.46**
7	Total All Traffic (Revenue & Non-Revenue) ..	42.64	39.37	33.49	**32.51**

10. Wagon Position and Wagon Usages

The supply of wagons and loading in the current year compared to previous year is given below—(in terms of daily average number of wagons) :—

Sl. No.	Description	Broad Gauge		Metre Gauge	
		2015–16	2016–17	**2015–16**	2016–17
(a)	No. of wagons owned (in terms of 8 wheelers)	9263	9178	0	0
(b)	Inter-change debit/credit balance	n/a	n/a	n/a	n/a
(c)	Average wagon holding (in terms of 8 wheelers)	**6442**	6870	**0**	0
(d)	No. of wagons loaded :				
	i. Orginating	**1408**	1372	**0**	0
	ii. Transhipment	**0**	0	**0**	0
	iii. Repacked	**0**	0	**0**	0
	iv. Coaching traffic	**0**	0	**0**	0
	v. Total loading	**1408**	1372	**0**	0
(e)	No. of loaded wagons received daily from other Rlys.	**1110**	1099	**0**	0
(f)	Turn round of wagons (on line)	**2.20**	2.43	**0**	0

Note :—* All Wagon related items are in terms of 8 wheelers.n/a-not available

11. Wagons on Line

(a) The actual No. of wagons for the last years was as under :

(Figures in units)

Gauge	**2015–16**	2016–17	% variation over previous year
Broad	**9,488**	9,414	–0.79
Metre	**0**	0	0.00
Total	**9,488**	9,414	– 0.79

(b) The average No. of wagons on line pooled and non-pooled as under (in terms of 8-wheelers).

Gauge	2015–16	2016–17	Percentage variation over previous year
Broad	**6,442**	6,870	-6.23
Metre	**0**	0	0.00

(c) The No. of wagons loaded and transhipped at break of gauge junctions excluding those booked at coaching rates and wagons into which Goods were transhipped or repacked in the same gauge during the current year as compared with previous year were as under :—

Gauge	2015–16	2016–17	Percentage variation over previous year
Broad	**5,15491**	5,40,073	-4.55
Metre	**0**	0	0.00

13 STATEMENT OF NET TONNE KMS. (CARRIED BASIS)

(Figures in Millions)

Particulars	2015–2016	2016–2017
I. Coal		
(i) Coal for Railway Use ..	**0**	00
(ii) Coal for Steel Plants ..	**339.66**	344.32
(iii) Coal for Other Use ..	**4,278.05**	3,527.75
(iv) Total Coal ..	**4,617.71**	3,872.07
II. Raw Materials for Steel Plants (Other than Coal).	**708.34**	739.76
III. Finished products from Steel Plants	**625.82**	933.30
IV. Cement ..	**1,892.08**	1,591.76
V. Export Ore		
(i) Iron Ore ..	**0**	0
(ii) Manganese Ores ..	**0**	0
VI. Miscellaneous Goods		
(i) Railway Material ..	**17.2**	44.25
(ii) Foodgrains ..	**3,534.05**	2,958.41
(iii) Mineral Oil ..	**1,276.78**	1,155.72
(iv) Fertilizer ..	**1,503.23**	1,322.95
(v) Other Goods ..	**1,415.63**	1,181.68
(vi) Total Misc. Goods ..	**7,746.89**	7,715.35
(vii) Total all traffic ..	**15,590.84**	14,379.36

14. ENGINE USAGE

The more important statistics of engine usage are given below :—

1. Engine Kms. incl. shunting—(Allotment basis)

(Figures in thousands)

Particulars	Current Year 2015–16	Previous Year 2016–17	% variation over previous year
(a) Passenger			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**32,062**	32,604	1.69
Dsl. Hyd. ..	0	0	00
Elec. ..	**47,911**	52,000	8.53
Total ..	**79,972**	84,604	5.79
M. G. Steam ..	**19**	19	0.00
Dsl. Elec. ..	**55**	55	0.00
Dsl. Hyd. ..	0	0	0.00
Elec. ..	0	0	0.00
Total ..	**74**	74	0.00
(b) Goods			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**7,553**	6,785	-10.17
Dsl. Hyd. ..	**0**	0	0.00
Elec. ..	**20,573**	22,373	8.75
Total ..	**28,126**	29,158	3.67
M. G. Steam ..	0	0	0
Dsl. Elec. ..	**0**	0	0.00
Dsl. Hyd. ..	0	0	0
Elec. ..	0	0	0
Total ..	**0**	0	0.00
(c) Mixed			
B. G. Steam ..	**0**	0	0
Dsl. Elec. ..	**0**	0	0
Dsl. Hyd. ..	**0**	0	0
Elec. ..	**0**	0	0
Total ..	**0**	0	0
M. G. Steam ..	**0**	0	0
Dsl. Elec. ..	**0**	0	0
Dsl. Hyd. ..	**0**	0	0
Elec. ..	**0**	0	0
Total ..	**0**	0	0
(d) Total EKMs incl. Deptl.			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**46,219**	45,475	–1.61
Dsl. Hyd. ..	**15**	0	-100.00
Elec. ..	**69,544**	73,207	5.27
Total ..	**1,15,778**	1,18,682	2.51
M. G. Steam ..	**27**	27	0.00
Dsl. Elec. ..	**61**	64	4.92
Dsl. Hyd. ..	0	0	0.00
Elec. ..	0	0	0.00
Total ..	**88**	91	2.25

II. Engine Kms. per day per engine in use :

(a) Passenger Service			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**547**	495	–9.51
Dsl. Hyd. ..	0	0	0.00
Elec. ..	**753**	782	3.85
Combined ..	@	@	..
M. G. Steam ..	**29**	28	0.00
Dsl. Elec. ..	**47**	52	10.64
Dsl. Hyd. ..	0	0	0.00
Elec. ..	0	0	0.00
Combined ..	@	@	..
(b) Goods Service			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**264**	233	-11.74
Dsl. Hyd. ..	**0**	0	0.00
Elec. ..	**440**	445	1.14
Combined ..	@	@	..
M. G. Steam ..	**0**	0	0.00
Dsl. Elec. ..	**0**	0	0.00
Dsl. Hyd. ..	**0**	0	0.00
Elec. ..	0	0	0.00
Combined ..	@	@	0.00

III. Engine Kms. per day per engine on line (All services) :

(Figures in thousands)

Particulars	*Current Year 2015–16*	*Previous Year 2016–17*	*% variation over previous year*
(a) Passenger			
B. G. Steam ..	**0**	0	0.00
Dsl.Elec. ..	**361**	358	0.84
Dsl. Hyd. ..	**13**	40	0.00
Elec. ..	**430**	445	–3.37
Combined ..	@	@	..
M. G. Steam ..	**9**	10	-10.00
Dsl. Elec. ..	**34**	42	-19.05
Dsl. Hyd. ..	**0**	0	0.00
Elec. ..	**0**	0	0.00
Combined ..	@	@	..

@ As the method for compilation of Engine Kms. per day per engine in use/on line is different for different tractions the data for combined traction have not been shown.

16. PUNCTUALITY OF PASSENGER TRAINS

The punctuality performance of passenger carrying trains on the Broad/Gauges during the current year and previous year is given below :

	Particulars	**2015–16**	2016–17
B.G.	Mail & Express	**88.5**	86.9
	Passenger	**85.0**	80.1
	Suburban (EMU)	**73.2**	81.2
M.G.	Mail & Express	**0.0**	0.0
	Passenger	**98.4**	98.6
	Suburban (EMU)	0.0	0.0

GOODS EARNINGS UNDER IMPORTANT HEADS DURING 2016–2017

Sl. No.	Particulars	Tonnes Carried (in millions)		Earnings (in lakhs of ₹)	
		2015–16	2016–17	2015–16	2016–17
	Revenue Earnings Traffic				
1.	Products of Agriculture	9.571	7.654	52,591.21	43,841.54
2.	Animals & Products of animals.	..	..	..	..
3.	Products of mines	24.524	23.085	1,11,517.56	99,561.99
4.	Mineral oil	4.651	4.035	26,915.53	24,968.51
5.	Products of Forests	0.146	0.151	625.95	616.16
6.	Manufactures	10.901	10.674	47,096.09	47,187.02
7.	Others	8.233	8.950	36,856.16	39,680.41
8.	Total Revenue Traffic Excel Misc. Goods Earnings.	**58.026**	**54.549**	**2,75,602.60**	**2,55,855.63**
9.	Non-Revenue Traffic Railway Coal				
	a. For home line	..	..	..	..
	b. For other Govt. Railways.	..	..	..	..
	c. Diesel oil booked by Companies for Rlys.	..	..	..	..
10.	General Stores & Materials for Railway.				
	a. For home line (1001+1004).	0.117	0.146	..	228.92
	b. For other Govt. Railways.	..	..	..	..
11.	Total Non-Revenue traffic.	0.117	0.146	..	228.92
12.	Grand Total	**58.143**	**54.695**	**2,75,602.60**	**2,56,084.55**

18. WATER SUPPLY

Sl. No.	Division	Name of Work	*Estimate cost ₹ in lakhs.*
I.	**Works completed**		
a	**Works costing more than ₹ 5 lakhs each**		
1.	1	Construction of GLR at TMV & CGL.	80.00
	2	Hydrant Pipe Line	56.00
	3	Repairs to earnings work pipe line in BBQ Carriage Yard and Chennai Central - augmentation of water supply arrangements and provision of deep bore well at ADEN/II/B/MAS sub division.	170.00
	4	Transporation of supply of portable drinking water.	127.0
	5	MCPT section work	10.00
2.	SA	..	Nil
3	PGT	..	Nil
4.	TVC	..	Nil
5.	TPJ	..	Nil
6.	MDU	TEN/RVS Section – Left over misc. works such as water taps. Provision of shifting benches etc.	87.37209
		ASD - Replacing dmage pipe line in TBR and ASD station.	
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	FRP over head tank at Tindivanam.	50.00
9.	MTP	..	Nil
(b)	**Works costing less than ₹ 5 lakhs each**		
1.	MAS	..	Nil
2.	SA	..	Nil
3.	PGT	..	Nil
4.	TVC	..	Nil
5.	TPJ	..	Nil
6.	MDU	MPA - Provision of bore well at MPA colony.	0.80
		DG - Provision of bore well at South colony DG.	0.75
		KQN - Augmentation of water supply at KQN station.	0.80
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	..	Nil
9.	MTP	..	Nil

II. Works in Progress

(a) Works costing more than ₹ 5 lakhs each

Sl. No.	Division	Name of Work	*Estimate cost ₹ in lakhs.*
1.	MAS	1. Borewell at CGL	30.00
		2. PF water pipe line	43.00
		3. PF taps and toilests	82.00
		4. Water supply	54.00
		5. Repairs to existing GLR at AJJ, PUT.	63.46
		6. Lorry water supply by contractor.	17.5
		7. Repairs to BBQ carriage watering hydrants pipe line.	10.00 2.00
		8. Provision of deep bore well at ADEN/II/B/MAS sub division.	89.52
		9. Supply of drinking water by tanks mounted on lorry for railway colonies and stations in at JTJ Phase II.	38.00
		10. Repairs to water supply arrangements at PER & PT colony.	21.24
		11. PER - Repairs and maintenance of Staff Quarters and water supply distribution system in PER & PT colony.	5.00
		12. Transportation and supply portable drinking water.	38.27
		13. Provision of deep bore wells in MS-SG section.	24.57
2.	SA	Watering facilities in the stabling lines between 9, 10, 11 & 12 in PF No. 6 at CBE PF No. 1 at MTP. ADEN/PTJ-Sub-division maintenance of water supply arrangements in SSE/W/PTJ section for a period of two years.	74.73
3.	PGT	-	
4.	TVC	Ernakulam Coaching Complex - Watering arrangements by laying 200mm dia pipe from Muvatupuzha river near Piravam Road station.	895.00
		CGV, ETM, TRVL-Improvements to water supply arrangements.	24.00
		ALLP-Repairs to water hydrants.	9.33
5.	TPJ	Improvements and augmentation to the existing water supply recycling plant at BG coaching Complex TPJ.	54.65
6.	MDU	RMM 1 - Repairs to ROD pipe line.	96.84
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	..	Nil
9.	MTP	..	Nil
(b) Works costing less than ₹ 5 lakhs each			
1.	MAS	..	Nil
2.	SA	..	Nil
3.	PGT	..	Nil
4.	TVC	..	Nil
5.	TPJ	..	Nil
6.	MDU	..	0.70
		ODC - Provision of bore well at ODC colony.	
		PLNI - Provision of bore well at PLNI colony.	0.8
7.	CE/CN/ERS	..	Nil
8.	CE/CN/MS	..	Nil
9.	MTP	..	Nil

23. ACTION TAKEN TO MAINTAIN CLEANLINESS AT STATION PREMISES.

A1, A & B Category stations : Medical Department—76 Stations.

Comprehensive cleaning contracts, inclusive of mechanized cleaning of stations/tracks, rag picking and garbage disposals have been awarded at 64 A1, A & B Category stations by Medical Department and 9 A1 Category stations by EnHM Department Cleanliness at remaining stations are managed by departmentally.

'C' Category stations: Commercial Deapartment—75 Stations.

Cleaning contracts exist at 31 stations. Tenders are under process for 30 stations. Cleaning activity at remaining stations is managed presently with imprest cash provided exclusively for this purpose. Action has also been initiated to float tenders at remaining stations.

'D, E & F' category stations : Traffic Department

The cleaning activity at 'D, E & F' category stations is being carried out duly utilizing the imprest cash given exclusively for this purpose to SM's/CNCs/CCIs concerned.

As per instructions contained in Commercial Circular No.47 of 2014 Divisions have also been instructed to consider the option of outsourcing the cleaning work of D and E category stations in addition to the existing arrangement at D and E category stations.

In terms of Commercia Circular No 51 of 2014, three A1 category stations - Chennai Central, Chennai Egmore and Thiruvananthapuram Central Stations have been identified for integrated cleanliness contract.

Further, in accordance with the instructions contained in the Commercial Circular No. 76 of 2012 relating to Indian Railway (Penalties for activities affecting cleanliness at railway premises) Rules, 2012, (Gazette Notification GSR 846 (E) dated 26th Naovember 2012, fines are being collected from those indulging in activites affecting the cleanliness and hygiene of railway premises. An amount of Rs. 2,85,000/ - has been realized from 1403 cases during 2016–17.

Under "Swachh Bharat Mission", Action plan has been drawn focusing on vital aspects such as Tree Plantation, removal of encroachments, maintaining clean toilets at stations, painting of road kerbs, cleaning posters, repairing street lights, improving drainage, improving signage, whitewashing of buildings, eyc. In this regard, Special Drives are conducted every month.

During 2016–17, Special drives have been conducted at 697 stations. During the drive, public Awareness campaigns have also been organized with the assistance of NGOs, Scouts & Guides Civic bodies, Students fro Schools/Colleges to create awareness among the travelling public. Display through CCTV is also being done regarding Penal Provisions under Indian Railways (Penalties for activities affecting cleanliness at Railway Premises) Rules, 2012. The Clening activities are also monitored through ISS/CCTVs at important Stations.

24. SPECIFIC FUEL CONSUMPTION

Specific Fuel Consumption–Brief Remarks for the variation–Period : April 2016 to March 2017 compared with April 2015 to March 2016.

Service	Apr. 14 to Mar. 15	**Apr. 16 to Mar. 17**	Variation	Remarks
Broad Gauge Steam Traction	No service			
METRE GAUGE—STEAM TRACTION				
Pass. and Prop. of Mixed.	0.0	0.0	0.0	At present the steam locos operated by using coal are utilised for departmental service only. and peri odical steam presure test.
Goods and Prop. of Mixed	No Service	No Service	No Service	
DIESEL TRACTION—BROAD GAUGE				
Pass. and prop of Mixed. GTKM	4.16	**4.17**	(+) 0.01	GM/ST is not up date the other zones GTKM Correctly.
Goods and prop. of Mixed.	2.43	**2.46**	(+) 0.03	GM/ST is not up date the other zones GTKM Correctly and Reduced in Audited GTKM.
DIESEL TRACTION—METRE GAUGE				
Pass. and prop of Mixed.	28.86	**28.40**	(-) 00.15	NM Railway Heritage Passenger Services only.
Goods and prop. mixed.	Nil	**Nil**	Nil	

–MG Diesel closed on 19-10-2012 Except N.M. Railway.

15. STATEMENT No. 26(a)

SHED WISE AND FIELD WISE COAL SUPPLIED (IN TONNES)FOR 2016–2017

Field	Grade "A"	Grade "B"	Grade "C"	Grade "D"	Non Graded	Total
Bentgal & Bihar Coal	0	**0**	—	—	—	**0**
Singareni Coal	—	—	—	—	—	—
MPVP Coal	—	—	—	—	—	—
Total	0	**0**	—	—	—	**0**

NO NEW PURCHASE OF COAL FOR THE YEAR 2016-2017

Grade wise Coal Consumption (in tonnes) for Locomotive and Non-Locomotive purposes

Kind of Coal	Loco-Purposes		Non-Loco Purposes		Total	
	Apr.–15 to Mar–16	**Apr.–16 to Mar–17**	Apr.-15 to Mar–16	**Apr.–16 to Mar–17**	Apr.–15 to Mar–16	**Apr.–16 to Mar–17**
Grade"A"	12	4	—	—	12	4
Grade"B"	0	0	—	—	0	0
Grade"C"	—	—	—	—	—	—
Grade"D"	—	—	—	—	—	—
Non Graded	—	—	—	—	—	—
Wood (in terms of Coal)	—	—	—	—	—	—
Salvge	—	—	—	—	—	—
Coke (in terms of Coal)	—	—	39	—	39	—
Total	12	4	39	49	51	4

ACTION PLAN TO IMPROVE FUEL EFFICIENCY

Action by Diesel Sheds

1. Introduces the REMLOT and APU in the locos to monitor the detentions in the enroute more than thirty minutes and to shut down the locos.
2. Identifying locos of high SFC (during load box test) and taking immediate action to reduce the fuel consumption.

General

1. Monitoring of CTRs and shunting vouchers dispatch from crew booking points to GM/ST for correct account of Service wise performance and shuntinng.
2. Precise allocation and accountal of fuel issues to different services *e.g.* Passenger, goods, department and shunting etc.
3. Upgrading the fuel module in computer for correct accountal.
4. CRIS also introduced one programmer (FMS) to monitor the HSD issues on daily basis.

Action by Division

1. Periodical checking of fuel installations for quality and accountability.
2. Shutting down of diesel locos when detention is likely to be more than 30 minutes and this shouls be ensured by divisional Power Control.
3. Identifying Loco Pilots consuming more fuel than normal and their intensive Monitoring by Loco Inspectors.
4. Loco pilots to be categorized based on fuel efficiency/driving efficiency and loco pilots who are Poor on both to be sent for training on simulators at DTTC/GOC.
5. Rear loco multiple unit should be shut shut down when it is not required as per train load.

26. INPUT/OUTPUT RATIO

Particulars	2015-2016	2016-2017	Variation % over orevicus vear
1. **INPUT**			
(I) No. of Goods Engines incl. proportion of mixed engine to be distributed to Passenger & Goods service in ratio of mixed hrs. equated interms of steam locomotives by taking main line Diesel/Electric equivalent to 2.5 Steam and Dsl. and Elec. Shunter to 1.5 steam.	399.4	370.1	7.91
(ii) Wagon holdings in terms of 8-wheelers.	6442	6870	-6.23
(iii) Additional capital investments on line capacity & terminal capacity (₹ in lakhs).	N/A	N/A	N/A
2. **OUTPUT**			
(I) GTKMs. incl. Wt. of Engines (in lakhs) on ownership basis as per train documents Goods & prop. of mixed.	5,56,644	5,14,093	8.28
(ii) NTKMs (in lakhs) on ownership basis as per train documents Goods & prop. of mixed.	3,06,038	2,88,111	6.22
(iii) Average daily loading incl. Transhipment at BG, MG & NG (Revenue & Non-Revenue).	1,408	1,372	2.62
Average daily loaded receipts.	1,110	1,099	1.00
Total loading and loaded receipts.	2,518	2,471	1.90
AVERAGE			
Wagon Kms. Per wagon day on line.			
BROAD GAUGE	203.4	178.1	14.20
METRE GAUGE	**0.00**	0.00	0.00

VI. वाणिज्य/COMMERCIAL

1. Revision of Passenger Fares :

Revision of Child fare :–

Based on the commercial Circular No.71 of 2015 dated 02.12.2015, the Advance rates notification for Rate Advice No.12 of 2015 (coaching No.61/2015) has been issued. With effect from 10.04.2016 the following changes are made in the Child passenger fares.

1. In the case of children of age 5 years and under 12 yeras for whom full berth/seat (in reserved class) is aought at the time of reservation, full adult fare for such child will be charged. However, if berth/seat is not sought for the children of age 5 years and under 12 years of age at the time of reservation, then half of adult fare will continue to be charged subject to minimum distance for charge.

2. There is no change with regard to child fare for unreserved class.

3. Necessary changes carried in the reservation form so that he passenger can mark their option for requirement of berth/seat for child or not.

II. Levy of Krishi Kalyan Cess on the service tax leviable on tranportation of passengers by rail :–

1. Based on the commercial Circular No.29 of 2016 dated 18.05.2016, the advance rates Notification for Rate Advice No.5 of 2016 (coaching No.21/2016) has been issued. With effect from 01.16.2016 Krishi Kalyan Cess @ 0.5% shall be levied on the value of all taxable services.

ii "Service Tax of 14%, Awachh Bharat Cess of 0.5% and Krishi Kalyan Cess of 0.5% are chargeable on 30% of toatal passenger fare equivalent to 4.50% of the total fare in first class and all AC classes"

The increase in service tax shall be applicable w.e.f. 1.6.2016 on the tickets issued/booking made on or after 01.6.2016. Service Tax increase is not leviable on tickets issued prior to 01.06.2016.

iii. Introduction of Flexi Fare system for Rajdhani/Duronto and Stabdi trains.

Based on the commercial Circular No. 46 of 2016 dated 07.09.2016, the Advance rates notification for Rate Advice No.12 of 2016 (coaching No. 43/2016) has been issued. With effect from 09.09.2016, Ministry of Railways have decided to introduce the flexi fare system for Rajdhani/ Duronto and Stabdi trains as per details below :–

1. The base fare for Rajdhani/Duronto and Stabdi class of trains will be on flexi fare system.

2 (a) The base fare increase by 10% with every 10% of berths sold subject to a prescribed ceiling limit as indicate in the table below. There will be no change in the existing fare for 1 AC and EC class of travel. In the tables given below 'X' stands for the present base fare.

Fare Structure for Rajdhani/Duronto category of Trains

Charges of berths	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
2S	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5x	1.5X
SL	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5x	1.5X
3A	1X	1.1X	1.2X	1.3X	1.4X	1.4X	1.4X	1.4X	1.4x	1.4X
2A	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5x	1.5X
1A	1X	1X	1X	1X	1X	1X	1X	1X	1X	1X
X = Base Fare										

Charges of berths	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
CC	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5x	1.5X
EC	1X	1X	1X	1X	1X	1X	1X	1X	1X	1X
X = Base Fare										

(b) Vacant berths left at time of charting would be offered for current booking Tickets under current booking shall be sold at the last price sold for that class and other supplementary charges like reservation fee, superfast charges, catering charges, service tax etc., as applicable is levied in full.

(c) The information should also be displayed to the passenger during the booking in case the fare of lower class becomes higher than the higher class to exercise option to travel by the higher class.

(d) The last price for every class of tickets for the particular train should be printed in the reservation chart for the puropose of charging difference of fare in the train or charging the passengers of the train without ticket etc.

3. The operation of various quotas available in these category of Trains shall be as under :–

Tatakal Quota : The present limit of berths set aside for Tatkal quota in these trains shall be operated as per the existing guidelines. However, no additional charges as Tatkal charges will be levied. The berths assigned under the tatkal quota shall be booked at the rate of 1.5 times of the base fare for all classes (2S, SL, 2A, 3A and CC) except 1 AC and EC. Other supplenmentary charges like reservation fee, superfast charges, catering charges, service tax etc., as applicable will be levied in full.

(a) There is no premium Tatkal Quota in these train services.

4. **Concession :** Normal concession as applicable for respective concessional ticket will be admissible on the base fare of the ticket at each stage as per the table above.

5. **Refund Rules :** There will be no change in the existing refund rules.

6. **Other Charges :** There is no change in charges for reservation fee, superfast surchgarge etc. Such charges, whereever applicable, shall continue to be levied additionally as per existing instructions.

7. Service tax will continue to be levied as applicable as per instructions issued in this regard.

8. All other rules and conditions pertaining to the above category of trains shall be continued without any charge.

IV. Fare structure of Humsafar train :–

Based on Commercial No. 72 of 2016 dated 14.12.2016 the Advance rates notification for Rate Advice No. 12 of 2016 (coaching No. 63/2016) has been issued. Board has decided to run Humsafar train with fully Air conditioned third AC service having GPS based passenger information system, Passenger announcement system, fire and smoke detection and supperssion system,

CCTVs, comfortable seats, mobile and laptop charging points, integrated Braille display, LCD display above compartment doors in the aisle, Fire retardant curtains etc. The following two trains are running over this railway.

1. Train No. 22498 running between TPJ–SGNR from 02.03.2017
2. Train No. 22919 running between MAS–ADI from 10.05.2017.

2. The fare structure of this train which will have AC 3 tier will be as follows :–

2.1 Out of toatal accommondation, 10% of total accommondation shall be earmarked as Tatkal quota. There is also provision for HO quota/duty pass quota in this train therefore out of balance berths after 10% Tatkal quota and HO/duty pass quota, the first block of 50% shall be booked on base fare for Humsafar train and there after a 10% increase for every 10% increase in the passenger block for the remaining 50%.

Base of AC 3 tier of Humsafar train shall be 1.15 times of the base fare of AC 3 tier superfast Mail/Express trains, which shall be applicable for the first passenger block of 50% and there after a 10% increase for every 10% increase in the passenger block for the remaining 50%. Fare of Tatkal quota shall be 1.5 times of Humsafar basic fares. Other charges will be levied separately.

This sample details charging fare of the Humsafar train is as under :–

Distance (in Kms.)	AC 3 Tier		Fare (in)					
	Mail/Exp.	Humsafar	First	10%	10%	10%	10%	10%
	1	A=1x1.15	Ax1	Ax1.1	Ax1.2	Ax1.3	Ax1.4	Ax1.5
Basic Fare	960	1104	1104	1214	1325	1435	1546	1656

2.2 Other charges like reservation fee, superfast surcharge, service tax etc. as applicable shall be levied separately. Catering charge shall be optional for meals. The fare of Humsafar is inclusive of bedroll charges.

2.3 The advance reservation period (AR) will be 120 days.

2.4 Normal child fare rules will apply. No concessional tickets and tickets against Free complimentary passes which are not reimbursed shall be admissible in this train.

2.5 Booking of tickets against Passes issued to Member of Parliments and Rail Travel coupons (RTCs) issued to MLA/MLCs shall be permissible as they are fully reimbursed.

2.6 The eligibility of Privilege pass/PTO for Railway employees shall be on par with eligibility in Rajdhani trains.

2.7 Defence warrants will be eligible for exchange as per the actual fare.

3.0 Vacant berths left after first charting would be offered for current booking Tickets under current booking shall be sold at the last price sold for that class with 10% discount on last price and other suoplementary charges like reservation fee, superfast charges, service tax etc. as applicable shall be levied in full.

3.1 The last price of tickets for the train should be printed in the reservation chart for the purpose of charging of difference of fare in the train of charging the passengers of the train without ticket etc, 10% discount in the last price shall also be applicable for allotment of vacant berths in the train by TTEs.

3.2 Refund Rules : Normal cancellation and refund rule shall apply.

V Discounted fare in Shatabdi trains on Mysore-Bangalore and Ajmer-Jaipur sections.

Based on Commercial circular No. 66 of 2016 dated 14.12.2016, the Advance rates notification for Rate Advice No. 12 of 2016 (coaching No. 64/2016) has been issued. Ministry of Railways have decided to give discounted fare in AC chair car of Shatabdi trains running over Mysore-Bangalore and Ajmer-Jaipur sections with effect from 15.12.2016 on trial basis for six months and further extended for another six months.

2. The details of the existing and revised fare are as follows :–

(i) (a) 12015 New Delhi-Ajmer Shatabdi Express between Jaipur and Ajmer :–

Total Fare	Existing fare	Revised fare
Basic fare	251	202
Catering charges inclusive of service tax.	0	0
Reservation charges	40	40
Superfast charges	45	45
Service tax	15	13
Total amount	351 (rounded off to Rs. 355)	300

(b) 12015 New Delhi-Ajmer Shatabdi Express between Jaipur and Kishangarh :

Total Fare	Existing fare	Revised fare
Basic fare	229	202
Catering charges inclusive of service tax.	0	0
Reservation charges	40	40
Superfast charges	45	45
Service tax	14	13
Total amount	328 (rounded off to Rs. 330)	300

(ii) (a) 12016 Ajmer-New Delhi Shatabdi Express between Ajmer and Jaipur :

Total Fare	Existing fare	Revised fare
Basic fare	251	159
Catering charges inclusive of service tax.	45	45
Reservation charges	40	40
Superfast charges	45	45
Service tax	15	11
Total amount	396 (rounded off to Rs. 400)	300

(b) 12016 Ajmer-New Delhi Shatabdi Express between Kishangarh and Jaipur :

Total Fare	Existing fare	Revised fare
Basic fare	229	159
Catering charges inclusive of	45	45
service tax. Reservation charges	40	40
Superfast charges	45	45
Service tax	14	11
Total amount	373 (rounded off to Rs. 375)	300

(ii) 12007 Chennai Central - Mysore Shatabdi Express betweenBangalore City and Mysore :

Total Fare	Existing fare	Revised fare
Basic fare	257	125
Catering charges inclusive of	81	81
service tax. Reservation charges	40	40
Superfast charges	45	45
Service tax	15	9
Total amount	438 (rounded off to Rs. 440)	300

(ii) 12008 Mysore - Chennai Central Shatabdi Express between Mysore and Bangalore City :

Total Fare	Existing fare	Revised fare
Basic fare	257	192
Catering charges inclusive of service tax.	11	11
Reservation charges	40	40
Superfast charges	45	45
Service tax	15	12
Total amount	368 (rounded off to Rs. 370)	300

* Other charges like mela surcharge etc. If applicable shall be levied separately.

2. Flexi fare system shall not be applicable for the sections of these trains.

3. No concession/discount/rebate shall be admissible on the above revised fare. Since in chair car of Shatabdi trains seat option is must for child of age 5 years and above and of below 12 years and full fare ticket is issued, therefore child fare shall be issued on the adult fare as per above revised fare table.

4. Concessional tickets as per rule shall be issued on the existing fare as above not on the revised fare.NTickets on pass shall be issued as per rule. Tickets on PTOs shall be issued as per rule based on the existing fare as above not on the revised fare. All the fully reimbursable tickets shall be issued on the revised fare.

7. Normal cancellation and refund rule shall apply.

8. Tatkal charges shall not be levied on the above revised fare.

VI. 10% rebate in the basic fare on the vacant berths/seats after preparation of first chart on an experimental basis for six months in Rajdhani/Duronto/Shatabdi trains :–

Based on Commercial circular No. 68 & 79 of 2016 dated 08.12.2016 & 28.12.2016 the Adavnce rates Notification for Rate Advise No. 12 of 2016 (coaching No. 65 & 66/2016) has been issued. Ministry of Railways have decided the following to be implemented with effect from 20.12.2016.

The detailed provisions as under :–

1.1 10% rebate shall be applicable on the base fare of last ticket sold for a particular class and train just before preparation of first chart.

1.2 Reservation fee and superfast charges as applicable shall be levied in full & service tax etc. as applicable shall be levied.

1.3 The last sold price of the ticket for the train should be printed on the reservation chart for the purpose of charging of difference of fare in the train or charging the passengers of the train without ticket etc.

1.4 10% discount shall also be applicable for allotment of vacant berths (due to non-turned up passengers) in the train by TTEs.

2. Reduction in the Tatkal quota in Rajdhani/Duronto/ Shatabdi Trains.

2.1 To begin with, the Tatkal quota should be reduced to 10% of the total classwise accommodation.

2.2 Thereafter, fortnightly review of utilization of quota may be undertyaken by CCMs of zonal Railways and based on its utilization, Tatkal quota may be increased upto a maximum of 30% of toatal classwise accommodation in the train.

2.3 Within ARP period, the berth shifted from Tatkal quota to normal quota shall be redistributed on pro-rata basis within the remaining slabs for which booking is due. Such berths shall not be booked below the fare on which last ticket was booked just before implementation of above changes.

2.4 The above changes should be implemented, with effect from 20.12.2016 to 31.05.2017.

With effect from 01.01.2017 on an experimental basis for six months, 10% rebate in the basic fare on the vacant berths/ seats after preparation of first chart in Rajdhani/Duronto/ Shatbdi trains, also be applicable in the reserved class of all other trains and further extended for another six months.

VII. Introduction of Antyodaya Express Train :–

Based Commercial Circular No. 19 of 2017 the Advance Rates notification for Rate Advice No. 3 of 2017 (coaching No. 11/2017) has been issued.

It has been decided by Board to run Antyodaya Express train, a long distance superfast service with fully second class unreserved coaches having some special features like Widder windows, Vestibule ends for inter coach movement, cushioned luggage rack, handhold in doorway area, fire extinguishers with anti-theft arrangements, portable water filtration system, exterior colour scheme with anti-graffiti coating, MU cables for push-pull operation etc :,

With effect from 04.03.2017, the T. No. 22877/22873 Ex Howrah-Ernakulam-Howrah Antyodaya Express has been introduced (Ex Howrah-Saturday & Ex Ernakulam-Tuesday).

2. The fare structure of this train which will have only unreserved second class coaches will be as follows :–

2.1 Base fare of unreserved second class of Antyodaya Express train shall be 15% higher than the base fare on unreserved second class of Mail/Express trains.

2.2 Other charges like superfast surcharge, Mela surcharge if applicable etc. shall be levied seperately.

2.3 The sample examples for charging fare of the Antyodaya Express train is as under :–

Description	Mail/Express	Antyodaya Express train
Basic fare	367	422
Superfast charge	15	15
Total fare	382	437

2.4 Rounding of fare shall be made as per existing principle.

2.5 Normal Child fare rules shall apply.

2.6 Concessional tickets, tickets against free complementary passes which are not reimbursed and Railway Privilege passes/PTOs shall not be admissible in this train.

2.7 Booking of tickets against Passes issued to member of Parliaments and Rail Travel Coupens (RTCs) issued to MLA/MLCs shall be permissible as they are fully reimbursed.

2.8 Defence warrants, Paramilitary warrants etc. which have fully reimbursable fare will be eligible for exchange as per the actual fare.

2.9 The ticket may be printed with the name of the train i.e. "Antyodaya".

3.0 refund Rules : Normal cancellation and refund rule will apply.

2. DYNAMIC PRICING POLICY :

Dynamic Pricing refers to tarif measures for management of seasonal and regional skew in demand for wagaons with the objective of optimizing utilization of transport capacities and reducing idling of assets and capacities.

The following various charges/surcharges which are in force for the Financial year 2016–17.

Busy Season Surcharge

Busy Season Surcharge at the rates mentioned in the table below has been levied from 1st October, 2013 and will remain in force till further advise.

Sl. No.	Commodities	Rates
1.	All Commodities	15%
2.	Container Traffic	Nil
3.	Automatic Traffic moved in NMH,	Nil

BCACM, BCCNR & BCACBM Wagons

With effect from 17-04-2014 Board have revised the Busy Season for the financial year 2014–15 and levied 15% Busy season surcharge on the following commodities as under which continues to remain in force untill further advise.

Sl. No.	Commodities	Rates
1.	Busy Season—1st July to 31st March	(i) Coal Tar
2.	Lean Season—1st April to 30th June	(ii) Coal Tar Pitch (iii) Furnace Oil (iv) Light Diesel Oil (v) Carbon Black Feed Stock.

Development Surcharge

With effect from 01.07.2007 the levy of 2% Development surcharge on all goods Traffic has been imposed on NTR by the Board and the same has been revised to 5% w.e.f. 15.10.2011, which continues to remain in force until further advise.

Congestion Surcharge

The 20% Congestion Surcharge on freight charges mentioned in the table below has been levied w.e.f. 01.4.2011. Now the Congestion Charges for the Traffic booked to Bangladesh only has been enhanced from 20% to 25% with effect from 19.07.2015 and will remain in force until further advise.

Sl. No.	Commodities	Rate of Congestion Surcharge	Enhancedd Rate w.e.f. 19-07-15
1.	All traffic to Bangladesh	20%	25%
2.	All traffic to Pakistan	20%	No Change

with effect from 24-11-2014 Congestion Surcharge of 10% on Base Freight Rac is levied on all goods traffic including containers originating from Ports and will continues to remain in force up to the financial year 2016–17.

Classification of Commodities :–

(a) With effect from 06-06-2016 the commodity "Red Mud" appearing under main Commodity Head-Clay and sand, has been revised from Class 150 to 120 for the period up to 31-03-2017.

(b) With effect from 15-11-2016, the new commodity 'MONAZITE' has been classified as class 160 With packing condition–P.I.

(c) With effect from 24-11-2016, the classification of 'OCHRE' appearing under the Main Commodity Head-Clay and sand has been revised from Class 150 to Class 120.

(d) With effect from 09-03-2017, the consignment 'Waxy Crude Oil' has been classified as Class 180 on Railway Risk Rake under main commodity Head-Petroleum Products and Gases and Books/Exercise. Books/Note Books and Work Books has been classified as LRI under the main commodity Division 'A'.

E – DEMAND REGISTRATION

Railway Board have introduced Registration of Demand for wagons electronically through e-RD on FOIS through web portal with effect from 01-07-2014 Over this Railway about 90 percent demand for wagon are registered through e-RD.

Wagon Registration Fee :

Wagon Registration Fee to be deposited at the time of registration for indents of different type of wagons effect from 20-05-2014 are as under which continues to remain in force until further advise.

Gauge	Per Wagon	Per Rake
BG	Rs. 1500	Rs. 50,000
MG	Rs. 1500	Rs.50,000
NG	Rs.1500	Rs.1500 x No. of Wagons in a rake.

SERVICE TAX ;-

Issue of Service Tax Certificate for Transportation of Goods by Rail (STTG Certificate).

Modifications in issuing STTG Certificates to the Customer during the period 01.04.2016 to 31.03.2017 are appended below:

(1) Service Tax Certificate for Transportation of Goods by Rail (STTG Certificate) are issued on receipt of written request from the Customer (within 30 days).

(i) The rate of Service Tax has been increased from 14.5% to 15% (including Cesses) with effect from 01.06.2016.

(ii) Service Tax of 15% is chargeable on 30% of freight (equivalent to 4.5% on the total freight).

(iii) The Service Tax is chargeable @ 3.5%, the Swatch Bharat Cess @ 0.5% and Krishi Kalyan Cess @ 0.5% are chargeable on 30% on total freight.

Ministry of Railways with effect from 09.11.2016 have issued instructions that STTG Certificate may be issued at the level of Divisional Railway, instead of Zonal railway.

Regarding levy of Service Tax on Demurrage and Wharfage charges, Ministry of Railways have advised that there is no liability on the part of Railways to collect Service Tax Demurrage and Wharfage charges. Demand Note/ Receipt etc., for collection of Demurrage/Wharfage charges shall however, clearly specify that, "Customer shall solely be liable for paying applicable Service Tax directly, under Reverse Charge Mechanism".

CRIS had modified the Menu–'Collection of Service Tax' in FOIS to issue system generated STTG certificate to the customers with effect from 27.12.2016.

Central Board to Excise and Customs have allotted Permanent Service Tax Assessee Code (New Registration Number) GOVTC5383XSD001.

3 Refunds on Goods Traffic

Sl. No.	Description	April to March 2015–16	April to March **2016–17**
1	Number of cases carried for from previous year.	4,712	**4,593**
2	No. of cases received/re-opened during the year.	10,847	**1,021**
3	Number of cases disposed during the year.	6,254	**5,483**
4	Number of cases on hand at the end of the year and carried forward to next year.	4,593	**250**
5	Number of cases outstanding below 3 months.	67	**54**
6	Number of cases outstanding for over 6 months.	4,645	**4,539**
7	Average time taken to settle	25.32	**21.01**

Registration of refund claims during April 2016 to March 2017 is 1,021 as against 10,847 during April 2015 to March 2016.

The Number of refund cases pending at the end of March, 2017 is 2503 as against 4593 at the end of March, 2016.

The Number of cases pending below 3 months is 54 at the end of March, 2017 as against 67 at the end of March, 2016.

The Number of cases pending over 3 months is 4539 at the end of March, 2017 as against 4645 at the end of March, 2016.

Based on reply received from the Board on clarification sought for from this Railway a bulk of 4250 (FIS) cases of M/s. Dalmia and India Cements was cleared.

The pending cases are being closely monitored and persistent efforts are being taken for early disposal of pending cases, special attention is bestowed for cleaning more than 3 months cases to bring down the outstanding pending cases.

4. Rebate on Export Traffic :–

The scheme was not in force in 2016–2017.

5. Introduction of Freight Incentive Schemes :

a. Liberalized Automatic Freight Rebate Scheme for traffic loaded in Traditional Empty Flow Directions (TEFD).
b. Incentive Scheme for Freight Fotwarders.
c. Incentive Scheme for Loading Bagged Consignment in Open and Flat Wagons.

Liberalized Automatic Freight Rebate Scheme For Traffic Loaded in Traditional Empty Flow Direction (TEFD)

Board with the objective to reduce the Empty Running Ratio on IR and to garner additional revenue for the Railways by a suitable pricing mechanism based on the discount in the TEFD, whereby automatic rebate for the computerized FOIS system shall become available to customers offering traffic in inter-zonal/intra-zonal traditional empty flow direction introduced the scheme with effect from 01.01.2017

Incentive Scheme for Freight Forwarders

The revamped scheme introduced from 25.6.2015 aims to facilitate cargo aggregation and thereby expand the commodity basket on Railways.

Incentive Scheme for Loading Bagged Consignment in Open and Flat Wagons

Board with objective garner additional volume of traffic and revenue by granting incentives to customers for loading of bagged consignament in open and flat wagons introduced the scheme with effect from 24.10.2016.

6. (a) CLAIMS REGISTRATION

Year	Parcels	Goods	Total
2016–17	122	208	330
2016–17	212	294	506

6. (b) Claims Performance

Details		2016-17	2015-16
Opening Balance	..	89	71
Registration	..	330	506
Re-opened	..	21	50
Total	..	440	627
No. of cases paid	..	37	67
No. of cases repudiated	..	338	471
Total Disposal	..	375	538
Closing Balance	..	65	89
Amount paid (Excl. court cases)	..	1.69	4.82
Amount paid in court cases	..	1.21	0.05
Total amount paid (in Lakhs)	..	2.90	4.87
Average time for disposal	..	77 days	78 days

6. (c) CAUSE-WISE ANALYSIS OF CLAIMS PAID :

Claims paid on Account of	Year	Number	Amount Rs. in lakhs)
Complete loss ..	2016–17	36	1.36
..	2016–17	60	4.20
Theft of complete packages	2016–17	0	0
..	2016–17	0	0
Pilferages ..	2016–17	1	0.48
..	2016–17	0	0
Damage by wet ..	2016–17	0	0
..	2016–17	0	0
Delay in transit ..	2016–17	1	0.33
..	2016–17	6	0.14
Breakage ..	2016–17	0	0
..	2016–17	0	0
Leakage ..	2016–17	-	-
..	2016–17	-	0.0
Others ..	2016–17	....	....
..	2016–17	....	....
Total ..	2016–17	37	1.69
..	2016–17	67	4.82

6. (d) COMMODITY WISE ANALYSIS OF CLAIM PAID

Claims paid on Account of	Year	Number	Amount Rs. in lakhs)
(a) Grains & Pulses ..	**2016–17**	**0**	**0**
..	2015–16	0	0
(b) Iron & Steel ..	**2016–17**	**0**	**0**
..	2015–16	0	0
(c) Cotton piece goods	**2016–17**	**1**	**0.02**
..	2015–16	3	0.07
(d) Chemicals & Manure	**2016–17**	**0**	**0**
..	2015–16	0	0
(e) Coal & Coke ..	**2016–17**	**0**	**0**
..	2015–16	0	0
(f) P. O. L. ..	**2016–17**	**0**	**0**
..	2015–16	0	0
(g) Others ..	**2016–17**	**36**	**1.68**
..	2015–16	**67**	4.75
(h) Total ..	**2016–17**	**37**	**1.70**
..	2015–16	**67**	4.82

6. (e) COURT CASES DISPOSAL (EXCLUDING ACCIDENT CASES)

Details	2016–17	**2015–16**	% Variation
Opening Balance ..	264	**234**	**+13%**
Registration ..	72	**77**	**–6%**
Transferred cases ..	..	..	..
Total ..	336	**311**	**+8%**
Settled out of court ..	..	..	..
Decreed ..	14	**28**	**–50%**
Dismissed ..	24	**17**	**+41%**
Others ..	..	**02**	**–100%**
Total ..	38	**47**	**–19%**
Closing Balance ..	298	**264**	**+13%**

7. (f) COURT CASES TREND (BENCHWISE, EXCLUDING ACCIDENT CASES)DURING 2016-17

RCT	Opening Balance	Regis-traction	Total	Disposal	Closing Balance
RCT/MAS	01	..	01	..	01
RCT/ERS	01	02	03	..	03
Other Railway RCT Cases	62	03	65	19	46
Civil Suits	..	..	..	..	-
Consumer Forum cases	178	54	232	19	213
Appeal cases in High Courts & Supreme Court	22	13	35	..	35
Total	264	72	336	38	298

6. (g) ACCIDENT CASES (SECTION 124) DURING THE YEAR 2016–17

RCT	Opening Balance	Regis-traction	Total	Disposal	Closing Balance
RCT/MAS	03	01	04	04	..
RCT/ERS	01	01	02	..	02
Other Railways RCT Cases	01	..	01	01	..
Appeal cases in High Courts	06	..	06	01	05
Total	11	02	13	06	07

6. (H) ACCIDENT CASES (SECTION 124-A) DURING THE YEAR 2016–1

RCT	Opening Balance	Regis-traction	Total	Disposal	Closing Balanc
RCT/MAS	163	157	321	164	157
RCT/ERS	106	62	168	65	103
Other Railways RCT Cases	86	07	92	17	75
Appeal cases in High Courts	205	51	256	07	249
Total	560	277	837	253	584

(I) P. S. Us. (2016-17)

RCT 's	Opening Balance	Regis-traction	Total	Disposal	Closing Balanc
RCT/MAS	..	..	..	..	..
RCT/ERS	..	..	..	..	..
Other Railways RCT Cases	05	..	05	..	05
Appeal cases in High Courts & S/C	04	..	04	..	04
Total	09	..	09	..	09

(J) CAUSE -WISE AND COMMODITY WISE ANALYSIS O CLAIMS PAID IN COURT DURING 2016–17

Cause	Commodity	Amount in Rs.
Under charges	Wheat	8,946/-
Over charges	Sugar	1,11,916/-

7. CLAIMS PREVENTION – PREVENTIVE MEASURES :

7(a) N. R. Cell

During 2016–17 total of 145 wagons load consigments were disposed off by the NR Cell averting claims to the tune of Rs. 1,840 Lakhs. 527 Parcel Consignments were also disposed off during the same period saving an amount of Rs. 51.21 Lakhs.

The performance of NR Cell during the year 2016–17 compared to the corresponding period of the previous year is furnished below :

Details	Wagon Loads		Parcels	
	2016–17	**2015–16**	2016–17	**2015–16**
Opening Balance	14	**13**	16	**25**
Registration	160	**172**	577	**521**
Total	174	**185**	593	**546**
Disposal	145	**171**	572	**530**
Closing Balance	29	**14**	21	**16**
Amount saved (Rs. in lakhs)	1840	**2015**	51.21	**56.045**

7(b) C. P. Checks :

During the year 2016–17, Commercial Officers/ Headquarters, Divisions and Inspectors have conducted 502 claim prevention Checks of Major Stations, Parcel Offices and Goods Sheds over Southern Railway. In addition 50 On Board Amenity and Catering checks, Night safety and Footplate Inspections and cleanliness drive were also conducted at stations and in several trains.

8. LOST PROPERTY OFFICE

8. (a) Position of unconnected/undelivered parcels :

Details	2016–17	**2015–16**
Opening Balance	565	**899**
Registration	779	**794**
Total	1344	**1693**
Disposal	776	**1128**
Closing Balance	568	**565**

8. (b) Auction at lost property offices – 2016–17

LPO	Opening Balance	Regis-tration	No. of Auctions conducted	No. of items disposed through Auction	Amount realised ₹
MAS	317	415	11	371	9,77,611
ED	03	45	04	34	36,691
CBE	16	64	08	59	1,13,880
CLT	17	70	04	78	2,62,368
ERS	12	43	03	53	1,44,550
TVC	14	78	07	56	7,84,942
QLN	12	06	02	14	53,320
MDU	56	26	01	40	28,090
TPJ	46	32	02	06	25,135
Total	493	779	42	711	18,26,587

9. REFUND ON PASSENGERS AND OTHER COACHING (PARCEL) TRAFFIC

During the year 2016–17, a total number of 1,00,457 cases have been registeres over Southern Railway and 1,15,600 cases have been disposed off. As compared to corresponding period of the previous year 2015–16, there is decrease of 4.5 in the cumulative receipt and increase of 20% in cumulative disposal. The percentage of cases cleared as compared to receipt during the month of March 2017 is 113%. The number of pending Coaching Refund cases over Southern Railway at the end of March 217 is 2213 cases.

Comparative details of Refund claim dealt within the Refund Offices over Southern Railway the year 2015–16 and 2016–17 is enclosed.

12. Road Competition

Road Operators continue to offer stiff competition to the Railway with their inherent advantages of negotiable rate, door-to-door services, quick transit, instant settlement of claims on the spot, etc. The issue of National permits and Zonal Permits for Road operators has stiffened the competitions further.

Freight Marketing Branch has intensified efforts to attract higher rated/high yielding traffic. Regular Meetings are held with traders, Customers, firms, Chamber of Commerce, etc. at divisional and headquarters level.

Freight :

Southern Railway closely liaise with Importers/ Exporters and port management for capturing additional/ new traffic wherever possible. Primary advantages of the scheme is that Marketing Wing of Railway act as a **" Single Window "** clearance for movement by Rail. This scheme has found considerable patronage among the Importers/Exporters and Southern Railway has moved substantial quantum of Imported Commodities as detailed below :—

Sl. No.	Commodity	2016–17	
		Tonnage in 000's	Earnings (₹ in Crores)
1	Imported Fertilizer ..	745	**84.29**
2	Imported Gypsum ..	144	**14.95**
3	Imported Palm oil ..	18	**2.88**
4	Imported Wheat ..	95	**7.76**
5	Imported Coal ..	15,895	**855.35**
6	Imported Limestone ..	2,155	**192.55**
7	Imported Iron Ore ..	554	**38.13**
8	Imported Container ..	608	**31.41**
9	Imported Dolomite ..	649	**57.87**
10	Imported Steel ..	11	**0.73**

2. The originating loading of high rated traffic, programmed traffic, low rated traffic and other revenue traffic moved are furnished below :–

	Tonnes in Thousands		Earnings in Crores	
Type of Traffic	2015-16	**2016-17**	2015-16	**2016-17**
a. High Rated Traffic	242	**199**	27.43	**21.60**
b. Programmed Traffic	28,147	**26,331**	1,956.05	**1,781.04**
c. Low rated Traffic	1,887	**2,669**	191.46	**222.79**
d. Other Revenue Traffic	3,098	**3,151**	354.19	**317.22**

3. The originating goods loading over Southern Railway during 2016–17 was 32.350 Million Tonnes as against 33.374 Million Tonnes during 2015–16. Similarly the originating Goods Earnings during 2016–17 was ₹. 2,399.82 Crores as against ₹. 2,589.67 Crores during 2015–16.

4. Increase in Loading of commodities :

There was considerable increase in loading under the following commodities in 2016 - 17 compared to 2015 - 16.

Sl. No.	Commodity	2015–16 Tonnes	2015–16 Earnings in lakhs	**2016–17** Tonnes	**2016–17** Earnings in lakhs
1	Iron Ore	70,699	536.08	**5,54,273**	**3,813.06**
2	Charcoal	1,45,968	2.677.76	**1,51,129**	**2,763.95**
3	Cement	10,67,495	6,366.60	**11,27,098**	**6,929.58**

5. Automobile Traffic :

As a result of continuous liaison and effective marketing contacts with Automobile Traders, Southern Railway has moved 189 rakes with total revenue of ₹ 46.93 Crores during 2016-17.

6. Parcel

The orginating Parcel loading during 2016-17 was 3.9 lakhs of tonnes with an earnings of ₹ 156.68 Crores as against 4.01 lakhs of tonnes with earnings of ₹ 167.3 Crores during 2015-16.

Under FSLR, AGC and round trip VP leasing scheme Southern Railway had earned ₹ 48.12 Crores during the year 2016-17.

VII. यांत्रिक इंजीनियरी/MECHANICAL ENGINEERING

Stock on Line

The particulars of Rolling Stock on line owned at the end of March 2017 as compared to the previous year :—

As on 31st March 2017	Locomotives						Passenger and other Coaching Vehicles		Rail Car in units		EMU's in 4 Coach units	
	Broad Gauge			Metre Gauge N. M. R.								
	Elec. A. C. Locos	DSL. Locos	DSL. HYD. Locos	Elec.	Steam	DSL. Locos	B. G.	M. G.	B. G.	M. G.	B. G., EMU, M. G.	T. C.
Previous Year 2015–2016	..	347	8	*	8	7	6,596	31	–	–	272	550
Current Year 2016–2017	**..**	**351**	**8**	*	**8**	**7**	**6,779**	**31**	–	–	**271**	**544**

As on 31st March 2017	Wagon in Units		Travelling Cranes					
			BROAD GAUGE			METRE GAUGE		
	B. G.	M. G.	Steam	Diesel	Hand	Steam	Diesel	Hand
Previous year 2015–2016	9,428	189	..	6	..	..	..	..
Current year 2016–2017	**9,293**	**158**	**..**	**6**	**..**	**..**	**..**	**..**

2. Additions and Renewal

Particulars	BROAD GAUGE		METRE GAUGE	
	Additions	Replacement	Additions	Replacement
LOCOS :				
Steam	..	..	..	..
Diesel	4	..	..	..
Electric	..	..	..	..
COACHES :				
Bogies	216	..	..	..
Locos	..	..	..	..
Coaches	MC TC	..	..	..
EMU Trailer Coaches	.. ..	..	..	..
Transferred from other Railways	..	..	..	..
Transferred to other Railways	117	..	..	..
WAGONS :				
Bogies	..	..	..	..

Out of 21 (a) 2 WDG4 Received on Transfer from other Railways
(b)19 New Locos received.

2.1 Wagon built by wagon building firms and Railway Workshop (2016–2017)

Name of the Firm	*Type*	*No. in Vehicle units*	*No. in 4-Wheelers units*
Broad Gauge Stock	**Nil**	**Nil**	**Nil**
M. G. STOCK	Nil	Nil	Nil

2.2 Goods Stock Transferred from other Railways

Railway	No. of vehicle	No. in 4-Wheeler units
	–Nil–	

3. Locomotives Online with their Tractive efforts

(a) Steam Locos

As on 31st March 2017	*Broad Gauge*		*Metre Gauge*	
	No.	*Total Tractive Efforts (Kgs.)*	*No.*	*Total Tractive Efforts (Kgs.)*
Previous Year 2015–2016	..	..	8	97,432
Current Year 2016–2017	**..**	**..**	**8**	**97,432**

(b) Diesel Locomotives

As on 31st March 2017	*Broad Gauge*		*Metre Gauge*	
	No.	*Total Tractive Efforts (Kgs.)*	*No.*	*TotalTractive Efforts (Kgs.)*
Previous Year 2015–2016	355	1,07,74,230	7	1,34,400
Current Year 2016–2017	**359**	**1,09,18,430**	**7**	**1,34,400**

(c) Electrical Locomotives on line with their tractive effort :–

Particulars	Broad Gauge	
	Nos.	Horse Power/:oco
Last Year 2015-16	WAM 4–8	3,640
	WAP1–33	3,800
	WAP 4–151	5,000
	WAG 7–122	5,000
	WAG5A/HA-89	3,850
	WAP7–47	6,120
Current year 2016–17	WAM 4–5	3,640
	WAP1–29	3,800
	WAP 4–151	5,000
	WAG 7–122	5,000
	WAG5A/HA-89	3,850
	WAP7–51	6,120

4. Coaches Vehicles and seating capacity (Except EMU)

As on 31st March current year 2016-17	Pass. Coaches (No. in units)	Other Coaching Vehicle (No. in units)	Total Seats			
			Air condition	Ist Class	II Class	
					Berths	Seats
Broad Gauge	6,154	530	62,231	156	153852	451072
N. M. Railway	26	5	..	250	..	1060

5. Goods Vehicles and carrying capacity

As on 31st March current year 2016-17	Public Traffic Wagons				Special wagons including Brake Vans No. in units	Depot. Railway Service wagons (No. in units)	Total Goods vehicles (No. in units)
	Covered Wagons		Open Wagons				
	No. in units	Capacity in tonnes	No. in units	Capacity in tonnes			
Broad Gauge	**5339**	**290381.1**	**3768**	**210685.7**	**278**	**..**	**9385**
Metre Gauge (Incl. N. M. Railway)	**146**	**5156.3**	**21**	**750.1**	**..**	**..**	**167**

6. Diesel Rail Cars

As on 31st March 2017	(A) Motor Coaches		(B) Trailer Coaches	
	No. in units	Total Seats	No. in units	Total seats
Previous year 2015-16				
Broad Gauge	..	..	..	..
Metre Gauge	..	..	..	..
***Current year* 2016-17**				
Broad Gauge	**..**	**..**	**..**	**..**
Metre Gauge	**..**	**..**	**..**	**..**

Electrical Multiple Units

Particulars	Motor Coaches		Trailer Coaches	
As on 31st March 2015–2016	Nos.	Horse Power	Nos.	Horse Power
Broad Gauge	272	243712	550	..
***As on 31st March* 2016–2017**				
Broad Gauge	**271**	**242816**	**544**	**..**

7. Travelling Cranes

As on 31st March 2017	Steam Cranes		Diesel Cranes		Hand Cranes	
	No. in units	Capacity in Tonnes	No. in units	Capacity in Tonnes	No. in units	Capacity in Tonnes
Broad Gauge Previous year 2015-16	..	..	6	140T X 6	..	..
***Broad Gauge* Current year 2016–17**	..	..	6	140T X 6	..	..
Metre Gauge Previous year 2015-16.	..	..	..	..	..	..
***Metre Gauge* Current year 2016-17.**	..	..	..	..	..	..

8. Rolling Stock by Age Group

(a) Locomotives (Steam)

Age Group	Broad Gauge				Metre Gauge			
	Previous Financial Year 2015–2016		***Current Financial Year 2016–2017***		Previous Financial Year 2015–2016		***Current Financial Year 2016–2017***	
	No.	%	**No.**	%	No.	%	**No.**	%
1 to 5	..	..	..	..	..	..	..	..
6 to 10	..	..	..	..	..	..	..	..
11 to 15	..	..	..	..	..	..	..	..
16 to 20	..	..	..	..	..	..	..	..
21 to 25	..	..	..	..	..	..	..	..
26 to 30	..	..	..	..	..	..	..	..
31 to 35	..	..	..	..	..	..	..	..
36 to 40	..	..	..	..	..	..	..	..
Over 40	..	..	..	..	8	100.00	**8**	**100.00**
Total	..	..	..	..	8	100.00	**8**	**100.00**

Rolling Stock

(a) Electric Locomotive (Broad Gauge)

Age Group Years	2015–2016		***2016–2017***	
	Nos.	Percentage	**Nos.**	**Percentage**
Less than 1 Year ..	24	5.33	**3**	**0.67**
1 to 5 Years	97	21.56	**109**	**24.38**
6 to 10 Years	69	15.33	**72**	**16.11**
11 to 15 Years	52	11.56	**56**	**12.53**
16 to 20 Years	78	17.33	**84**	**18.79**
21 to 25 Years	78	17.33	**55**	**12.30**
26 to 30 Years	36	8.00	**58**	**12.98**
Above 30 Years.. ..	16	3.56	**10**	**2.24**
Total ..	450	100.00	**447**	**100.00**

(b) Passenger Coaches

Age Group Years	Broad Gauge				Metre Gauge			
	Previous Financial Year 2015/16		Current Financial Year 2016/17		Previous Financial Year 2015/16		Current Financial Year 2016/17	
	No.	%	No.	%	No.	%	No.	%
1 to 5	1773	28.43	**1696**	**27.09**	..	..	..	..
6 to 10	1167	18.71	**1136**	**18.14**	..	..	..	..
11 to 15	1155	18.52	**1177**	**18.81**	1	4.0	**1**	**4.0**
16 to 20	1320	21.16	**1275**	**20.36**	..	..	..	..
21 to 25	756	12.12	**923**	**14.75**	24	96.0	**24**	**96.0**
26 to 30	66	01.06	**53**	**0.85**	..	..	..	..
31 to 35	..	..	..	..	..	..	..	..
Over 35	..	..	..	..	..	..	..	..
Total	6237	100.00	**6260**	**100.00**	25	100.00	**25**	**100.00**

(i) *Motor Coaches*

Age Group Years wise	2015–2016		2016–2017	
	Nos.	Percentage	**Nos.**	**Percentage**
Broad Gauge				
1 to 5 Years	53	19.49	**53**	**19.56**
6 to 10 Years	75	27.57	**75**	**27.98**
11 to 15 Years	81	29.78	**81**	**29.89**
16 to 20 Years	36	13.23	**36**	**13.28**
21 to 25 Years	26	9.56	**26**	**9.59**
26 to 30 Years	1	0.37	**0**	**0**
Above 30 Years	0	0	**0**	**0**
Total	272	100.00	**271**	**100.00**

(ii) *Trailer Coaches 110*

Age Group Years	2015–2016		2016–2017	
	Nos.	Percentage	**Nos.**	**Percentage**
1 to 5 Years	96	17.72	**95**	**17.46**
6 to 10 Years	149	27.50	**149**	**27.39**
11 to 15 Years	165	30.49	**165**	**30.33**
16 to 20 Years	98	18.17	**98**	**18.02**
21 to 25 Years	37	5.13	**37**	**6.80**
26 to 30 Years	5	0.93	**0**	**0**
Above 30 Years	0	0	**0**	**0**
Total	550	100.00	**544**	**100.00**

(c) Wagons

General Services

Age Group Year	Broad Gauge				Metre Gauge			
	Previous Financial Year 2015–2016		Current Financial Year 2016–2017		Previous Financial Year 2015–2016		Current Financial Year 2016–2017	
	No.	%	**No.**	**%**	No.	%	**No.**	**%**
1 to 5	124	1.38	**149**	**1.68**	-	-	-	-
6 to 10	669	7.45	**688**	**7.74**	-	-	-	-
11 to 15	557	6.20	**235**	**2.64**	-	-	-	-
16 to 20	4898	54.04	**5226**	**58.78**	-	-	-	-
21 to 25	1839	20.48	**714**	**8.04**	186	100.00	**158**	**100.00**
26 to 30	865	9.63	**1787**	**20.10**	-	-	-	-
31 to 35	28	0.31	**91**	**1.02**	-	-	-	-
36 to 40	0	0	**0**	**0**	-	-	-	-
Over 40	0	0	**0**	**0**	-	-	-	-
Total	8980	100.00	**8890**	**100.00**	186	100.00	**158**	**100.00**

9. Rolling Stock on line

(a) Overaged *Steam Locomotives on line as on 31st March 2017*

Type of Stock	BROAD GAUGE							Stock condemned in current financial year 2016–2017			METRE GAUGE							Stock condemned in current financial year 2015–2016			
	Total Stock			Stock Overaged							Total Stock			Stock overaged							
	Non-Replaced	Replaced	Total	Non-Replaced	Replaced	Total	Percentage of overaged to total	**Non-Replaced**	**Replaced**	**Total**	Non-Replaced	Replaced	Total	Non-Replaced	Replaced	Total	Percentage of overaged to total	**Non-Replaced**	**Replaced**	**Total**
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Passenger	..	..	..	..	..	..	..	..	..	..	4	4	8	4	4	8	..	..	..	..
Mixed Goods	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Light Goods and Miscellaneous.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	**4**	**4**	**8**	**4**	**4**	**8**	..	..	..	..

(b) Number of locomotives put off and new locomotives put on line during the year 2016–2017.

Sl. No.	Particulars	BROAD GAUGE			METRE GAUGE		
		Steam	Diesel	Electric (A/C.)	Steam	Diesel	Electric (A/C.)
1.	No. of locomotives taken off the line	..	2	7	..	..	..
2.	No. of locomotives placed on line	..	3	4	..	..	..
3.	No. of locomotives permanently transferred from other Railway.	..	1	(–)	..	..	..
4.	No. of locomotives permanently transferred to other Railway.	..	0	(–)	..	..	..

(c) Overaged Coaching Stock on line as on 31st March 2017 —Broad Gauge – Coaches

Sl. No.	Particulars	Total stock owned			Stock Over Aged			Percentage of overaged to total Stock on line	Stock condemned during the current financial year 2015-2016		
		Non-Replaced	Replaced	Total	Non-Replaced	Replaced	Total		Non-Replaced	Replaced	Total
1.	Air-conditioned class	1128	0	1128	4	0	4	0.03	6	0	6
2.	Upper Class (First)	0	0	6	0	0	0	0.00	3	0	3
3.	Composite Class	0	0	0	0	0	0	0.00	0	0	0
4.	Lower Class (Second).	5026	0	5026	46	0	46	0.69	174	0	174
5.	Tourist Car Inspection. Carriage and Dining Cars.	174	0	174	7	0	7	0.10	5	0	5
6.	All other coaching Vehicles excluding these under item 5. & PPS.	356	0	356	120	0	120	1.80	10	0	10
	Total ..	**6684**	**0**	**6684**	**177**	**0**	**177**	**2.65**	**198**	**0**	**198**

Trailer Coaches DMU., DTC & TC Coaches			
Diesel Power Coaches	0	0	0
Trailer Coaches TC	89	0	89
Diesel Trailer Coaches DTC	6	0	6
Total ..	95	0	95

METRE GAUGE—COACHES

Particulars	Total stock owned			Stock Over Aged			Percentage of overaged to total stock on line	Stock condemned during the current financial year 2016-2017		
	Non-Replaced	Replaced	Total	Non-Replaced	Replaced	Total		Non-Replaced	Replaced	Total
1. Air-conditioned Class.	..	..	..	..	..	..	..	..	..	..
2. Upper Class (First)	..	..	..	..	..	..	..	1	..	1
3. Composite Class	..	..	..	..	..	..	..	..	..	..
4. Lower Class (Second)	..	..	..	..	..	..	..	24	..	24
5. Tourist Car Inspection Carriage and Dining Cars.	..	..	..	..	..	..	..	3	..	3
6. All other coaching Vehicles excluding these under item. 5 & PPS	..	..	..	..	..	..	..	1	..	1
Total ..	..	..	..	..	..	..	..	29	..	29

DIESEL RAIL CARS			
Driving Trailers YRD	..	..	..
Trailers YRD	..	..	..
Total ..	..	..	..

RAIL BUS			
YRB	1	0	1

(d) Overaged wagon stock on line as on 31st March 2017 (Broad Gauge wagons)

Sl. No.	Type of Wagons	Stock on Line			Stock Overaged			Percentage of overaged to total stock on line	Stock condemned during the current financial year 2015–16		
		Non-Replaced	Replaced	Total	Non-Replaced	Replaced	Total		Non-Replaced	Replaced	Total
1.	Covered										
2.	Open	4852	0	4852	0	0	0	0.00	5	0	5
3.	Brake-vans	2770	0	2770	162	0	162	1.74	128	0	128
4.	Tank Wagons	260	0	260	10	0	10	0.11	1	0	1
5.	Special Stock	459	0	459	0	0	..	0.00	0	0	0
6.	Railway Service Wagons.	952	0	952	4	0	4	0.04	1	0	1
	Total ..	0	0	0	0	0	0	0.00	0	0	0
		9293	**0**	**9293**	**176**	**0**	**176**	**1.89**	**135**	**0**	**135**

Particulars	BROAD GAUGE		METRE GAUGE	
	Coaches	Wagons	Coaches	Wagons
Number put off the line during the year 2015–2016.	325	54	0	0
Number put on line during the year 2016–2017.	**216**	**0**	**0**	**0**

10 (a) Locos under or Awaiting Repairs

Details	Year	Average No. on line	Average under Repairs		In Mechanical Workshops		Stabled in Sheds awaiting workshop repairs		In Shed and Transportation Workshops		In Transit	
			No.	%	No.	%	No.	%	No.	%	No.	%
BROAD GAUGE 2015–2016												
Diesel Electric		349.42	29.88	8.58	6.11	1.75	-	-	23.87	6.83	-	-
Diesel Hydraulic		3.06	0.54	17.65	0.00	0.00	-	-	0.54	17.65	-	-
Electric		441.72	30.3	6.86	8.19	1.85	-	-	22.11	5.01	-	-
Total		794.20	60.82	7.66	14.30	1.80	-	-	46.52	5.86	-	-
METRE GAUGE 2015–2016												
Steam		8.00	1.61	20.13	0.95	11.88	-	-	0.66	8.25	-	-
Diesel Electric		5.00	0.00	0.00	0.00	0.005	-	-	0.00	0.00	-	-
Diesel Hydraulic		-	-	-	-	-	-	-	-	-	-	-
Electric		-	-	-	-	-	-	-	-	-	-	-
Total		13.00	1.61	12.38	0.95	7.31	-	-	0.66	5.08	-	-
BROAD GAUGE 2016–2017												
Diesel Electric		347.70	31.89	9.17	7.04	2.02	-	-	24.85	7.15	-	-
Diesel Hydraulic		0	0	0	0	0	-	-	0	0		
Electric		447	31.71	7.09	6.81	1.52	-	-	24.90	5.57	-	-
Total		794.70	63.6	8.00	13.85	1.74	-	-	49.75	6.26	-	-
METRE GAUGE 2016–2017												
Steam		7.33	2.74	37.38	1.70	23.19	-	-	1.04	14.19	-	-
Diesel Electric		4.25	1.20	28.24	1.20	28.24	-	-	0	0.00	-	-
Diesel Hydraulic		-	-									
Electric		-	-	-	-	-	-	-	-	-	-	-
Total		11.58	3.94	34.02	2.9	25.04	-	-	1.04	8.98	-	-

(b) Coaching stock under or Awaiting Repairs

Type	Year	Average No. on line (in Units Vehicle)	Average under Repairs No.	Average under Repairs Percentage	In Mechanical Workshops No.	In Mechanical Workshops Percentage	In sick lines and Transportation No.	In sick lines and Transportation Percentage	Stabled Awaiting Workshop Repairs No.	Stabled Awaiting Workshop Repairs Percentage	In Transit No.	In Transit Percentage
					BROAD GAUGE							
Passenger Coaching Vehicles	2015–2016	6183	366.25	5.92	210.47	3.40	51.00	0.82	53.53	0.87	51.24	0.83
	2016–2017	**6179**	**409.41**	**6.63**	**204.81**	**3.31**	**43.16**	**0.70**	**116.21**	**1.88**	**45.23**	**0.73**
Other Coaching Vehicles—	2015–2016	384	18.26	4.76	11.06	2.88	2.42	0.63	2.98	0.78	1.81	0.47
	2016–2017	**356**	**16.13**	**4.53**	**9.64**	**2.71**	**1.67**	**0.47**	**3.51**	**0.99**	**1.31**	**0.37**
All Coaching Vehicles—	2015–2016	6567	384.51	5.86	221.53	3.37	53.42	0.81	56.51	0.86	53.05	0.81
	2016–2017	**6535**	**452.54**	**6.51**	**214.45**	**3.28**	**44.83**	**0.69**	**119.72**	**1.83**	**46.54**	**0.71**

Type	Year	Average No. on line (in Units Vehicle)	Average under Repairs No.	Average under Repairs Percentage	In Mechanical Workshops No.	In Mechanical Workshops Percentage	In sick lines and Transportation No.	In sick lines and Transportation Percentage	Stabled Awaiting Workshop Repairs No.	Stabled Awaiting Workshop Repairs Percentage	In Transit No.	In Transit Percentage
					METRE GAUGE							
Passenger Coaching Vehicles—	2015–2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2016–2017	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Other Coaching Vehicles—	2015–2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2016–2017	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
All Coaching Vehicles—	2015–2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2016–2017	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

(c) Wagons under or awaiting Repairs

Year	Average No. on line (8 Wh.)	Average under Repairs No.	Average under Repairs Percentage	in Mechanical Workshops No.	in Mechanical Workshops Percentage	In sick line and Transportation No.	In sick line and Transportation Percentage	Stabled awaiting workshop repairs No.	Stabled awaiting workshop repairs Percentage
				BROAD GAUGE					
2015–2016	6460.41	553.00	8.56	94	1.46	160	2.48	299	4.63
2016–2017	**6870.06**	**523.00**	**7.61**	**65**	**0.95**	**150**	**2.27**	**302**	**4.40**
				METRE GAUGE					
2015–2016	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2016–2017	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

11. Rolling StockTurned out after repairs from workshops

(a) Locomotives — (Steam Loco)—Metre Gauge

Details	Heavy repairs Periodical overhaul	IOH	Special repairs	Total	Equivalent Std. I Class Unit repairs	Average number of days taken for POH: Calender days	Average number of days taken for POH: Working days excluding Sundays and Shop Holidays
Previous Financial Year 2015–2016	1	..	..	1	1.00	341	273
Current Financial Year 2016–2017	**1**	**..**	**..**	**1**	**1.00**	**455**	**361**

The kilometres between periodical overhaul of loco No. X 37391

Previous Financial Year 2015–2016 .. .. 17369 KMs.

The kilometers between periodical overhaul of loco No. X 37396

Current Financial Year 2016–2017 .. .. 11370 KMs.

(b) Over aged coaching and wagon stock on line as on 31st March 2017

I. Under or awaiting repairs

Particulars in a Locos	*Average on line*		*Average under repairs (Hourly)*		*Installed and Transportation W. Shop*		*Locos in Transit*	
(a) Locos								
Broad Gauge	Nos.	%	Nos.	%	Nos.	%	Nos.	%
2015–2016	441.72	–	40.70	9.21	40.70	9.21	..	..
2016–2017	**447.43**	–	**43.37**	**9.69**	**43.37**	**9.69**	..	..
(b) Coaches stock under or awaiting Repairs—EMU Broad Gauge								
2015–2016	279.93	100	20.32	7.45	20.32	7.45	..	..
2016–2017	**279.12**	**100**	**15.38**	**5.51**	**15.38**	**5.51**	..	..

C & D Rolling Stock Turned out after repairs from workshops *(b) Coaches in VUs.*

Shop	*Activity*	*Previous Financial Year 2015–2016*				*Current Financial Year 2016–17*			
		Periodical Over hauling	*Off Schedule Over Rs. 100*	*Off Schedule Below Rs. 100*	*Total*	***Periodical Over hauling***	***Off Schedule Over Rs. 100***	***Off Schedule Below Rs. 100***	***Total***
				BROAD GAUGE					
Perambur Carriage Works —									
Passenger Coaches	PCVs	1764	151	0	1915	**1785**	**120**	**0**	**1905**
Other Coaches	OCVs	231	0	0	231	**283**	**0**	**0**	**283**
	Total	1995	151	0	2146	**2068**	**120**	**0**	**2188**
Perambur Loco Works—									
Passenger Coaches	PCVs	545	17.5	0	562.5	**610**	**20.95**	**0**	**630.95**
Other Coaches	OCVs	0	0	0	0	**0**	**0**	**0**	**0**
	Total	542	17.5	0	562.5	**610**	**20.95**	**0**	**630.95**
	DTC/TCs of DEMU	54	0	0	54	**85**	**0**	**0**	**85**
Golden Rock Workshops —									
Passenger Coaches	PCVs	906	88.5	0	995	**980**	**95.5**	**0**	**1075.5**
Other Coaches	OCVs	33	0	0	33	**43**	**0**	**0**	**43**
	Total	939	88.5	0	1027.5	**1023**	**95.5**	**0**	**1118.5**

Rolling Stock Turned out after repairs from workshops (b) Coaches in VUs.

Shop	*Activity*	*Previous Financial Year 2015-2016*				*Current Financial Year 2016–2017*			
		Periodical Over hauling	*Off Schedule Over Rs. 100*	*Off Schedule Below Rs. 100*	*Total*	***Periodical Over hauling***	***Off Schedule Over Rs. 100***	***Off Schedule Below Rs. 100***	***Total***
				METRE GAUGE					
Gold Rock Workshop–									
Passenger Coaches	PCVs	5	0	0	5	**8**	**0**	**0**	**8**
Other Coaching Vehicles	OCVs	4	0	0	4	**0**	**0**	**0**	**0**
	Total	9	0	0	9	**8**	**0**	**0**	**8**

(e) Rolling Stock Turned out after Repairs from Workshops (c) Wagons in VUs.

Gauge	*Shop*		*2015–2016 Periodical Overhaul*	*Off. Schedule*	*Total*	***2016–2017 Periodical Overhaul***	***Off. Schedule***	***Total***
Broad Gauge	CW/PER	..	3,135	0	3,135.0	**3,108**	**0**	**3,108**
	GOC	..	..	0	0	**0**	**0**	**0**
	Total	..	3,135	0	3,135.0	**3,108**	**0**	**3,108**
Metre Gauge	GOC..	..	..	0	0.0	..	..	**0**

Note.—PCVs – Passenger Coaching Vehicles, OCVs – Other Coaching Vehicles.

(f) POH Unit Cost of Repairs

Rs. in Thousands

Stock	Shop	–	Broad Gauge		Metre Gauge	
			Previous Financial Year 2015–16 (Actuals)	***Current Financial Year 2016–17 (Actuals)***	*Previous Financial Year 2015–16 (Actuals)*	***Current Financial Year 2016–17 (Actuals)***
Unit repair cost (per loco)						
Steam Loco	GOC	..	..	..	..	..
Driving Power Car of DMU	LW/PER	..	4783	**5292**	No Activity	
Dsl. Hyd.			..	..		
AC Electric			11318	**11718**		
Dsl. Elec.	GOC	..	10450	**12065**	7000	**7510**

POH Unit Cost of Repairs

Average cost of repairs per Passenger Carriage (In FWUs)

PCV–POH	CW/PER	AC	956	1123	No Activity	
		Non-AC	952	1034		
	LW/PER	Non-AC	865	865		
	GOC	AC	998	1070		
		Non-AC	840	935	510	586
Driving Trailer coach of DEMU–POH	LW/PER		4783	5292	No Activity	
Trailor coach of DEMU–POH	LW/PER		727	626		

Average cost of repairs per Other Carriage (In 8 Wheeler)

OCVs–POH	CW/PER		935	1050		
	LW/PER		..	..		
	GOC		1511	758	434	..

Average cost of repairs per Wagon (In FWUs)

Wagons – POH	CW/PER		295	343	No Activity	
	GOC		..	..	..	..

Rolling Stock Planned Out After Repairs (In Lakhs of Rs.)

	Years	Broad Gauge
i. Average cost of maintenance and repairs per locomotives (Electrical) without POH cost.	2015–16	28.30
	2016–17	32.94
ii. Average cost of maintenance and repairs of EMU Coach Unit.	2015–16	29.47
	2016–17	37.20

12. LOCOMOTIVES, COACHES & WAGONS OVERDUE REPAIRS

Rolling Stock	Type	Broad Gauge				Metre Gauge			
		Current financial Year as on 31–03–2016		Current financial Year as on 31–03–2017		Current financial Year as on 31–03–2016		Current financial Year as on 31–03–2017	
		No.	%	No.	%	No.	%	No.	%
Locos	(a) Steam	Nil	Nil	**Nil**	**Nil**	4	50.0	**3**	**37.5**
	(a) Dsl. Electric	..	..	..	..	..	..	..	..
	(c) Dsi. Hydralic	Nil	Nil	**Nil**	**Nil**	Nil	Nil	**Nil**	**Nil**
Coaches (In VUs)		33	0.5	**8.7**	**1.3**	..	..	..	..

(b) ENGINE FAILURES – DIESEL–LOCOS

Gauge	Type	Year	Total No. of failure	Average KMs per engine failure	Failure under various service			Engine KMs per engine failure (various services)		
					Pass	Mixed	Goods	Pass	Mixed	Goods
B. G.	Dls. Electric	2015–16	91	435135	74	..	17	433219	@@	443478
		2016–17	**101**	**389871**	**82**	**..**	**19**	**397604**	@@	**356498**
	Dsl. Hydraulic	2015–16	..	..	..	..	..	@@	@@	..
		2016–17	**..**	**..**	**..**	**..**	**..**	@@	@@	**..**
M. G.	Dls. Electric	2015–16	..	54986 (*)	..	..	..	54986 (*)	@@	..
		2016–17	**..**	**55518 (*)**	**..**	**..**	**..**	**55518 (*)**	@@	**..**
	Dsl. Hydraulic	2015–16	..	..	..	..	..	..	..	..
		2016–17	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**

Note.– (*) Denotes total engine Kms. without failure

(@@) There is no service

Engine failures–Diesel Locos (SR LOCOS IN SR territory)

–	Total No. of statistical Engine failures	Average Kms per Engine failures in Lakhs
BG	101	5.14
MG	0	0

15. Engine Failures (Electrical) 2015–2016 and 2016–2017

Year	Total No. of engine failure	Average KM per engine failures (in lakhs)	Failure under various service			Engine KM/Engine failures under various service (in lakhs)		
			Pass.	Mixed	Goods	Pass.	Mixed	Goods
2015–16	114	7.29	84	..	30	5.99	..	10.93
2016–17	103	8.09	68	..	35	7.44	..	9.35

Energy and Amount particulars of traction and Non-traction

Sl. No.	Description	Year	
		2015–16	**2016–17**
1	Traction consumption in million units	1125.06	**1114.69**
2	Non-traction consumption in million units	122.813	**119.098**
3	Total in million units	**1247.873**	**1233.788**
4	Traction amount paid ₹ in crores	745.319	**839.429**
5	Non-traction amount paid ₹ in crores	94.714	**91.896**
6	Total ₹ in crores	944.274	**931.325**
7	Traction Average rate ₹./kwh	8.39	**7.32**
8	Non-traction average rate ₹./kwh	7.71	**7.72**
9	**Total**	**8.05**	**7.52**

ENGINE FAILURES STEAM 2015–16 AND 2016–17

Year	Total No. of engine failure	Average Kms per engine failures	Engine failures under various services			Engine failures under various services		
			Pass.	Mixed	Goods	Pass.	Mixed	Goods
2015–16	1	19440	1	..	..	19440	..	..
2016–17	3	6491	3	..	..	6491	..	..

ENGINE FAILURES STEAM 2016–17

Month/Year	No. of engine failures	Pass.	Mixed	Goods	Total
April 2016	1	1674	..	..	1674
May 2016	2	1620	..	..	1620
June 2016	..	1674	..	..	1674
July 2016	..	1620	..	..	1620
August 2016	..	1674	..	..	1674
September 2016	..	1674	..	..	1674
October 2016	..	1627	..	..	1627
November 2016	..	1674	..	..	1674
December 2016	..	1620	..	..	1620
January 2017	..	1485	..	..	1485
Febrauary 2017..	..	1620	..		1620
March 2017..	..	1512	..	..	1512
Total	**3**	**19474**	..	..	**19474**
Average Kns per engine failures 2016–17 ..	3	19474	..	..	6491

14. Hot Boxes

Stock	Gauge	Year	Total No. of Hot Boxes	Responsibility			Percentage of variation over previous year	No. per One million wagons Kms. and Ten Million Vehicle Kms.
				Southern Railway	F. Railway	Un fixed		
Coaches	BG	2015–16	3	2	1	..	(+) 57.14 %	0.32
		2016–17	4	3	1	..	(+) 33.33 %	0.02
	MG	2015–16	..	..	..	..	..	..
		2016–17	..	..	..	..	..	..
Goods	BG	2015–16	19	3	16	..	(+) 34.48 %	0.04
		2016–17	19	3	16	..	(0 %	0.04
	MG	2015–16	..	..	..	..	..	..
		2016–17	..	..	..	..	..	..

Note.— (+) Denotes improvement
(–) Denotes detoriation

Shedwise yearly outage—2016–2017 B. G. (Service base Outage Bd's)

Month and Year	TARGET					ACTUAL				
	ED	GOC	ERS	TNP	TOTAL	ED	GOC	ERS	TNP	TOTAL
April ..	24.7	23.0	3.1	2.8	**5306**	26.4	25.0	4.0	3.4	**59.3**
May ..	25.7	23.0	3.1	0.0	**51.8**	26.6	24.3	5.6	0.5	**57.0**
June ..	26.6	23.0	2.3	0.0	**51.9**	27.4	24.7	4.6	0.0	**56.8**
July ..	26.6	23.0	2.3	0.0	**51.9**	28.4	24.5	3.3	0.1	**56.3**
August ..	31.0	22.1	1.5	0.1	**54.7**	32.1	24.5	2.4	0.1	**59.1**
September	31.1	22.1	1.5	0.0	**54.7**	31.6	23.7	2.9	0.2	**58.4**
October ..	29.3	23.9	1.5	0.0	**54.7**	31.5	26.9	3.2	0.0	**61.5**
November	29.3	23.9	1.5	0.0	**54.7**	31.4	24.4	1.9	0.0	**51.7**
December	29.3	24.0	1.5	0.0	**54.8**	32.1	25.1	2.3	0.1	**59.5**
January ..	26.7	24.2	1.4	0.2	**52.5**	32.1	24.7	2.6	0.0	**59.4**
February..	26.9	24.9	1.4	0.3	**53.5**	30.0	26.2	1.6	0.4	**58.2**
March ..	25.0	25.0	1.47	2.1	**53.5**	28.0	25.5	2.1	2.4	**58.0**
Total ..	**332.2**	**282.1**	**22.5**	**5.5**	**642.3**	**357.6**	**299.4**	**36.9**	**7.4**	**701.2**
Average	**27.7**	**23.5**	**1.9**	**0.5**	**53.5**	**29.8**	**25.0**	**3.1**	**0.6**	**58.4**

VIII. बिजली इंजीनियरी/ELECTRICAL ENGINEERING

1. Electrical Energy Generation, Purchase, Sales and Consumption.

The following are the figures pertaining to the years 2015–16 and 2016–17.

Sources of Power	Generated (sent out from bus bars)		Purchase		Total	
Energy Purchase from State Electricity Board in million Unit			2015–16	2016–17	2015–16	2016–17
(a) General Service						
(i) Tamil Nadu	..	..	101.656	**98.742**	..	..
(ii) Andhra Pradesh	..	..	0.743	**0.823**	..	
(iii) Karnataka	..	..	2.120	**2.228**	122.813	**119.098**
(iv) Kerala	..	..	18.294	**17.305**	..	..
(b) Traction Services						
(i) Tamil Nadu	..	..	834.35	**810.29**	..	..
(ii) Andhra Pradesh	..	..	77.87	**76.43**	..	..
(iii) Karnataka	..	..	..	..	1125.06	**1114.69**
iv) Kerala	..	..	212.83	**227.97**	..	..
Total			..	..	1247.873	**1233.788**

2. Unit Cost of Generation and Purchases

a. For Generated Energy : There is no generating Stations on this Railway

b. Purchase of Energy Particulars		*Units*	2015-16	**2016-17**
(i)	Energy Purchase	In Million kWH	1247.873	**1233.788**
(ii)	Total Cost	(₹ in Crores)	944.274	**931.325**
(iii)	Average rate per kWH		7.56	**7.55**

3. Analysis of total electrical energy consumed for various services in terms of percentage of the total energy purchase 2016–17

		Percentage
a.	Major workshops (11.563 Million Units) ..	0.937
b.	Non-rent returning buildings (This includes Division Offices, Hospitals, Stations, Yards, Loco sheds, Carriage Maintenance Depots, Stores Depots, RPF out posts etc., for which).	
(i)	Water Supply Installations (9.755 mu) ..	0.791
(ii)	Service Buildings (56.598 mu) ..	4.587
(iii)	Yard lighting (2.126 mu) ..	0.172
(iv)	Hospital (5.699 mu) ..	0.464
c.	Staff quarters and staff welfare buildings, (33.358 mu). ..	2.704
	Traction Services (1114.69 Million Units) ..	90.347

4. Generating and Purchasing Stations as on 31st March 2017.

Generating Stations : There are no generating stations on this Railway, However, Diesel generating sets of capacities varying from 10kVA to 500kVA are provided at important installations as standby source of supply during interruption of supply from the State Electricity Board sources. Following are the particulars :—

Particulars	No. of DG sets	Cap. in kVA	Purchasing Stations of Supply Points	
			HT	LT
As on 31st March 2017	253	22633	89	3195

5. Electrical Traction Distribution (2016-17)

	Upto 31st March 2016	**Upto 31st March 2017**
1. Total Route km. Electrified	2,706	**2,792**
2. Total Track km. Electrified	6,212	**6,552**

6. A. C. Electric Locomotives

Particulars			Broad Gauge (average for the year)	
			2015-16	**2016-17**
(i) Total No. of Engine on line	..	..	441.72	**447.43**
(ii) No. of Engine in use (average per day).	..	..		
a. Goods Service	..	..	187.12	**188.13**
b. Passenger Service	..	..	213.91	**215.92**
c. Shunting	..	..	..	..
d. Departmental	..	..	..	..
e. Banking	..	..	..	..
f. Spare	..	..	0.33	**2.02**
Total average per day	..	..	401.36	**406.05**
(iii) Engine km/day/Engine in line (all services).	..	..	567	**568**
(iv) Engine km/Day/Engine in use (all services).I	..	..	596	**604**
(v) Total No. of failure				
a. Passenger Service	..	..	84	**68**
b. Goods Service	..	..	30	**35**
(vi) Engine km/Engine failure				
a. Passenger Service	..	..	599328	**744693**
b. Goods Service	..	..	1093226	**935693**
(vii) Total km (Passenger and goodsservice).	..	..	1568685	**83388393**

7. Suburban Electric Multiple Unit Stock—Broad Gauge

	2015-16	**2016-17**
(i) Holding as on 31st March 2017		
a. In terms of Units (1 unit =1 MC + 2 TC) (4 Coaches WAU-1type)	272	**271**
b. In terms of Coaches (Motor Coaches and trailer Coaches).	822	**815**
c. Break up of Coaches (Motor Coaches and trailer Coaches).	**272MC&550TC**	**271MC&544TC**
Motor Coaches ICF Coaches 238	196	**195**
(i) Kms. run in terms of single units	36448280	**33612405**
(ii) Total No. of Failure	1	**6**
(iii) Kms/Motor Coaches failure ..	36448280	**5602067.5**

8. Electrical General Services Particulars

		2015–16	**2016–17**
(i) Generating, Converting and transforming Plants.	Nos.	337	**337**
Transformer capacity in	kVA	165045	**165065**
(ii) Total connected loads of installations purchasing powerfrom outside sources in kw.(in thousands).		185609	**184405**
(iii) Electrification of stations including block huts		728	**736**
(iv) Total No. of Motors(other than pump motors in service in majorworkshops, TL depots, divisional electrical repair shops, Printing Press, etc.,)	Nos.	4895	**3256**
	Capacity	39773	**29748**
(v) Electrical driven pump	Nos.	1588	**1563**
(vi) Electrified Quarters	Nos.	24707	**23882**
Lights		131844	**127115**
Fans		43192	**41456**
Plugs		65704	**65265**
(vii) Service Buildings			
Lights		96807	**94865**
Fans		39687	**39698**
Plugs		48062	**47889**

			2015–16	2016–17
(viii)	Ac plants and refrigeration's equipments			
	AC Plants	Nos.	2462	**2443**
	Capacity	Tons	6250	**6166**
	Refrigerators	Nos.	237	**242**
	Capacity	Ltrs.	39152	**40922**
(ix)	Water coolers	Nos.	624	**684**
	Capacity	Ltrs.	90802	**98777**
(x)	Air Compressors	Nos.	111	**113**
	Capacity of Motors in	HP	1854	**1913**
(xi)	Welding sets	Nos.	896	**932**
	Capacity in	Amps	114320	**122610**
(xii)	Battery Chargers	Nos.	892	**899**
	Capacity in	Amps	59577	**48472**
(xiii)	Other installations, Miscellaneous *viz.*, Geysers, Water distilling plants etc., Nos.		1102	**1503**
(xiv)	Flood light towers in yards—			
	No. of Towers		425	**405**
	Wattage	KW	70271	**65515**
(xv)	Length of Transmission line (Other than Traction) km.			
	HT OH		38	**38**
	UG		186.22	**191.22**
	LT OH		609.33	**605.07**
	UG		9*73.11	**1475.31**
(xvi)	Power line Crossings	Nos.	2705	**2766**
(xvii)	No. of lifts		89	**101**
(xviii)	No. of Escalators		61	**79**
(xix)	Solar panels capacity in kWP		30.60	**62.00**
(xx)	Solar PUMP capacity in kWP		..	**1.50**

8.A. *Train Lighting and Air-conditioning*

(a) Train lighting— The Train Lighting and Air-conditioning services in coaches were maintained satisfactorily. The population of B.G. Train Lighting coaches as on 31st March 2017 are furnished as follows.

Self Generation AC Coaches Population—

Sl. No.	*Type of coaches*	*Population*
1	FAC	12
2	FACCW	62
3	ACCW	237
4	CZAC	41
5	ACCN	526
	Total	878

(b) Shatabdi/Jan Shatabdi/Garbrath/Duronto Exp.Coaches—

1	FCZACEN	Nil
2	CZACEN	Nil
3	WLRRM	6
4	CZ ACJ	11
5	CZACH	4
6	WLRRMDAC	6
7	LCZAC	26
8	LFCZAC	4
9	SWGFAC	Nil
10	LWFAC	9
11	LWACCW	45
12	LWACCN	54
13	WACCW	9
14	WACCN	19
15	WFAC	3
16	LWLRRM	34
17	WCBAC	3
18	ACCNH	30
19	LWCZDAC	12
20	LWCBAC	7
21	LWFACCW	7
	**Total	**289**

Introduction of New Trains for the period from 01–04–2016 to 31–3–2017.

Nil

Augmentation (Addition/deletion) in the rake link in the composition of Express trains during the period 2016-2017

Sl. No.	Train No.	From	To	Date of Introduction	Type of AC/ TL coaches	Frequency	Total No. of coaches
1	12639/12640	MAS	SBC	13–06–16	GSCZ–8	Daily	24
2	16304/16303	TVC	ERS	21–06–16	GS–2	Daily	20
3	16305/16306	ERS	CAN	21–06–16	GS–2	Daily	20
4	16308/16307	CAN	ALLP	21–06–16	GS–2	Daily	20
5	16313/16314	ERS	CAN	21–06–16	GS–2	Daily	20
6	22630/22659	TEN	DR	24–08–16	GSCN–1	Weekly	17
7	22659/22660	KCVL	DDN	26–08–16	GSCN–	Weekly	18
8	22687/22688	MDU	DDN	28–09–16	GSLR–1	Weekly	21
9	12685/12686	MAS	MAQ	29–09–16	LWACCN–1	Daily	21
10	16021/16022	MAS	MYS	21–10–16	FACCW–1	Weekly	23
11	22659/22660	KCVL	DDN	28–10–16	GS–2 ACCW–1	Weekly	21
12	12084/12083	CBE	MV	10–12–16	GSCZJ–2	Daily (Except Tuesday)	16
13	12694/12693	TN	MS	07–12–16	GS–1	Daily	24
14	12084/12083	CBE	MV	20–01–17	CZACJ–1	Daily (Except Tuesday)	14
15	12077/12078	MAS	BZA	20–01–17	GSCZJ–2	Daily (Except Tuesday)	11
16	12075/12076	TVC	CLT	21–01–17	GSCZJ–1	Daily	21
17	22643/22644	ERS	PNBE	31–01–17	GS–1	Daily	24
18	22607/22608	ERS	SBC	29–01–17	GS–1	Bi-Weekly	24
19	16864/16863	MQ	BGKT	30–01–17	ACCW–1, ACCN–1	Weekly	18
20	16609/16610	CBE	NCJ	30–01–17	GS–1,	Daily	17

Introduction of Incentive Scheme

Progress of introduction of Incentive Scheme :—

Sl. No.	Position as on 31st March 2017	*Name of Workshops*	
		Perambur	***Ponmalai***
1	Total strength to be brought under incentive.	914	348
2	Total No. of men put on incentive in any month during the year.	809	338
3	Balance yet to be covered	105	50
4	Probable date by which the remaining men are to be covered.	The non-incentive men are utilized for non-repeated nature of work and the percentage is more. As and when necessity arises this men will be covered.	Actual staff strength is lesser than the sanctioned incentive man power. The balance will be booked when the vacancies are filled up.
5	Additional lines of production under taken to fully utilize the staff that were declared surplus in the various sections brought under the scheme.	In TLW and LTL shops modifications for passenger amenity are carried out namely IC to FL fitting PABT, Chat light fittings, Laptop charger, extra fans, emergency lights etc. in AC/EW pantry car equipments POH ed.	Nil
6	Average bonus earned per head per day.	₹ 93.44	₹ 127.11
7	Average increase in productivity during the year 2016-17 the period to the introduction of incentive scheme (In Units).	256 Coach/512 Units ## # Water cooler–25 units AC and motors–72 units	Both AC and Non-AC productivity is not increased. 1500 IOH bogies completed.

- CW and LW are Maintenance/Service shop.

- Staff are deputed to Electrical Millwright shop.

9. Financial Position-Electrical Department

A. Revenue Budget As per the demands for Grants:–

(Figs. in Lakhs of ₹)

Demand Number and Description	***Budget grant 2017-18***	***Final grant 2016-17***
Demand No. 5 Repairs and Maintenance of Motive Power (Electric Loco)	**20,825**	**19,638**
Demand No. 6 Repairs and Maintenance of Carriages and Wagons- EMU, TL and AC	**44,066**	**4,12,557**
Demand No. 7 Repairs and Maintenance of Plants and Equipments	**25,809**	**24,255**
Demand No. 8 Operating Expenses-Rolling stock and Equipments	**42,969**	**41,388**
Demand No. 10. Operating Expenses-Fuel for Electric Traction	**96,007**	**84,016**
Demand No.11 Staff Welfare and Amenities - Supply of Energy for Power & lighting (J 580)	**2,029**	**1,398**
Total	**2,31,705**	**2,11,950**

***B. Works Budget* Demand No. 16**

Plan Expenditure works controlled by CEE/MAS (Electrical Departments)

(Figs. in Lakhs of ₹)

	Demand Number and Description	***Budget grant 2017-18***	***Final grant 2016-17***
1	Traffic Facilities (16)	**0.02**	**15.56**
2	Other Electrical Works (36)	**610.06**	**432.92**
3	Traction Distribution works (37)	**6,488.01**	**1,033.37**
4	Workshops (42)	**40.85**	**31.5**
5	Staff Amenities (52)	**74.05**	**60.31**
6	Passenger Amenities (53)	**987.64**	**949.91**
7	Machinery and Plants (41)	**182.37**	**267.09**
8	Rolling Stock (21)	**1,360.03**	**2,139.97**
9	Other Specified Works (64)	**0.01**	**5.28**
10	Road Safety work (29)	**7.81**	**109.16**
	Total	**9,750.85**	**5,045.07**

10. Railway Electrification Project

Energisation during 2016–17

2.0 Energisation on 25 kV

S. No.	Section	RKM	TKM	Date of energisation	Date of CRS Authorisation
1	FCI siding WH, TKT & HPCL.	..	3.89	..	..
2	CHV–MAQ–MAJN	89	200	06-02-17	..
Total–89 RKM 203.819 TKM					

3.0 CRS Inspection

S. No.	Section	RKM	TKM	Date of energisation	Date of CRS Authorisation
155	CHV–MAQ–MAJN	89	200	11–03–2017	R. 120/1/ 2017-SR dated 22-03-17
Total–89 RKM 200 TKM					

IX. सिगनल व दूर संचार/SIGNAL AND TELE-COMMUNICATION

1. General — The over all performance of Signal and Tele-communication Installations continued to be satisfactory consistent with the increase in assets consequent on the execution of numerous planned works.

2. Signalling — The distribution on Inter-locked stations and those provided with Rudimentary Inter-locking on the Railways are as under :—

Gauge As on	Inter-locked stations								Non-Inter-locked Stations Without Rudimentary		Total No. of Block Stations	
	Std. III/IIR		Std. I/IR		IBS/IBH		Rudimentary					
	31st March 2016	**31st March 2017**	31st March 2016	**31st March 2017**	31st March 2016	**31st March 2017**	31st March 2016	**31st March 2017**	31st March 2016	**31st March 2017**	31st March 2016	**31st March 2017**
BG	433	436	47	47	26	27	0	0	2	2	508	512
MG	0	0	1	1	0	0	5	5	2	2	8	8
TOTAL	433	436	48	48	26	27	5	5	4	4	516	**520**

(A) Summary as on 31–03–2017

Total No. of Inter-locked stations	**436**	+ **48**	+ **27**	+ **5**	=	**516**
Total No. of Non-Interlocked stations	–	–	–	–	=	**4**
Total No. stations closed for Gauge conversion	–	–	–	–	=	**17**
Total No. of Block stations :	**516**	+ **4**	+ **17**	–	=	**537**

Note.— 1. This excludes flag & Halt stations but includes IBS.
2. Stations in automatic territory where emergency cross over exists and worked from the premises are included.
3. Stations in automatic territory where there are no points but provided with signals and track circuits are treated as non-block stations and hence are not included in the list of block stations.

(B) Method of Train Working.—Various systems of train working in vogue with number of block sections as on 31st March 2017 Gauge wise along with corresponding figures for 31st March 2017 are given below :—

Serial No.	System of Train Working	Broad Gauge		Metre Gauge		Total	
		31st March **2016**	**31st March** 2017	31st March **2016**	**31st March** 2017	31st March **2016**	**31st March 2017**
1.	**Single Line Token Instrument** (No. of Block section) ..	3	**1**	**8**	**8**	11	**9**
2.	**Tokenless Block Instrument** (No. of Block section) ..	409	**420**	**NIL**	**NIL**	409	**420**
3.	**Paper Line Clear Ticket**						
	a. Single Line	..	..	..	..	..	..
	b. Double Line	..	..	..	..	..	..
4.	**Lock and Block Instrument** (No. of Block section) ..	146	**190**	**NIL**	**NIL**	146	**190**
5.	**Automatic Signalling in KMs.**						
	a. Track Kilometres	1056.17	**1083.17**	**NIL**	**NIL**	1056.17	**1083.17**
	b. Route Kilometres	438.65	**438.65**	**NIL**	**NIL**	438.65	**438.65**
6.	**Intermediate Block Signalling in Kms** (Route Kilometres)	**291.130**	**308.97**	**NIL**	**NIL**	**291.13**	**308.97**
7.	**Other Systems**						
	a. Continuous Track Circuiting (Other than Auto signalling)	54.90	**54.90**	**NIL**	**NIL**	54.90	**54.90**
	b. Twin Single Line (Route Kilometres)	82.68	**82.38**	**NIL**	**NIL**	82.68	**82.38**

(C) Type of Signalling as on current year 31st March 2017—

Serial No.	Route	Quadruple Line	Double Line	Third Line	Single Line	Twin Single Line	Total
		Total No. of stations on					
(i) Two Aspect Semaphore Signalling—							
	E-Route						
	MG-Route				8		8
	Total						8
(ii) Multiple Aspect Upper Quadrant Signalling—							
(a)	D-Route				2		2
	E-Route						
	Other (Including MG)						
	Total						2

(iii) Multiple aspect colour light signalling—

Serial No.	Route	Quadruple Line	Double Line	Third Line	Single Line	Twin Single Line	Total
		Total No. of stations on					
	'A' Route ..	2	16	4	..	..	22
	'B'-Route ..	15	138	4	21	7	185
	'C'-Route ..	..	5	..	..	..	5
	'D'-Route ..	..	76	..	126	..	202
	'E'-Route ..	..	..		96	..	96
	MG ..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	510
	iv Under Gage Conversion..		..	..	17	..	17
	Total (i)+(ii)+(iii)	**17**	**235**	**8**	**243**	**7**	**537**

D. Signalling Assests *Total No. of Stations*

	A-Route	B-Route	C-Route	D-Route	E-Route	MG-Route	Total
1. Electronic Inter-locking - EI (SSI)	14	69	..	34	19	..	**136**
2. Route Relay Inter-locking-RRI	1	17	3	11	18	..	**50**
3. Panel Inter-locking-PI or P1/RS	7	73	2	151	54	..	**287**
4. Centralised Operation by SM's Side Control (CO)	..	5	..	1	5	..	**11**
5. Lever Frame	..	..	..	..	1	8	**9**
6. Intermediate Block Signalling IBS/IBH	..	20	..	7	..	..	**27**
7. Gauge conversion	..	..	..	..	..	17	**17**
Total	**22**	**184**	**5**	**204**	**97**	**25**	**537**

(E) (i) Classification of stations as on 31st March 2017–

GAUGE	ROUTE	Special Class		'A' Class		'B' Class			'C' Class		'D' Class		Total
		Third/ Double/ Quadruple Line	Single Line	Double Line	Single Line	Double Line	Single Line/ Twin Single Line	Single Line	Double Line	Single Line	Double Line	Single Line	
		BG		BG		BG		MG	BG		BG		
BG	A	22	——	——	——	——	——	——	——	——	——	——	22
	B	50	——	——	——	100	11	——	20	3	1	——	185
	C	5	——	——	——	——	——	——	——	——	——	——	5
	D	9	1	——	——	63	124	——	7	——	——	——	204
	E	——	1	——	——	——	95	——	——	——	——	——	96
	MG	——	——	——	——	——	——	——	——	——	——	——	0
	TOTAL	86	2	0	0	163	230	0	27	3	1	0	512
MG	S3	——	——	——	——	——	——	8	——	——	——	——	8
	TOTAL	——	——	——	——	——	——	8	——	——	——	——	8

(F) (II) Summary of Classification of stations as on 31st March 2017–

BG	86	2	..	..	163	230	0	27	3	1	0	512
MG	..	..	..	..	..	..	8	..	..	..	..	8
Total Number of Stations												520

Total Number of Block working stations .. 520

Total Number of Stations closed for Gauge Conversion .. 17

Total .. 537

(Total No. of Manned Gates as on 31st March 2017 - Class wise)

Sl. No.	Safety Devices provided	Special Class W.S.L.	Special Class O.S.L.	'A' Class W.S.L.	'A' Class O.S.L.	'B 1' Class W.S.L.	'B 1' Class O.S.L.	'B 2' Class W.S.L.	'B 2' Class O.S.L.	'C' Class W.S.L.	'C' Class O.S.L.	Total W.S.L.	Total O.S.L.	Ovrall Total
I.	a Lifting Barriers	158	307	48	113	22	51	23	60	197	743	448	1274	1720
	b Telephone	162	309	49	117	22	53	24	60	212	767	469	1306	1775

(Total No. of Manned Gates as on 31st March 2017).—Route Wise

Sl. No.	Route/Safety Devices provided	Special Class W.S.L.	Special Class O.S.L.	'A' Class' B 1' Class W.S.L.	'A' Class' B 1' Class O.S.L.	'B 2' Class W.S.L.	'B 2' Class O.S.L.	'C' Class W.S.L.	'C' Class O.S.L.	Total W.S.L.	Total O.S.L.	Overall Total
1.	'A' Route—											
	(a) Lifting Barriers	10	8	1	0	0	1	0	4	10	23	21	36	57
	(b) Telephone .	10	8	1	0	0	1	0	4	10	23	21	36	57
2.	'B' Route—													
	(a) Lifting Barriers	45	101	9	24	8	12	6	14	37	108	105	259	364
	(b) Telephone ..	45	101	9	25	8	12	6	14	40	109	108	261	369
3.	'C' Route—													
	(a) Lifting Barriers	0	0	0	0	0	0	0	0	0	0	0	0	0
	(b) Telephone ..	0	0	0	0	0	0	0	0	0	0	0	00	
4.	'D' Route—													
	(a) Lifting Barriers	69	156	25	72	6	26	12	28	98	375	210	657	867
	(b) Telephone ..	71	156	25	73	6	26	12	28	104	386	218	669	887
5.	'E' Route—													
	(a) Lifting Barriers	34	42	13	17	8	11	5	14	52	236	112	320	32
	(b) Telephone ..	36	44	13	19	8	12	6	14	54	248	117	337	454
6.	MG Route—													
	(a) Lifting Barriers	0	0	0	0	0	1	0	0	0	1	0	2	2
	(b) Telephone ..	0	0	1	0	0	2	0	1	4	1	5	3	8

(ii) Non-Inter locked Gates—

Route	Total No. as on 31st March 2017 Special Class	'A' Class	'B1' Class	'B2' Class	'C' Class	Total
Trunk Route and Important Main Line :						
1. 'A'&' B' Route on B. G.	3	1	3	4	69	**80**
2. 'Q'&'RI' Route on M. G.	..	..	..	..	..	..
Others ..	11	15	14	38	491	**569**
Total	**14**	**16**	**17**	**42**	**560**	**649**

(iii) Unmanned Gates.—As on 31st March 2017

Sl. No.	Section	No. of Unmanned Gates
(1)	Single line	414
(2)	Double line	42
	Total	456

H. Tele-communication Narrative Report—2016–17

(I) Exchanges

Sl. No.	Exchanges	Auto Exchanges	Inter-com.	Remarks
(1)	Total No. of Exchanges	78	47	..
(2)	Telephone Lines (in service)	14,373	2,569	..

(II) Traffic Control Including Area Control

Section Control

Details of Control Alignment/Cable

Sl.No.	Division	Section	Route Kms
a) RE Quad Telecom Cables			
1.	Chennai	Villivakkam - Annanagar	3.09
		Total	**3.09**
b) OFC + RE Quad Cable			
1.	Chennai	Chennai Beach - Thirumayilai	8.66
2.	Chennai	Chennai Beach - Basin Bridge	4.66
3.	Palakkad	Podanur - Palakkad	48.26
4.	Palakkad	Palakkad - Shoranur	44.49
		Total	**106.07**
c). OFC + 4 QUAD			
1.	Chennai	Chennai – Gudur	136.04
2.	Chennai	Chennai Beach - Chengalpattu	59.84
3.	Chennai	Thirumayilai - Tiruvanmiyur - Velachery	10.69
4.	Salem	Erode - Karur - Tiruchchirappalli	137.16
5.	Palakkad	Shoranur - Kozhikode - Mangalore	307.07
6.	Palakkad	Mangalore - Padil	2.00
7.	Thiruvananthapuram	Shoranur - Thrissur - Ernakulam	106.85
8.	Thiruvananthapuram	Ernakulam-Kottayam-Kayankulam.	114.66
9.	Thiruvananthapuram	Ernakulam-Allappuzha-Kayankulam.	100.34
10.	Thiruvananthapuram	Ernakulam - Cochin Harbour Terminus.	7.75
11.	Thiruvananthapuram	Kayankulam - Kollam	40.84
12.	Thiruvananthapuram	Kollam - Thiruvananthapuram Central	64.30
13.	Tiruchchirappalli	Villupuram - Tiruchchirappalli	177.53
14.	Tiruchchirappalli	Tiruchchirappalli - Thiruvarur	49.80
15.	Tiruchchirappalli	Tiruchchirappalli- Tiruchchirappalli Fort.	3.94
16.	Madurai	Tiruchchirappalli - Madurai	157.39
		Total	**1476.20**
d) OFC + 6 QUAD			
1	Chennai	Chennai - Tirunindravur - Tiruvallur	41.65
2	Chennai	Tiruvallur - Arakkonam	26.83
3	Chennai	Arakkonam-jolarpettai Jn	144.59
4	Chennai	Arakkonam-Renigunta	66.30
5	Chennai	Arakkonam - Chengalpattu	62.96
6	Chennai	Chengalpattu - Villupuram	102.92
7	Salem	Salem - Jolarpettai	120.04
8	Salem	Salem - Erode	59.25
9	Salem	Salem - Mettur Dam	40.25
10	Salem	Salem-Namakkal-Karur	85.12
11	Salem	Virudachallam - Salem	138.88
12	Salem	Erode - Coimbatore	100.14
13	Salem	Coimbatore - Mettupalaiyam	35.51
14	Salem	Podanur - Coimbatore	16.77
15	Salem	Mettupalaiyam -Udagamamandalam	45.88
16	Salem	Karur-Dindigul	73.97
17	Salem	Podanur - Kinathukadavu	24.81
18	Palakkad	Shoranur-Nilambur	65.80
19	Palakkad	Mangalore - Padil	5.70
20	Palakkad	Pollachi-Kinathukadavu	21.16
21	Palakkad	Palakkad-Pollachi	57.87
22	Tiruvananthapuram	Thrissur-Guruvayur	22.63
23	Tiruvananthapuram	Thiruvananthapuram -Nagercoil	71.05
24	Tiruvananthapuram	Nagercoil-Tirunelveli	73.29
25	Tiruvananthapuram	Nagercoil-Kanniyakumari	15.51
26	Tiruchchirappalli	Villupuram-Puducherry	37.30
27	Tiruchchirappalli	Villupuram - Vellore	150.23
28	Tiruchchirappalli	Katpadi - Vellore Cantonment	9.90
29	Tiruchchirappalli	Cuddalore - Vridhachalam	57.30
30	Tiruchchirappalli	Mayiladuthurai - Tiruvarur	37.91
31	Tiruchchirappalli	Villupuram-Cuddalore-Puduchattiram	68.83
32	Tiruchchirappalli	Puduchattiram - Mayiladuthurai	54.96
33	Tiruchchirappalli	Thanjavur - Kumbakonam	39.35
34	Tiruchchirappalli	Kumbakonam - Mayiladuthurai	31.10
35	Tiruchchirappalli	Thanjavur - Tiruvarur	54.37
36	Tiruchchirappallii	Tiruvarur-Nagore	30.37
37	Tiruchchirappalli	Nagore - Karaikkal	12.00
38	Tiruchchirappallii	Nidamangalam - Mannargudi	13.41
39	Tiruchchirappalli	Nagapattinam - Velankanni	10.32
40	Madurai	Madurai-Manamadurai-Rameswaram	161.49
41	Madurai	Madurai-Tuticorin-Tirunelveli	188.22
42	Madurai	Manamadurai-Virudhunagar	66.55
43	Madurai	Virudhunagar-Srivilluputtur-Tenkasi	122.16
44	Madurai	Tirunelveli- Tiruchendur	61.21
45	Madurai	Tirunelveli-Tenkasi	72.02
46	Madurai	Tenkasi - Shengottai	7.83
47	Madurai	Dindigul-Palani	58.30
48	Madurai	Palani - Pollachi	62.90
49	Madurai	Punalur - Kollam	44.98
50	Madurai	Punalur - Edaman	8.38
51	Madurai	Sengottai - Bhagavayjipuram	6.52
		TOTAL	**2984.79**
e). Railway 4 QUAD alone			
1.	Tiruchchirappalli	Tiruvarur – Karaikudi	148.99
		Total	**148.99**
f). Railway 6 QUAD alone			
1	Chennai	Pattabiram East Siding - Pattabiram East Cabin	2.03
2	Palakkad	Padil - Panambur	16.71
3	Madurai	Tiruchchirappalli - Karaikkudi	89.35
4	Madurai	Karaikkudi-manamadurai	61.16
5	Madurai	Bhavathipuram - Ariyankavu	8.48
		Total	**177.73**

CONTROL SECTIONS

Division	Section
Chennai	Chennai – Thiruvallur
	Chennai – Thiruvallur – Katpadi
	Chennai – Katpadi – Jolarpettai
	Chennai – Arakkonam – Renigunta
	Chennai – Gudur
	Chennai Beach – Villupuram, Chengalpattu – Arakkonam
	Chennai Beach – Tambaram
	Chennai Beach – Velachery
Salem	Salem - Jolarpettai, Salem - Metturdam, Salem - Vriddhachalam
	Salem - Erode - Coimbatore - Podanur - Kinathukadavu, Coimbatore - Udhagamandalam
	Salem - Karur - Tiruchchirappalli, Karur - Dindigul
Palakkad	Palakkad - Shoranur , Palakkad - Pollachi - Kinathukadavu - Palakkad - Podanur
	Palakkad - Shoranur - Cannanore, Shoranur - Nilambur
	Palakkad - Cannanore - Panambur
Thiruvananthapuram	Thiruvananthapuram - Kollam - Ernakulam
	Kollam - Ernakulam - Shoranur, Ernakulam - Alleppey - Kayankulam - Kochi Harbour Terminus
	Kollam - Thiruvananthapuram - Kanyakumari - Nagercoil - Tirunelveli
Tiruchchirappalli	Tiruchchirappalli - Villupuram - Katpadi, Villupuram-Puducherry, Cuddalore -Villupuram, Vriddhachalam - Cuddalore
	Tiruchchirappalli - Vriddachalam - Villupuram,
	Tiruchchirappalli - Thanjavur - Kumbakonam - Mayiladuthurai - Cuddalore
	Tiruchchirappalli - Thanjavur - Thiruvarur - Nagore, Thiruvarur - Mayiladuthurai, Thiruvarur - Thiruthuraipundi - Karaikudi
Madurai	Madurai - Dindigul - Tiruchchirappalli -Dindigul-Pollachi
	Madurai - Virudunagar - Vanchi Maniyachi, Tuticorin - Vanchimaniyachi - Tirunelveli,
	Madurai - Manamadurai - Rameswaram, Manamadurai - Virudunagar, Manamadurai -Karaikudi - Tiruchchirappalli,Virudunagar-Tenkasi,Tenkasi-Kollam, Tenkasi-Tirunelveli, Tirunelveli-Tiruchendur.

BSNL PHONE AT STATIONS

Provision of BSNL phones at all stations.

S.No.	Division	Number of Stations Provided with BSNL Phones
1.	Chennai	104
2.	Salem	79
3.	Palakkad	65
4.	Thiruvananthapuram	71
5.	Tiruchchirappalli	87
6.	Madurai	111
	Total	**517**

RAILNET CONNECTIVITY

S.No.	Connectivity	No. of locations Provided with Railnet
1.	LAN connectivity	72 Nodes
2.	Internet Gateway Connection	90 MB + 10 MB through RCIL

PRS & UTS

Division	PRS Locations	UTS Locations
Chennai	47	129
Salem	22	78
Palakkad	32	60
Thiruvananthapuram	55	72
Tiruchchirappalli	33	110
Madurai	37	117
Total	**226**	**566**

III – PASSENGER AMENITIES

S.No.	Telecom Items	Numbers
1.	PC based PA system	129
2.	Clocks [QUARTZ]	GPS clocks provided at 113 Stations
3.	Coach Guidance System	43
4.	Train Display Board	105
5.	Conventional PA System	287
6.	Touch screens	84
7.	POET	34

IV – SATELLITE PHONES—9

V – FOIS ,CMS & COIS

1.	**FOIS**	144 Locations
2.	**COIS**	53 Locations
3.	**CMS**	24 Locations
4.	**V — SAT Connectivity**	9 Locations

VI – VOICE RECORDER IN CONTROL OFFICE

Voice Recorders are provided on all the 23 Section controls and 8 Traction Power Control in all Divisions.

VII – CUG PHONES

8958 CUG SIM cards of M/S. AIRTEL are provided for Officers & Staff in all Divisions, Headquarters office, project and Construction wing.

VIII – VIDEO CONFERENCE

1. Video conferencing arrangements in Headquarters and all divisions is connected through OFC Ethernet media with ring protection.

2. CRB with GMs Video Conferencing system is connected through OFC MPLS Network between Chennai and New Delhi.

3. Video Conferencing arrangements provided between ML/Railway Board to CSTE & CCE.

PERFORMANCE OF TELECOMM CIRCUITS

S. No.	Name of The Circuit	2016–17 Performance in %
a.	Average Efficiency of Control Circuits on Railway OFC	
	Circuit	99.94
	Operating	99.98
b.	Average Efficiency of Control Circuits on Railway Quad Cable	
	Circuit	99.98
	Operating	99.99
c.	Average Efficiency of Control Circuits on Railway RE Cable	
	Circuit	99.52
	Operating	99.71
d.	Average Efficiency of Control Circuits on (Railway OH Link)	
	Circuit	No Circuit
	Operating	No Circuit
e.	Average Efficiency of Control Circuits (BSNL OH Link)	
	Circuit	No Circuit
	Operating	No Circuit

3. MATTER RELATING TO TELE-COMMUNICATION WORKS

Sl. Nos.	*Description of Work*	*Year of Programme*	*Estimated cost ₹ (in lakhs)*	*Physical progress upto 31st March 2017*	*Remarks*
	OFC WORKS				
1.	Vriddhachalam - Salem (OFC and STM-1 with MUX)	2010-11	478.61 DF3	95%	*Work is in progress.*
2.	Vriddhachalam - Cuddalore Jn. (OFC and STM-1 with MUX)	2011-12	222.34 DF3	100%	*Work is in progress.*
3.	Salem - Coimbatore - Provision of 6 Quad Cable in lieu of Re Cable 153 Kms.	2012-13	947.18 DRF	98%	*Work is in progress.*
4.	Villupuram Jn. - Thanjavur Jn. - OFC work (192 Kms)	2012-13	770.86 DF3	70%	*Work is in progress.*
	OTHER SPECIFIED WORKS				
1.	Southern Railway - Integrated Security System at TVC, ERS, MDU, CBE, TPJ, CLT & MAQ. (7 stations)	2010-11	3050.09 CAP	—	*Work is in progress.*
2.	Southern Railway - Integrated Security System at MAS, BBQ, TRL, MSB, MS, MBM, & TBM. (7 stations)	2010-11	1110.40 CAP	—	*Completed*

4. MATTER RELATING to S&T / PROJECTS / CHENNAI

Para 3:- Major Signalling Development and Signalling Elements of Line Capacity Works Costing More than 20 Lakhs.

(a) Pure Signalling Works.

3(a) (I) The Position of Major Signalling Works at the end of Financial Year review is as under :-

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimate D Cost	Sanction ED in the year	Comple tedin the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
1.	814	Madras Beach-Gummidipundi Auxiliary Warning system (TPWS	535437 DF(4)	98-99	2008-09	100%	100%	1. Work completed and commissioned including upgradation for 81coaches on 02-05-2008. 2. Handedover to Division on 06-02-13. 3. Final acceptance certficate issued. the section is under AMC.
2.	815	Chennai-Ambattur Audio frequency track circuit in lieu of conventional DC Track Circuit on slow lines (MAS-ABU Slow lines. (MAS-ABU Slow lines).	66832 DRF	2002-03	2016-17	86%	100%	1. Work completed and commissioned with commissioing of ABU-KOTR on 26.3.2015 KOTR-VLK on 23-9-2015 VLK-VPY section on 23/24-12-2016 2. Pending works are being attended 3. Final variation under process.
3.	816	Basin Bridge-Ambattur & Ambattur-Pattabhiram-Audio Frequency Track circuits in lieu of conventional DC Track Circuits. (i) BBQ-ABU Section Fast lines. (ii) ABU-PAB Section slow lines and Fast Lines.	194116 DRF	2002-03	2016-17	101%	100%	1. Work completed and commissioned with commissioing of ABU-KOTR on 26-3-15 KOTR-VLK on 23-9-16 VLK-VPY section on 23/24-12-16. 2. Pending works are being attended 3. Final variation under process.
4.	702	Ernakulam-Shoranur-Palghat Erode- Chennai and Bangalore-Jolarpettai -Chennai-Anti collision Device.	752400 DF(4)	2003-04				1. The abstract cost is Rs. 75.24 Crores. Detailed estimate for Rs. 205.84 Crores has been sent to Railway Board on 16-01-2009 Directives awaited.
5.	703	Ennore-Gummidipundi-Replacement of Conventional DC Track Circuit by Audio Frequency Track Circuit including Replacement of sigg. cables. (32 Km.)	115349 DRF	2004-05		83%	45%	2. AFTC commissioned in GPD-KVP section on 31-3-17 with provision of 17 Nos. of Siemens make AFTC and 4 Nos. of RTU's. 2. Work in progress in PON-KVP section.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
6	819	Shoranur-Ernakulam Alleppey-Kayankulam-Trivandrum-Block Proving Axle Counter in Interlocked Sections (317 Km.–39 BS).	207868 DF(4)	2004-05		91%	90%	1. Work commissioned in 36 block sections out 39. 2. AMPA-ALLP-MAKM, SRTL-TUVR-KUMM-ERS sections commissioned. 3. In SRR-ERS section BPCA work completed and handed over to Division except PUK-IJk and AFK-AWY IBS section. 4. BPAC work ERS-ALLP-HADsection in progress. 5. KYJ-TVC section BAPC work completed. 6. KUMM-ERS and TUVR-KUMM BPAC commissioned on 24-10-16.
7	820	Trivandrum-Kanniyakumari -Block Proving by Axle Counter in Panel/Route Relay Interlocked Section (87 Km.-5 Block Sections)	25204 DF(4)	2004-05		64%	80%	1. Detailed estimate sanctioned. 2. Contract awarded and cable laying work is completed. 3. The work in CAPE-NCJ Section was commissioned on 20-12-10 and work in progress at balance sections.
8	821	Villivakkam, Ambattur & Avadi-Replacement of signalling Gears by Route Relay.	161261 DRF	2008-09	2014-15	93%	100%	Commissioned. 1. Villivakkam - 30-03-2014 2. Ambattur - 28-08-2014 3. Avadi 31-03-2015
9	822	Chennai Beach-Vllupuram, Chennai Beach-Tirumayilai-Light Emitting Diode Signals (Phase-II)	26665 DF(4)	2008-09	2014-15	65%	100%	Commissioned
10	823	Perambur-Tiruvallur Ring Main arrangement and replacement of power Cable (36.03 Km.).	35416 DF(4)	2008-09	2015-16	110%	100%	Work completed and commissioned.
11	824	Chennai Area– Public address system in suburban trains (66 rakes).	61376 (DF 1)	2009-10 Suple-mentary	2016-17	84%	100%	1. Out of 66-9 car rakes, GPS based passenger information system is provided in 56 rakes : Avadi-29 & 3 (9 car & 8 car MEMU respectively) Tambaram-19 (12 car) & Velachery-5 (9 car) Commissioned in 54 rakes : Avadi-28 & 3 (9 car & 8 car MEMU respectively) Tambaram-18 (12 car) & Velachery-5 (9 car)
12	825	Vijayamangalam & Totiyapalayam-REplacement of Signalling with Electronic Interlocking.	64206 DRF	2009-10	2015-16	101%	100%	1. Totiyapalayam commissioned on 16-10-2015. 2. Vijayamangalam commissioned on 16-12-2015.
13	826	Karamadai & Mettupalayam-Replacement of Multi Aspect upper Quadrant Signalling Gears by Electronic Interlocking.	69308 DRF	2009-10	2015-16	114%	100%	Commissioned
14	827	Replacement of MAUQ Signalling by Electronic Interlocking. at Virarakkiyam.	43165 DRF	2009-10	2016-17	81%	100%	Work commissioned on 31-7-2016.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
15	828	Pallakkad Division Mankara, Mannanur, Ottappalam, Parli & Lakkitti-Repl. of Panel Interlocking arrangement by Route Setting type Panel Interlocking (B-Route).	163705 DRF	2010-11		49%	70%	1) Dtaield estimate is sanctioned on 07-12-2011 for Rs. 1637.04 Lakhs by CSTE/Plg. & Prjects/MAS. 2) GM sanctioned the revised detailed estimate drawn for provision of IBS in lieu of replacement of signalling gears at Mankara. 3) Contract awarded on 11-06-14 for PLL and outdoor work at 4 stations. 4) Parli work is completed and commissioned on 13-10-2015. 5) Tender for MNY combined with indoor works tender at MNUR, OTP & LDY. will be opened on 29-04-2016. LOA issued on 15-7-2016. 6) Lakkiti commissioned on 7-12-2016. 7) OTP commissioned on 27-3-2017 8) Outdoor work is in progress at MNUR. Indoor work held up due to non-provision of doors in relay & equipment rooms. Staircase in front of these rooms to be provided. MNY will be converted to IBS. IBS building work in progress. Outdoor cable laying in progress. 9) Approval P. Way plan for MNY are required to prepare SIP of LDY-MNY IBS.
16	829	Train Management System on Chennai Beach Sullurupettai, Chennai Beach-Velacherry, Chennai Beach Chengal-pattu & Chennai Central Arakkonam Sections-Southern Railway.	385800 DF(3)	2010-11		..	..	1) The detailed estimate for Rs. 38.58 Crores is sanctioned on 06-09-2011. 2) The work is frozen as Board"s instructions vide Letter No. 2011/SIG/ WP/15/2/PT dated 12-11-2012. and tender has been discharged.
17	830	BBQ-AJJ Section (Slow Line–Provision of Train Protection Working System (TPWS).	308142 DF (4)	2010-11		58%	99%	1) Contract has been awarded to M/s. Thales India Pvt. Ltd. on 10-4-2014. Since every for trial section (Villivakkam-Ambattur Automatic signalling section) completed by the firm on 30-7-2014. 2) All physical works and testing activities completed and pending works are being attended. 3) Dianamic trials in the section completed on 11-11-2016. 4) Monitoring of performance of the system started from 01-12-2016 by switching on the On Board system in two trains. 5) Verification of TPWS telegrams completed for entire section. 6) Validation completed between VLK-TRL and is in progress in BBQ-VLK and TRL-AJJ section. Safety case to be submitted by M/s. Thales. 7) DG (S&T) Railway Board inaugurated the TPWS on 21-12-2016 at Ambattur station. 8) Power supply equipments (Inverter) installation in distributed location is in progress.
18	831	Trivandrum Division-Replacement of signalling assets by panel Interlocking at Angamali for Kaladi.	26458 DRF	2010-11		47%	90%	1) CRS sanctioned obtained. 2) All physical work completed and station to be commissioned.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
19	832	Salem Division VRI–SA Section-Provision of Optic Fibre Cables and STM-1 with MUX (140 Km).	47862 DF (3)	2010-11	2016-17	94%	100%	1) Work completed. Residual/protection work under progress. 2) Indoor equipment installation completed and final variation statement sent to Finance.
20	833	Arakkonam-Jolarpettai-Train Protection & Warning system-150 RKM.	1123200 DF(4)	2012-13		..	..	1. Works sanctioned vide supplementary grants 23 of 2011–12. 2) As per Railway Board's Letter No. 2013/ Sig./TCAS/Status Dated 2-8-2016, this work will be excecuted by Southern Railway. 3) Detailed estimate prepared and sent to Finance for vetting on 28-3-2017.
21	834	Chennai Beach-Tambaram-Chengalpattu-Train Protection & warning system-60 RKM.	633877 DF(4)	2012-13		..	..	1) S T Detailed Estimate sanctioned on 27-01-2016 by GM for Rs. 63.39 Crs. 2) Tender schedule prepared and technical eligibility criteria approved by GM. Tender floated on 26-5-2016 and Pre-bid conference held on 10-6-2016 with various firms. 3) Technical bid opened on 10-8-2016. Brief note vetted on 23-92016. Technical Bid accepted by CSTE on 27-12-2016. 4) Commercial Bid opened on 5-1-207 and brief note vetted on 25-1-2017. HAG Level TC framed for finalizing tender.
22	835	Tiruchchirappalli Division-Replacement of Panel Interlocking at Tiruchchirappalli Fort Station.	37659 DRF	2011-12	2015-16	81%	100%	Commissioned on 08-09-2015.
23	836	Salem Division-Replacement of Signalling gears by Route Setting Type Panel Interlocking (4 stations) (D-Route) in KRR-TPJ Section. At MMH, PGN, EL and MTNL Stations.	160881 DRF	2011-12		57%	60%	1) Contract for indoor and outdoor works has been awarded. 2) S & T building completed at all stations indoor and Outdoor works are in progress 3) MNH commissioned on 30-9-2016. 4) MTNL commissioned on 29-11-2016. 5) PGN commissioned on 21-3-2017. has been awarded. 6) For EL, CRS sanction received. Cable laying and EI wiring in progress.
24	837	Lalapet Replacement of Multi Aspect Upper Quadrant Signalling by Panel Interlocking.	42336	2012-13	2016-17	60%	100%	Work completed and commissioned on 28-2-2017.
25	838	Walaja Road-Jolarpettai & Chennai Beach-Velachchery-Remote Terminal Unit with Network arrangement.	96861 DF(3	2012-13	2016-17	94%	100%	Work completed
26	839	Salem Division-Replacement of Universal Axle Counter with Single Section Digital Axle Counters (5 Intermediate Block Sections.	70851 DRF	2012-13		3%	5%	1) Detailed estimate is sanctioned. 2) Tender has been opened on 30-11-2015 and discharged. 3) HASSDAC being procured through store. PO issued. Material is likely to be supplied by March 2017. 4) Works tender to be floated
27	840	Mayanoor-Replacement of Multi Aspect Upper Quadrant Signalling by Panel Interlocking.	41553 DF(3)	2012-13	2016-17	68%	100%	Work completed and commissioned.
28	841	Chennai Division Replacement of point Machines. (450 Nos.)	36856 DRF	2012-13	2016-17	91%	100%	1) Detailed estimate has been sanctioned on 05-04-2013. 2) 400 Nos. of point machines have been replaced. 3) Batteries to be supplied, 50 Nos. pending. 4) Proposed for deletion in 2017-18.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
29	842	Villupuram- Thanjavur-Optic Fibre Cable (192 Kms.).	77087 DF(3)	2012-13	2016-17	94%	100%	1) Out door work completrd. 2) Indoor work completed at all stations except for installation of chargers at ANP, VDL, SY and CLN stations. section.
30	843	Salem-Coimbatore-6 Quad Cble in lieu of RE Cable (175 Kms.)	94719 DRF	2012-13	2016-17	103%	100%	Work completed. Residual/protection work under progress.
31	844	Southern Railway-Integrated Power Supply (131 left over Stations-MAS-35, SA-47, PGT-49)	240488 DF (4)	2013-14		2%	..	1) The scope of the work is provided IPS at 131 stations. Finance agreed to vett the indent for 27 IPS stating that the Budget Grant for 2015-16 is only for 27 IPS. 2) PO issued for procurement of 27 No. of IPS on 28-9-2016 and M/s. Statcon Power Controls Ltd., has supplied 27 sets of SMPS based IPS. 3) Modified estimate vetted by Accounts on 2-8-2016. Indent for 104 IPS vetted and sent.
32	845	Palghat Division-Dual Detection by single Section Digital Axle Counters at track circuits and provision of earth leakage detector.	40882 DF(4)	2013-14		50%	5%	1) Detailed estimate sanctioned by CSTE/ Plg. & Proj./MAS on 22-04-2014 for Rs. 408.82 Lakhs. 2) Contract awarded in February 2016. and LOA issued on 21-3-2016. 3) Materials recived. Survey of cable route is in progress. 4) Location foundation completed at SRR and TIR.
33	846	Chennai Division-Replacement of Electro Mechanical Signalling arrangements-I Station- B Route and 3 Stations E-Route.	141361 DRF	2013-14		..	..	1) LOA issued for construction of S&T accommodation and work is in progress. 2) S & T Tender floated on 30-03-2016 and opened on 10-05-2016 and LOA issued for outdoor works on 19-8-2016 LOA for indoor works issued on 25-10-2016 and work is in progress. 3) Construction of huts in in progress. 4) Cable route survey completed.
34	847	Chennai Beach-Villupuram, Arakkonam-Jolarpettai & Chennai-Gudur-Backup power supply Auto Sections.	189923 DF(4)	2014-15		..	..	1) Detailed estimate sanctioned on 04-11-2015 2) Three Tenders opened on 28-01-2016. 3) LOA for MAS-GDR issued on 23-5-2016. MSB-CGL issued on 27-7-2016 and AJJ-JTJ issued on 21-9-2016. 4) Construction of 20 Nos of Power huts is in progress in MAS-GDR and AJJ-JTJ Section. 5) AT provision tender under TC. 6) 20 Huts and 30 new ATs to be provided
35	852	Velliyannai, Palaiyam & Eriodu-Repl. of panel interlocking with Electronic Interlocking (D-Route)	138631 DRF	2015-16		..	..	1) Detailed estimate sanctioned on 15-7-2016. 2) Division advised for construction of Building. 3) P. Way plan for Palaiyam required for finalization of signalling plan.
36	853	Doddampatti, Lokur & Tinnapatti-Repl. of panel interlocking with electronic interlocking (D-Route).	176156 DRF	2015-16		..	..	Detailed estimate sanctioned on 9-8-2016 All indents vetted and with stores department for tendering. S&T tender will be floated after finalization of Building tender.
37	851	Jolarpettai-Repl. of Route Relay Interlocking and A, B & Cabins.	154266 DRF	2015-16		..	..	1) Site survey is under progress for preportion of detailed esmate. 2) Site survey for requirement of No. of cabins to be finalized by Division. 3) Revised P. Way plan received on 24-3-2017. 4) Joint inspection by Divn/Proj Officers planned during April 2017 to finalize Site for EI Cabin.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
38	854	Tiruchchirappalli-Karaikudi Manamadurai-Optic fibre Cable communication arrangement incl. SDH and PD-MUX with redundant power supply arrangement (151 RKM).	63200 DF(4)	2015-16		..	..	1) Detailed estimate is sanctioned on 06-01-2016. 2) NS Indent for 86 Kms of OFC cable vetted by Finance on 27-4-2016 and sent to Stores Branch for Procurement. Tender discharged due to high rate. Further 99 Kms. of OFC cable indent sent to stores for procurement on 21-10-2016. 3) Outdoor tender opened on 23-12-2016. Brief note vetted on 13-1-2017 and under TC. Indoor work handed over to M/s. RCIL.
39	849	Ernakulam Jn.-Ernakulam Town & Trivandrum Central-Dual dtection arrangement for berthing track and Trivandrum Division-redundancy for track detection at vulnerable locations.	36505 DF(3)	2015-16		..	..	Sr. DSTE/TVC to propose a new work to cover the entire yard in PWP 2017-18 as per CSTE directive conveyed vide letter No. SG.242/WP/2017-18 dated 30-8-2016.
40	850	Madurai Division-Integrated Power Supply with Solar Panel (23 Stations).	50421 DF(4)	2015-16		..	..	scope of the work is provided IPS with solar panel at 23 stations for which detailed estimate is sanctioned on 15-12-2015. Indent for procurement of IPS for 23 Nos. is vetted and sent to stores for tendering.
41	848	Chennai Division-Improvement of Data Logger and RTU Network.	43930 DF(3)	2015-16		..	..	1) Detailed estimate sanctioned on 17-02-2016 by ₹ 4.39 Crs. 2) Tender floated on 23-5-2016 and opened on 1-7-2016. 3) LOA issued on 7-10-2016 and work is in progress. 4) All indents sent to Stores Branch for further procurement action.
42	855	Podanur-Palakkad-Repl. of obsolete paper insulated quad communication cable with 6 quad cable (RE) (49 RKM).	39783 DRF	2015-16		..	..	1) Detailed estimate is sanctioned on 11-12-2015. 2) For outdoor work LOA issued to M/s. Ganesh Constructions Chennai on 8-12-2016 Indoor work handed over to M/s. RCIL. 3) PO isswued for 33 Kms. of 6 Quad cable with delivery date as 10-7-2017. Indent for 27 Kms sent Stores for pro curement on 21-10-2016. 4) Trenching for 5.2 KM completed in PGT-KTKU Section.
43	857	Chennai Egmore Tambaram - Replacement of Existing AFTC on A&B lines by MSDAC in Auto section of Chennai Egmore (MS)-Tambaram (TBM) section.	136368 DRF	2016-17		..	..	Site survey under progress for preparation of estimate.
44	858	Salem Provision of IPS for Non-Blanking of signals at leftover stations/IBS locations over Salem Division.	53200 DF4	2016-17		..	..	1) Sub estimate received on 27-9-2016 2) Detailed estimate sanctioned for Rs. 5.32 Crs. vide Letter No. SG. 190/SA/IPS/ Est. Dated 13-11-2016. 3) Indents vetted and sent to stores for procurement.
45	859	Shoranur Jn. Tiruvananthapuram Central-Provision Multi Section Digital Axle Counters (MSDAC) at IPL, MVLK, KYJ, QLN and KCVL Stations in TVC Division.	159700 DF4	2016-17		..	..	Estimate sanctioned for Rs. 15.97 Crs. vide Letter No. SG. 190/MSDAC/2/Est. Dated 24-11-2016.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
46	861	Chennai Dn.-Provision of Dual detection using MSDAC in Chennai Egmore and other than berthing tracks of Chennai Central.	90408 DF4	2016-17		..	..	1) Site survey completed. S&T estimate prepared. Awaiting vetted Sub Estimate details from Division.
47	861	Salem-Provision of Dual detection for on grider bridges at KEY, CBF, SNO, OML, SXT & at berthing tracks at TUP, ED.	861 DF3	2016-17		..	..	Detailed estimate sanctioned for Rs. 5,01,79,845 on 30-1-2017 vide Letter No. SG. 190/SA/MSDAC/Est. Dated 30-1-2017.
48	862	Madurai-Provision of series Track Circuit on D-Route of Maduari Division in TPJ-MNM and MNM-RMM sections.	42790 DF4	2016-17		..	..	Detailed estimate under preparation.
49	863	Provision of Integrated Power supply arrangements to left over 28 Stations in TPJ Division	47601 DF4	2016-17		..	..	1) sanctioned new work included in PB 2016-17. 2) Detailed Estimate sanctioned for Rs. 4,70,61,000 on 5-7-2016 vide Letter No. SG. 190/T/IPS/Est. Dated 5-7-2016. 3) Indent for 28 IPS is vetted and sent to stores for procurement.
50	864	Madurai-Provision of series Track Circuit on D-Route of Maduari Division in DG MDU, TEN TCN, VPT TSI and MDU MNM Sections.	43500 DF4	2016-17		..	..	Detailed estimate under preparation.
		Progress of works – costing below Rs. 2.5 crores (Law Book 2014–15)						
1	1022	Chennai Beach (MSB)-Villupuram Junction-Replacement of OMEX-8A by SDH and PD MUX with power supply arrangement in between MSB-VM Section.	17269 DRF	2009-10	2012-13	74%	100%	Commissioned.
2	1022	Chennai Division-Replacement of aged and worn-out signalling gears by panel Interlocking at Sri Venkatesaperumal-rajapuram.	15312 DRF	2009-10	2012-13	92%	100%	Commissioned.
3	1027	Chennai Division-Provision of Invertors at Stations for signals to avoid blanking of Signal Phase-I.	22126	2012-13	2015-16	71%	95%	Work completed and commissioned.
4	1028	Chennai Division-Dual Detection track circuit for improvement of track circuit with multi digital axle counters at RPM, PRES and VPY.	24847 DF(4)	2012-13	2016-17	79%	99%	Work completed and commissioned.
5	1055	Replacement of obsolete RE communication cable with 6 quqd cable in KJKD-WRA 'B' line and WRA-CLMD 'A' line section (GMsOUTOFTURNWORK) to be combined with PB No. 855 of 2016-17.	11106 DRF	2014-15	..	..	..	1) Detailed estimate is sanctioned on 11-12-2015. 2) For outdoor work LOA issued to M/s. Ganesh Constructions Chennai On 8-12-2016, Indoor work handed over to M/s. RCIL. 3) PO issued for 33 Kms of 6 Quad cable with delivery date as 10-7-2017, Indent for 27 Kms. sent to Stores for procurement on 21-10-2016. 4) Trenching for 5.2 Km completed in PGT-KTKU Section.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
6	1058	Replacement of obsolete SDH equipment with provision of NMS and encashment of primary muxes in SRR-CLT Section.	3487 DRF	2009-10	2014-15	62%	100%	Commissioned
7	1064	Provision of Redundancy for track detection using multi section digital axle counter (MSDAC) at KOZHIKKODE (CLT) Station.	12957 DF4	2013-14	..	14%	..	1) Work tranferred to cste/ Projects in June 2015. 2) CSTE approved to provide MSDAC for berthing tracks alone. 3) Detailed estimate sanctioned in December 2015. Tender floated and opened on 14-7-2016. LOA issued on 1-11-2016.
8.	1084	Tiruchchirappalli DIVISION -Provision of OFC and STM-1 with Mux at Vriddhachalam-cuddalore Section-provision of OFC and STM1 with MUX-57 Kms.	22234 DF4	2010-11	2015-16	73%	100%	Commissioned.
9	1095	Trivandrum Division-Karukutty-replacement of Wornout Sigg. Gears by Route Setting Type Panel Interlocking.	28344 DRF	2008-09	2016-17	116%	80%	Commissioned on 12-7-2016 Proposed for deletion in 2017-18.
10	1096	ERS-SRR Section-OFC along with SDH ADD/Drop Muxes (STM-1), Digital Primary D/i Muxes and other associated equipments.	9611 DRF	2009-10	2014-15	76%	100	Commissioned
11	1100	Trivandrum Division-Replacement of SM's Slide Operation of Signals & Points by Panel Interlocking at PNQ Station.	21264 DF4	2011-12	..	6%	..	1) Revised estimate with provision of PI and S&T building (2 rooms only) has been sanctioned by GM vide Lr. No. SG. 190/ V/3/PNQ/Est/Vol. 2 dated 4-4-2016 for Rs. 1.63 Crs. Division advised for construction of S&T accommodation. 2) Foreclosure of contract concurred by Dy, FA&CAO/CN/ERS and sanctioned by CSTE/P&P/MAS.
12	1015	Chennai Division-Improvement of existing Data Logger & RTU Network on ASTE/AJJ Section. (To be excuted along with PB 848 of 2016-17)	9761 DF4	2014-15	..	..	..	1) Dtailed Estimate sanctioned 2) Tender floated on 23-5-2016 and opened on 1-7-2016. LOA issued on 7-10-2016.
13	1016	Chennai Division-Provision of Remote Terminal Unit (RTUs) in PYA-GDR Section.	5991 DF4	2015-16	..	..	..	1) Dtailed Estimate sanctioned. 2) Tender floated through e-tendering. 3) Tender opened on 19-10-2016 and Brief note vetted and LOA issued on 6-1-2017.
14	1023	Chennai Division-Arakkonam-Chengalpattu-Provision of BPAC in PI/ RRI sections 5 block sections.	16781	2009-10	2012-13	120%	100%	Commissioned.
15	1024	CHENNAI DIVISION-Replacement of aged worn-out route relay Interlocking at Chennai Suburban terminal.	15440	2010-11	2012-13	66%	100%	Commissioned.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
16	1067	SALEM DIVISION : Karur-Dindugul and Omalur -Mettur Dam : Provision of BPAC in PI/RRI/ setions.	24749	2011-12	2015-16	92%	100%	Commissioned.
17	1083	GOC-TJ-Block proving by axle counters in panel/ route relay interlocked section (47 km, 4 block sections)	21423	2004-05	2012-13	124%	100%	Commissioned.
18	1018	Replacement of Jeumont track circuit by SSDAC and QBAT at MAS in Chennai Division.	6180 DRF	2016-17	..	..	..	1) Site survey completed. S&T estimate prepared. Awaiting vetted Sub Estimate details from Division.
19	10140	Replacement of Jeumont track circuit by SSDAC and QBAT at MAS in Chennai Division.	5100 DRF	2016-17	..	..	..	1) Site survey completed. S&T estimate prepared. Awaiting vetted Sub Estimate details from Division.
		Progress of works Road safety works 2016–17)						
1	74	Palghat Division- Manning (3 Nos.) & inter- locking (25 Nos.) of LCs. PGT Division-19 LCS. SA Division-6 LCS.	56190 S. Fund	2003-04	2011-12	72%	100%	Commissioned.
2	75	Tiruchchirappalli &Madurai Divisions Manning (9 Nos.) and Interlocking (58 Nos. of Level Crossings. TPJ Division - 13 MDU Division- 45	111755 S. Fund	2003-04	2014-15	86%	100%	Commissioned.
3	76	Tiruvandrum Division- Manning (9 Nos.) & Inter- locking (50 Nos.) of LCs.	95410 S. Fund	2003-04	2011-12	99%	100%	Commissioned.
4	77	Palghat & Salem Divisions Interlocking of level Crossings (23 Nos.) and Manning of Unmanned Level Crossings. (6 Nos.) PGT Divn. - 15 LCs. SA Divn. - 8 LCs.	52075 S. Fund	2002-03	2011-12	84%	Interlocking 100%	Commissioned.
5	82	Thirunanthapuram Division Interlocking of Level Crossing Gates (13 Nos.)	46371 S. Fund	2012-13		54%	20%	1) Detailed estimate is sanctioned. 2) Work awarded and is in Progress. 3) Signalling Plans are approved for all LCs.
6	83	Tiruchchirappalli Division Tiruchchirappalli-Villupuram Interlocking of Lvel Cross- ings (10 Nos.) and remote terminal units (RTU) to mid section Interlocked Level Crossing.	38000 S. Fund	2012-13		37%	..	LOA issued on 24-2-2015 to M/s. Venkata Rami Reddy Constructions, Yerragunta. LC No. 244, 252, 257, 290, 267 & 271, 278 commissioned & LC No. 312 & 319 will be done by RVNL during doubling & work is in progress at LC 238 this will be commissioned this financial year.
7	85	Salem Division-Interlocking of Level Crossing Gates (18 Nos.)	56959 S. Fund	2013-14		..	10%	Estimate sanctioned. 2) LOA issued on 3-10-2016 and work is in progress.
8	86	Salem Division-Interlocking of Level Crossing Gates (19 Nos.)	60788 S. Fund	2013-14		..	10%	Estimate sanctioned. 2) LOA issued on 3-10-2016 and work is in progress.
9	87	Southern Railway-Soalr Panel power supply arrangements for Mid- Section Level Crossing Gates.	74512 S.Fund	2013-14		..	20%	1) Detailed estimate is sanctioned on 04-08-2015. 2) Indent for cables and relays submitted to finance for vetting. 3) Works tender for supply and installation of salar panel, inverter, battery and charges and associated cable laying to be floated. 4) Tender schedule under preparation.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
10	88	Trivandrum-Ernakulam-Trichue-Improvements to communication arrangements at all level crossings (395 Km.)	65457 S. Fund	2013-14		8%	..	Detailed estimate is sanctioned on 21-12-2015. 2) Outdoor tender floated on 27-9-16. opened on 7-11-2016 and brief note vetted on 28-11-2016 and under TC Indoor work handed over to M/s. RCII. 3) 49 Kms. of 6 Quad cable PO released and material supplied.
11	89	Shoranur-kozhikode-Mangalore-Improvements to communication arragements at all level crossings (85 Km.)	61460 S. Fund	2013-14		5%	..	Detailed estimate is sanctioned on 11-12-2015. 2) Outdoor tender floated on 27-9-16. opened on 7-11-2016 and brief note vetted on 28-11-2016 and under TC Indoor work handed over to M/s. RCII. 3) 61.5 Kms. of 6 Quad cable PO released and material supplied.
12	91	Ernakulam-Alappuzha-Kayankulam Interlocking of Level Crossing Gates (42 Nos.)	270591 S.Fund	2014-15		3%	20%	1) Detailed estimate sanctioned for Rs. 27.05 Crores. 2) Out of 42 gates, LOA issued for 09 Gates on 15-12-2015 3) Approval given for floating of 16 LCs & 14 LCs in TVC Dn. (2 tenders) and LOA issued in favour of M/s Venkata Reddy Secunderabad on 7-11-2016. 4) LC No. 8, 9, 11, 12 & 13 in KUMM-TUVR section commissioned on 24-10-2016. 5) LC No. 24,26 27, 28, 29, 30 in TUVR-SRTL section commissioned on 30-3-2017. 6) 3 LC gates in AMPA-HAD section will be completed along with doubling of track by S&T Construction.
13	92	Chennai Division-Inter-locking of Manned Level Crossing Gates (26 Nos.)	125204 S.Fund	2014-15		5%	10%	1) Detailed estimate sanctioned on 26-09-2015. 2) Tender opened on 28-01-2016. Brief note vetted on 04-03-2016 LOA for CGL-VM issued on 22-6-2016. LOA for CGL-AJJ issued on 18-7-2016. LOA for AJJ-RU issued on 10-8-2016. 2 . S&T work is in progress in CGL-VM, AJJ-RU and CGL-AJJ section. 3) LC No. 34 @Km 72/26-28 between AJJ-TRT commissioned on 27-3-17. 4) Construction of LC Gate huts is in progress.
14	93	Chennai Division-Inter-locking of Level Crossing Gates (8 Nos.)	36145 15.S.Fund	2014-15		..	10%	1) Detailed estimate sanctioned on 11-11-Tender floated and opened on 28-01-2016. Brief note vetted on 04-03-2016 and LOA issued. 2) S&T Work is in progress.
15	95	Chengalpattu-Arakkonam & Chennai Egmore-Villupuram- Interlocking of Level crossings (Gate No. 19,21,35, 43, 44, 47, 48 & 56, 57, 79 (10 Nos.)	51100 S.Fund	2014-15		..	10%	Detailed estimate sanctioned on 23-03-16 2)LOA issued for CGL-AJJ (7LCs) and CGL-VM (3LCs) section on 16-11-16. 3) All NS indents vetted and sent to stores Branch for Procurement action. 4) Construction of LC Gate huts is in progress.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
16	94	Trivandrum Division- Interlocking of Level Crossing Gate No. 63, 51, 39, 88, 26.	43300 S.Fund	2015-16		..	..	Estimate sanctioned on 23-9-2016. Draft schedule prepared and awaiting approval.
17	99	Chennai Central improvement to communication facilities for Level Crossing Gates (160 Nos.)	73000 S.Fund	2016-17		..	..	1) Detail Estimate sent to Finance for vetting on 28-12-2016 has been returned with observations. 2) Reply for Finance observations under process.
18	100	Salem Division-RTU at interlocked level crossing gates and strengthening of networking to central data logger server.	28203 S.Fund	2016-17		..	..	1. Estimate Under finance vetting.
19	101	Salem Division- Integrated power supply for non blanking of signals and earth leakage detector sat level crossings.	50000 S. Fund	2016-17		..	..	1. Estimate Under finance vetting.
		Progress of Traffic facilites works – Pink Book (Controlled by S & T Projects 2014–15)						
1	51	Nagercoil-One Single face Platform one Stabling Line and simultaneous despatch and reception facility from Trivandrum side.	70600 DF(3)	2007-08	2009-10	37%	100%	Commissioned.
2	52	Chennai Beach-Additional platforms.	83410 DF(3)	2007-08	2014-15	23%	95%	Commissioned.
3	56	Salem Division-Tiruppur–Direct reception & Dispatch for Goods Line.	11962 CAP	2008-09		50%	20%	1) Detailed estimate for Rs. 119.62 Lakhs approved by CSTE/P&P sent to SA Division for inclusion in the main estimate and sanctioned on 30-11-2010. 2) LOA issued to Bharath Construc tion Co. Salem. Relay rack erection completed. Wiring completed. Bell testing in progress. Oudoor wiring nearing completion. Track crossing work is in progress. Glued Joints 9 out of 85 completed. CRS remarks regarding gradient to be complied by division.
4	59	Provision of 2 Line Crossing Station at Melapalayam Station (MP) in TEN-SLGM) Section.	76900 DF3	2010-11		..	..	S&T sub estimate for Rs. 3.2 Crs. sent to Division for inclusion in main estimate. Sanction awaited. Budget control by Sr. DEN/Co-ord/TVC (vide CPDE lr. No. A. 14463/156/2015-16/BG dated 29-1-2016)
5	62	63 Salem Division : Augmentation of line capacity of saturated sections.–Bommidi-Lokur, Vijayamangalam-Uttukuli &Vanjipalaiyam-Somanur-IBS.	103799 DF3	2015-16		..	..	Detailed Estimate sanctioned on 23-5-16 with UPSBL CSTE's directive received to carry out the work with EI/OC. Estimate under revision. Engineering and Electrical subestimate as per revised requirement is awaited from Division.
6	64	Tikkotti-Vadakara-Intermediate block section.	30400	2016-17		..	..	1) Detailed estimate sent to Finance for vetting on 21-12-2016 has been returned with observations. 2) Reply for Finance observations made on 7-2-2017. Estimate returned once again for calculation of ROR. 3) Letter addressed to CSTE/Plg. advise CPTM for the ROR on 16-2-2017.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
7	65	Vadakara-Mahe-Intermediate section.	29100	2016-17		..	..	1) Detailed estimate sent to Finance for vetting on 21-12-2016 has been returned with observations. 2) Reply for Finance observations made on 7-2-2017. Estimate returned once again for calculation of ROR. 3) Letter addressed to CSTE/Plg. advise CPTM for the ROR on 16-2-2017.
Progress of Traffic facilites works – LAW (Controlled by S & T Projects)								
1	9	Madurai Division-Milavittan Provision of sand Hump.	3500 DF(3)	2009-10	2013-14	80%	100%	Commissioned.
2	12	Palghat Division-Extension of Relay room for provision of signalling arrangements in connection with provision of calling-on signals below starter signals at MDKI.	4970 DF(3)	2008-09	2013-14	145%	100%	Completed
3	14	Palghat Division-Palghat-Shoranur Section-Provision of an IBS on the UP Line between PGT-PLL.	11183 DF(3)	2010-11	2013-14	151%	100%	Completed.
4	15	Palghat Division-Palghat-Shoranur Section-Provision of an IBS on the Down Line between PGT-PLL.	11183 DF(3)	2010-11	2013-14	154%	100%	Completed.
5	16	Palghat Division-Parli-Provision of cross over at PGT end & Conversion of Road 4 into common loop.	6921 DF(3)	2010-11		5%	..	Commissioned.
6	23	Salem Division Provision of IBS-SA-VRPD at Neykkarapatti and DC-MVPM at KLPT.	28666 CAP	2009-10		107%	50%	1) Work Completed and Commissioned. between DC-MVPM on 25-09-2015. 2) Work between SA-VRPD completed and commissioned on 28-11-2015.
7	25	Salem Division Salem-Erode Section : Conversion of DVBH into IBS (MagudanChavadi-Virapandy Road).	17732 DF(3)	2009-11		107%	100%	Work Completed and Commissioned.
8	30	Trivandrum Division Kollam-Trivandrum Section-Provision of IBS at Chirayinkeezh between KVU-MQU.	16862 DF(3)	2010-11	2013-14	71%	100%	Completed.
9	31	Kayankulam-Kollam Section-Provision of IBS between PRND-STKT.	14858 DF(3)	2010-11	2014-15	148%	100%	Completed.
10	32	Thrisur-Aluva Section-Provision of IBS with Inter Distance of 9.12 Kms. Between Angamali and Aluva.	11642 DF(3)	2010-11	2014-15	94%	100%	Completed.
11	33	Thrisur-Aluva Section-Provision of IBS with Inter Distance of 10.30 Kms. Between PUK & IJK.	11419 DF(3)	2010-11	2014-15	95%	100%	Completed.
12	34	Kayankulam-Quilon Section-Provision of IBS between PRND & QLN.	11619 DF(3)	2010-11	2014-15	128%	100%	Completed.
13	50	Provision of IBS sigg. arrangements in QLN-PVU section and closure of MYY block station.	15972 DF(3)	2015-16				1) Estimate sanctioned for Rs. 2.72 Crs. vide Letter No. W. 573/V/PVU-QLN/SG/Est. dated 22-11-2016. 2) Approval for Draft schedule under process.

Sl. No.	Law 2016-17 PB 2016-17	Name of Works	Estimated Cost	Sanctioned in the year	Completed in the year	Approx Financeal Exp. upto 31-03-2017	Physical progress upto 31-03-2017	Remarks
1	1	2	5	3	9	10	11	12
Track Renewal Works Executed by S & T Project								
1	532	Erode Yard- Elimination of Scissor Cross over & re-laying with six sets of 1:12 Points & Crossings.	52980 DRF (S&T)	2007-08	2016-17	60%	100%	Work xompleted and commissioned on 9-2-2017.
2	526 of 2015-16	MDKI-Removal of existing scissors cross over at PTJ end and provision of separate cross over at PGT end.	52980 DRF (S&T)	2008-09		..	62%	1) LOA for the work awarded to M/s. Bharath Constructions, Salem. 2) Approved P. Way Plan received on 16-12-2016. 3) Proposal for EI for MDKI is under approval.

5. Status of Signalling Assets as on 31–03–2017

SL. No.	DESCRIPTION OF ITEMS	TOTAL AS ON 31-3-2016	ADDED DURING 2016-17	TOTAL AS ON 31-3-2017
1.	ZISTUS	4322649	212307.00	4534956
2.	Total Route KMS on Railway	5074.45	5.06	5079.51
	Total Track KMS on Railway	7003.84	190.03	7193.87
3.	Token Block Working (No. of Block Sections)	11	-2	9
4.	(i) Tokenless Block Working (No.of Block Sections)	409	12	421
	(ii) Lock & Block Working (No.of Block Sections)	146	44	190
5.	(i) Block working with continous track circuiting	22	1	23
	(ii) Block working with one train only system	0	0	0
6.	Intermediate Block Signal (No.of Block Sections)	26	1	27
	(i) Single Line	0	0	0
	(ii) Double Line	26	1	27
7.	UFSBI	0	6	6
8.	Block Proving by Axle-counters (No. of Block Sections)	347	10	357
	(i) Single Line section	212	-5	207
	(a) BPAC - Block panel	0	0	0
	(b) BPAC - Axle Counter with Block Instrument	212	-5	207
	(ii) Double Line section	135	15	150
	(a) BPAC - Block panel	0	0	0
	(b) BPAC - Axle Counter with Block Instrument	135	15	150
9.	Colour Light Signalling (Stations)	500	10	510
	(i) Multiple Aspect	500	10	510
	(ii) 2-Aspect	0	0	0
10.	Semaphore Signalling (Stations)	16	-6	10
	(i) MAUQ	8	-6	2
	(ii) LQ	8	0	8
11.	Automatic Block Working			
	(i) Track Kms	1056.17	27.00	1083.17
	(ii) Route Kms	438.65	0.00	438.65
12.	Automatic Permissive Block Working	—	—	—
	(i) Track Kms	—	—	—
	(ii) RouteKms			
13.	Safety Devices at Level-Crossings (No. of Gates)			
	(i) Interlocked at Level Crossings (No. of Gates)	1234	-37	1197
	(ii) Lifting Barriers at Level-Crossings (No. of Gates)	1674	46	1720
	(a) Electrically operated lifting Barrier (ELB) No. of Gates.	49	0	49
	(b) Mechanically operated lifting Barrier (MLB) No. of Gates.	1625	46	1671
	(iii) Non-Interlocked Level Crossings	540	39	579
	(iii) Telephone at Level-Crossings (No. of Gates)	1905	-130	1775
	(iv) Train Actuated warning system (No. of Gates)	27	0	27
	(a) At Unmanned Gates (No. of Gates)	21	0	21
	(b) At Manned Gates (No. of Gates)	6	0	6
	(v) Emergency Sliding Booms (ESB) (No. of Gates)	19	0	19
.14.	A.Total Interlocked Stations (R)	301	23	324
	(a) Standard-I Interlocking (R)	27	3	30
	(b) Standard-II Interlocking (R)	274	20	294
	(c) Standard-II I (R)	0	0	0
	(d) Standard-Iv (R)	0	0	0
	B.Total No of Interlocked Stations (Nos.)	516	0	516
	(i) Non Inte-rlocked Stations	4	0	4
	(ii) Modified Non-Inter-locked stations	5	0	5
	(iii) Block Hut with station Master	26	1	27
	(iv) Total Interlocked Stations (a+b+c)	481	-27	454

SL. No.	DESCRIPTION OF ITEMS	TOTAL AS ON 31-3-2016	ADDED DURING 2014-17	TOTAL AS ON 31-3-2017
	(a) Standard-I (Nos.)	48	-30	18
	(b) Standard-II (Nos.)	0	0	0
	(c) Standard-III/IR (Nos.)	433	3	436
15.	(B) Total No of Stations (Nos.)	516	4	520
	(i) Special Class stations	88	0	88
	(ii) 'A' Class stations	0	0	0
	(iii) 'B' Class stations	398	3	401
	(iv) 'B' Class stations without loop	0	0	0
	(v) 'C' Class stations	29	1	30
	(vi) 'D' Class stations	1	0	1
	(vii) 'DK' Class stations	0	0	0
16.	Route Relay Interlockings (No. of stations)	57	-7	50
	(a) Standard – IR Interlocking	18	-6	12
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – III/IIR Interlocking	39	-1	38
17.	Panel Interlocking No. of stations.	--	--	--
	A) Panel Interlocking (END PANELS) (No. of stations)	--	--	--
	(i) Stations with MACL Signals	--	--	--
	(a) Standard – IR Interlocking	--	--	--
	(b) Standard – IIR Interlocking	--	--	--
	(c) Standard – III/IIR Interlocking	--	--	--
	(ii) Stations with Semaphore Signals	--	--	--
	(a) Standard – IR Interlocking	--	--	--
	(b) Standard – IIR Interlocking	--	--	--
	(c) Standard – Iii/IIR Interlocking	--	--	--
	(B) Panel Interlocking (CENTRAL PANELS) (No. of stns.)	313	-26	287
	(i) Stations with MACL Signals (No. of stns)	306	-19	287
	(a) Standard – IR Interlocking	16	0	16
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – III/IIR Interlocking	290	-19	271
	(ii) Stations with Semaphore Signals	7	-6	1
	(a) Standard – IR Interlocking	0	0	0
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – Iii/IIR Interlocking	7	-6	1
18.	Lever Frames (No.of stations)	9	-1	8
	(i) With MACL Signals	0	0	0
	(a) Standard – IR Interlocking	0	0	0
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – Iii/IIR Interlocking	0	0	0
	(d) Non-Interlocked (NI)	0	0	0
	(e) Modified Non-Interlocked (MNI)	0	0	0
	(ii) Stations with Semaphore Signals (DOUBLE-WIRE) (MAUQ) (No. of stns)	1	-1	0
	(a) Standard – IR Interlocking	0	0	0
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – III/IIR Interlocking	0	0	0
	(iii) Stations with Semaphore Signals (SINGLE WIRE) (LQ) (No. of Stations)	8	0	8
	(a) Standard – IR Interlocking	1	0	1
	(b) Standard – IIR Interlocking	0	0	0
	(c) Standard – III/IIR Interlocking	0	0	0
	(d) Modified Non-Interlocked	5	-3	2
	(e) Non-Interlocked	2	3	5
19.	Electronic Interlocking (No. of stations)	101	35	136
	(a) Hot	56	28	84
	(b) Warm	45	7	52
	i. Microlok II (Ansaldo)	49	0	49
	(a) Hot	9	0	9
	(b) Warm	40	0	40

SL. No.	DESCRIPTION OF ITEMS	TOTAL AS ON 31-3-2016	ADDED DURING 2016-17	TOTAL AS ON 31-3-2017
	ii Westrace (Invensys)	19	2	21
	(a) Hot	19	1	20
	(b) Warm	0	1	1
	iii. AZD Praha	0	0	0
	(a) Hot	0	0	0
	(b) Warm	5	-1	4
	iv. GETS (VHLC)	0	0	0
	(a) Hot	5	-1	4
	(b) Warm	0	4	4
	v. Siemens (SICAS)	0	4	4
	(a) Hot	0	4	4
	(b) Warm	0	0	0
	vi. Kyosan	1	11	12
	(a) Hot	1	9	10
	(b) Warm	0	2	2
	vii. Medha	27	19	46
	(a) Hot	27	14	41
	(b) Warm	0	5	5
20.	On Board Train Protection System			
	a. Auxiliary Warning System	--	--	--
	(i) RKM	--	--	--
	(ii) Trackside Equipment (TKM)	--	--	--
	(iii) Onboard Equipment	--	--	--
	(No. of Locos/EMUs/MEMUs/DEMUs)			
	b. Anti Collision Device (ACD)	--	--	--
	(i) RKM	--	--	--
	(ii) Trackside Equipment (TKM)	--	--	--
	(iii) Onboard Equipment	--	--	--
	(No. of Locos/EMUs/MEMUs/DEMUs)			
	c. Train Protection & Warning System)			
	(i) RKM	48.59	66.00	114.59
	(ii) Trackside Equipment (TKM)	97.18	420.00	517.18
	(iii) Onboard Equipment	82	-82	0
	(No. of Locos/EMUs/MEMUs/DEMUs)			
	d. Train Collision & Avoidance System (TCAS)	--	--	--
	(i) RKM	--	--	--
	(ii) Trackside Equipment (TKM)	--	--	--
	(iii) Onboard Equipment	--	--	--
	(No. of Locos/EMUs/MEMUs/DEMUs)			
21.	Second Distant Signal (No. of stations)	--	--	--
	(i) Stations with MACLS Signals	--	--	--
	(ii) LC Gates	--	--	--
	(iii) Intermediate Block Signals	--	--	--
22.	Track Circuiting (No. of locations)	2958	131	3089
	(i) FM to FM	481	20	501
	(ii) FM to BSL (St)	481	20	501
(iii)	FM to BSL (T/O)	239	24	263
	(iv) FM to Home (St)	481	19	500
	(v) FM to Home (T/O)	481	19	500
	(vi) Loop Line	481	20	501
	(vii) Others (Calling-on, Approach (Track circuits etc.)	314	9	323
23.	Complete Track Circuiting of Yard Stations (No. of Stations)	481	19	500
24.	(i) No. of Stations of Semaphore Signals Lit with Solar Power	1	0	1
	(ii) No. of Semaphore Signals Lit with Solar Power (Nos)	1	2	3
	(iii) No. of LC Gates Lit with Solar Power	3	12	15
25.	AFTC (Nos)	1424	103	1527
26.	HFTC (Nos)	--	--	--
27.	DIGITAL AXLE-COUNTERS (Nos)	--	--	--
	(i) SSDAC (Single Entry)			
	(a) Stations	514	10	524
	(b) Equipments/Track circuits	1028	57	1085
	(ii) MSDAC (Multi Entry)	--	--	--

SL. No.	DESCRIPTION OF ITEMS	AS ON 31-3-2016	DURING 2016-17	ON 31-3-2017
	(a) Stations	--	--	--
	(b) Equipments/Track circuits	--	--	--
	(iii) HASSSDAC	--	--	--
	(a) Stations	--	--	--
	(b) Sets	--	--	--
28.	ANALOG ALE-CONTERS (Nos)	--	--	--
	(i) Single Entry			
	(a) Stations	22	-3	19
	(b) Equipments/Track circuits	53	-4	49
	(ii) Multi Entry	--	--	--
	(a) Stations	--	--	--
	(b) Equipments/Track circuits	--	--	--
29.	LED Lit Semaphore Signals (Nos)	3	0	3
	(a) No. of Stations	--	--	--
	(i) With conventional power	--	--	1
	(ii) With Solar Power	--	--	1
	(iii) With Primary Batteries	--	--	0
	(b) No. of Signals	--	--	0
	(i) With conventional power	--	--	1
	(ii) With Solar Power	--	--	1
	(iii) With Primary Batteries	--	--	--
30.	Eletrically lit semaphore signals (Nos)	--	--	--
	(a) No. of Stations	--	--	--
	(i) With conventional power	--	--	--
	(ii) With Solar Power	--	--	--
	(iii) With Primary Batteries	--	--	--
	(b) No. of Signals	--	--	--
	(i) With conventional power	--	--	--
	(ii) With Solar Power (Nos.)	--	--	--
	(iii) With Primary Batteries	--	--	--
31.	LED Lit MACL Signals (Nos)			
	(a) No. of Stations	497	13	510
	(b) No. of Signals	8563	297	8860
	(c) No. of Aspects	24797	-15	24782
32.	Tripple pole Signal lamps (Nos)	--	--	--
	(a) No. of Stations	--	--	--
	(b) No. of Signals	--	--	--
	(c) No. of Aspects	--	--	--
33.	Calling - On Signals (No. of Stations)	469	9	478
34.	Data - loggers (No. of Stations)	480	5	485
	(i) Stand Alone (Nos)	24	0	24
	(ii) Networking Mode (Section / Nos)	456	5	461
	(iii) Networking with Division	451	10	461
	(iv) Networking with Zonal HQ	456	10	461
	(v) Networking with Railway Board	451	10	461
35.	Integrated Power Supply (No of Stations)	254	45	299
	(i) SCR Based (No. of Stations)	0	0	0
	(ii) SMPS Based (No. of Stations)	254	45	299
36.	Point Machines (Nos)	5907	191	6098
	(i) IRS Type	5860	193	6053
	(ii) Siemens Type	0	0	0
	(iii) Clamp Type	36	0	36
	(iv) Other	11	-2	9
47.	Batteries (Nos)	81445	1217	82662
	(a) (i) 2V Cells 40 AH	3070	-478	2592
	(ii) 2V Cells 80 AH	36618	3137	39755
	(iii) 2V Cells 120 AH	12922	-897	12025
	(iv) 2V Cells 200 AH	23479	-1854	21625
	(v) 2V Cells 300 AH	1988	1683	3671
	(vi) 2V Cells 400 AH	3273	-368	2905
	(vii) 2V Cells 500 AH	0	0	0
	(viii) 2V Cells 600 AH	0	0	0
	(ix) 2V Cells 100 AH	0	12	12
	(x) Battery Set 12/24 V	81	8	89
	(xi) Battery Set 4/24 V	14	-14	0

5. Signal Equipment Failures

Sl. No.	Signal Failures	Number of Failures			
		Previous Year 2015-16		Current Year 2016-17	
I.	*On Signal Account :—*	Nos.	%	**Nos.**	**%**
	(a) In colour light Signalling area	3,564	65.02	**2,856**	**52.83**
	(b) In semaphore signalling area.	0	0	**0**	**0.00**
	Sub-Total	3,564	65.02	**2,856**	**52.83**
II.	*On Account of others :—*				
1.	Operating Department	367	6.70	**375**	**6.94**
2.	Mechanical Department	13	0.24	**18**	**0.33**
3.	Engineering Department	569	10.38	**887**	**16.41**
4.	Electrical Department	105	1.92	**136**	**2.52**
5.	D. O. T. ..	0	0.00	**0**	**0.00**
6.	Miscreant ..	130	2.37	**151**	**2.79**
7.	Miscellaneous ..	587	10.71	**805**	**14.89**
8.	S & T Construction ..	146	2.66	**178**	**3.29**
	Sub-Total	1917	34.98	**2850**	**47.17**
	Total (I + II)	**5481**		**5406**	

The percentage is worked out based on the grand total number of signal and interlocking failures both on S. & T. account and other account 5406.

6. S & T Workshop–Podanur

Introduction:

Signal and Telecommunication Workshop was set up on 09.04.1958 at Podanur to serve as manufacturing – cum repair unit for Signal Equipments. Initial activities were confined to manufacture of Mechanical Signalling equipments like Lever frames, Levers and accessories. Subsequently the repairing and overhauling of Electric Signal reverses, Single Line Block Instrument and Electro Mechanical signaling equipments like Shelf Type Relays were taken up for production. Since then this workshop has grown into a major manufacturing unit for Signal & Telecommunication products and supplies the same to the entire Indian Railways.

This workshop is managed by Chief Workshop Manager (CWM) with a team of Officers comprising of 04 S&T Officers, 01 Personnel Officer, 01 Stores Officer and 01 Accounts Officer.

Development of Signaling Relays and Electronic Axle counters.

Gradually the production of Shelf Type Relays have been dispensed with and production of modern signaling items such as Q Type Relays, Axle Counters, Electronic Timers, Control Panels (CCIP), Point machines etc. were taken up for production in this workshop with complete indigenous components which has helped in the commissioning of Modern Signalling like Route Relay and Panel Inter Locking and partially in Electronic Inter locking in various Railways.

Production items

Presently the workshop is producing Signalling Relays, Control Panels (CCIP), Double Line Block Instrument, Token Less Block Instruments to suit Non-RE areas, LED Signals for LC Gates, TLBI with UFSBI to suit RE area also, Electrically operated Lifting Barrier Gates, IRS Point Machines (Both 143 mm & 220 mm Stroke), Polarized Relays, Electric Timers etc.. The workshop has an auxiliary unit in Perambur/Chennai. The Perambur unit takes up the overhauling of Double Line Block Instruments and FM Daido Block Instruments which are installed throughout Southern Railways. Apart from this, the Perambur unit also tates up the assembly work of Gate Warning Bell, Annunicator, Battery Charging etc. In addition to the above, S&T Workshop / Perambur is also manufacturing Location Boxes, TLD Boxes and E Type Locks.

Production Growth and Outturn

The workshop manufactures various type of sophisticated Signaling Equipments for meeting the demand of Indian Railways in the commissioning of new signaling projects and replacement works.

Production Growth and Outturn

The workshop manufactures various type of sophisticated Signaling Equipments for meeting the demand of Indian Railways in the commissioning of new signaling projects and replacement works.

The combined annual Outturn of S&T workshop/Podanur and Perambur unit is in the order of Rs.65.51 Crores for the year 2016-17. 2017-18 the turnover expected is Rs. 90 Crores. Proposal for 2018-19 is Rs. 137 Crores.

Progressive growth in the out-turn of the workshop can be seen from the figures given below :—

Sl. No.	Description	2013-14	20 14-15	2015-16	**2016-17**
1	Q Type Plugin Type Relays ..	62087	60655	55162	**56106**
2	IRS Point machine	2613	2360	3305	**3335**
3	Token Less Block Instrument (Push Button Type) ..	71	56	39	**82**
4	Double Line Block Instrument ..	130	124	156	**134**
5	Control panel	128	103	26	**69**
6	Polarised Relay	224	396	360	**285**
8	GRS Apparatus cases	1678	1587	1780	**1854**

Details of Staff Strength and Out-turn per employee are as follows The Out-turn per employee for the year 2016-17 is ₹ 8.3 Lakh.

Year	Out turn in Crores of ₹	Staff strength	Out turn per employee (in lakhs of ₹)
2012–13	57.98	741	7.82
2013–14	67.52	798	8.49
2014–15	**61.31**	**736**	**8.00**
2015–16	**62.65**	**789**	**7.94**
2016–17	**65.51**	**789**	**8.30**

Incentive Scheme

The incentive scheme was introduced in this workshop from 1st August-1963. An average of 686 staff per month have been covered under incentive scheme for the year 2016-17.

Quality Control

The pride of the workshop lies in its capacity to produce sophisticated signaling products of high standard quality. This workshop has got ISO 9001:2008 Certification for all sections including Administrative offices.

This workshop is an ISO 14001 Certified unit.

ISO 18001 Certification (Occupational Health & Safety Management System), ISO 22001 & ISO 50001 are also initiated for implementation in entire workshop. Draft is already issued on 29.04.2017 and will be implemented in the next 6 months.

As per the Quality policy, this workshop is committed to manufacture and supply safety signaling equipments of consistent quality by continuous improvement. As result, a lot of improvements were made and new fixtures were introduced in the production of Relays, Token Less Block Instruments Point Machines etc.. These measures have reduced the rejection rate considerably and improved the reliability of items being produced in this workshop.

Developmental Activities

RDSO approval has been obtained for SSDAC, Track Feed Battery Charger, QNNI Relay, Handle Type Block Instrument (FM type) (Daido) and are being manufactured.

The following new items are under development and proposed to be manufactured in the workshop in the next year onwards.

(a) Special Relays viz: QBCAI, QN1K & QNA1K.
(b) Earth Leakage Detector.
(c) 4F/2B Track Relays – QBAT, QT2 & QTA2.
(d) Electronics for Universal Fail Safe Block Interface.
(e) Contactless Battery Charger Monitoring System.
(f) LED Signal Units for Subsidiary signals – Calling on, Shunt, Route.

RDSO approval is in advanced stage for all the above items.

The following new items are developed during the year 2015-16.

1. Double walled air ventilator Location Box.
2. Galvanized Location Box and Ground Nut.
3. Location Box fabricated with Stainless Steel.

Computerization in S&T workshop/Podanur

All the shops and sections of S&T workshop and associated offices are provided with PC systems and these are inter connected through LAN and in turn connected through Railnet.

Biometric attendance system is installed and kept ready for introduction.

Daily position of production, material stock position , etc. are monitored through computers. All the activities in the Bill section, Planning section, Drawing office, Personnel branch, ISO section Inspection department, Budget section Stores section Marketing section, Progress section General section are done through computers only. The issue of passes (Privilege Pass, Post-retirement Pass) are done through computers. Computerized GAC system has been introduced in this workshop from 22.02.2016 onwards. IPAS Bill system has also been introduced.

Outsourcing of sub assemblies and components

To meet the growing demand of vital components produced in the workshop, certain sub-assemblies and components of Q Relays, Point Machines and Electronic items are outsourced apart from in-house manufacture. Stock items are procured through Stores Dept. through procurement memo system.

Basic Training Centre

A Basic Training Centre is functioning attached with S&T workshop/Podanur from 09/04/1993. Courses for Non-ITI Apprentice Fitters (Freshers), Ex-ITI Fitters, Turner, Welder and Machinist as per Apprentice Act 1961 are conducted here. Engagement order issued on 01.12.2016 to report on 20.06.2017 on merit basis.

Staff Welfare

The workshop is periodically inspected by the Inspector of Factories and instructions are strictly followed. A canteen is functioning in the workshop for the benefit of staff. Tea, Snacks, Tiffin and Meals are arranged daily to the staff at subsidized rates. In addition to this, Hindi Library, Cycle stand and a separate Rest room are functioning for the welfare of the women employees.

Railway Sub-Divisional Hospital and Homoeopathic Dispensary are functioning nearby the workshop for the staff and their families.

The renovated Railway Institute with Library and Reading room has been opened for staff recreation with facility for various Indoor games like Shuttle Coke, Caroms, Billiards, Table Tennis etc.. Volley Ball court, Lawn Tennis court, Tennikoit court and Ball badminton court are also available for the staff and wards.

S&T Workshop/Perambur

S&T Workshop/Perambur is a repair workshop. The workshop is functioning under the control of CWM/S&T/PTJ. The major activity of the workshop is the overhauling of Double Line Block Instrument and Handle Type Block Instruments (FM type) (Diado). Apart from these overhauling activities, this workshop manufacture Electronic Gate Warning Bell, Annunicator, E Type Lock, Location boxes and TLD Boxes(FRP). Initial charging of Batteries used in Signal and AC Locos also are undertaken in this workshop.

This is a Non-incentive workshop managed by a SSE and PE/ S&T/PTJ is the over all in-charge of this unit who visits the workshop once in a week to look after the activities of the workshop.

DETAILS OF TRAINEES WHO HAD UNDERGONE TRAINING FOR THE PERIOD APRIL 2016To MARCH 2017 AT S & T TRAINING SCHOOL - PODANUR

Sl. No.	Name of Courses	No. of Courses Pro-grammed	No. of courses conducted	No. of seats alloted	No. of Staff trained
	I. Intial Courses				
1	Intial course for App. ESMs	5	5	64	64
2	Intial course for App.TCMs	2	2	12	12
3	App.SSE/Tele,App.JE/Drg.	5	5	18	18
	TOTAL	**12**	**12**	**94**	**94**
	II. REFSHER COURSES				
1	Refresher course for ESMs.	12	12	276	205
2	Refresher course for TCMs.	9	9	117	75
	TOTAL	**21**	**21**	**393**	**280**
	III. FOUNDATION COURSES				
1	Foundation course for ESMs.	3	3	42	90
2	Foundation course for TCMs.	4	4	40	31
	TOTAL	**7**	**7**	**82**	**121**
	IV. PROMOTIONAL COURSES				
1	Promotional Course/Signal	6	6	48	48
2	Promotional Course/Telecom.	4	4	13	13
3	Promotional Course C to B	2	2	9	9
	TOTAL	**12**	**12**	**70**	**70**
	V. MODULAR COURSES				
	Modular Course/Signal	4	4	40	17
	Modular Course/Tele	4	4	40	10
	Modular Course/Tele	4	3	30	10
	TOTAL	**12**	**11**	**110**	**37**
	VI. COMMON COURSES				
1	Yoga & Meditation	7	7	70	42
2	Computer appreciation	6	6	50	55
3	Raja Yoga, Hethe Yoga, Ayurvehdha	9	9	303	303
	TOTAL	**22**	**22**	**433**	**400**
	VII. (a) EQUIPMENT COURSES (SIGNAL)				
1	Electronic Interlocking/ LPD & earthing	3	3	30	42
2	RRI System I & II	4	4	40	34
3	EI/OEM	2	2	20	60
4	Block Instrument Course	5	5	50	55
5	Automatic Signal/AFTC	3	2	20	12
6	Point Machine & Track circuit	4	4	40	41
7	Signalling in RE, CLS & LED Sigg.	3	1	10	3
8	IPS & Data Logger.	3	3	30	34
9	Axle Counter IBNS/BPAC/ SSDAC	4	4	40	23
10	HASSDAC/SSDAC	3	3	30	27
11	Introduction to Ele. for ESMs	3	3	50	20
12	Induction to unskilled	4	4	40	112
13	TPWS	1	0	0	0
	Special Courses				
14	P. Way staff	1	1	43	43
15	Data Logger	1	1	24	24
16	IPSI	1	1	46	46
17	EI/Medha EI/OEM	1	1	4	4
18	RRB Fundamentalcourse for helpers.	1	1	24	24
	TOTAL	**49**	**45**	**541**	**604**

Sl. No.	Name of Courses	No. of Courses Pro-grammed	No. of courses conducted	No. of seats alloted	No. of Staff trained
	VII. (b) EQUIPMENT COURSES (TELECOMMN.)				
1	Data Communication, Railnet, PRS & UTS & Basic of networking.	6	5	50	29
2	Multiplexing techniques PDH/SDH	5	3	30	10
3	Making of cable route plan and its use, TTC including protection path testing and quad cable jointing	6	5	50	24
4	Optical fibre communication & Splicing, measurements and fault diagnosis.	6	5	50	24
5	ISDN Exchange	5	3	30	16
6	Power equipment batteries and measuring instruments.	5	3	30	12
7	Modern communication, Mobile communication, NGN, IPDSLAM & MTRC.	4	4	40	20
8	PA system, IPIS (Video Survellance system)	6	6	60	23
9	Configuration of network devices	4	4	40	30
10	Mesuring of Telecom. Instruments	5	5	50	22
11	Induction to unskilled	6	5	50	37
	TOTAL	**58**	**178**	**480**	**247**
	GRAND TOTAL	**193**	**178**	**2203**	**1853**

Sl. No.	Nature of course	seats alloted	seats utilised	% of utilisation
1	Intial Course	94	94	100%
2	Refersher Course	393	280	71%
3	Foundation Course	82	121	148%
4	Promotional Course	70	70	100%
5	Modular Course	110	37	34%
6	Common Courses	433	400	92%
7	Equipment Courses/Signal	541	604	112%
8	Equipment Courses/Tele	480	247	51%
	TOTAL	**2203**	**1853**	**84%**

7. Staff

(i) Total strength of staff (cadrewise separately for Signal and Tele-communication staff) in respect of Inspectors and Artizans 2016–17.

Sl. No.	Category		Total Nos.
(a) Signalling—			
	(1) Signal Engineers	..	284
	(2) Technician/Signal	..	1,370
(b) Tele-communication—			
	(1) Tele-commn. Engineers	..	169
	(2) Technician, Tele-commn	..	456
	(3) Wireless Instrument mechanics		74

(ii) Total No. of Signalling and Tele-communication staff recruited in respect of Inspectors and Artizans. (Indents Placed).

(a) *Through Railway Recruitment Board*		
(1) SSE/Sig.	..	1
(2) JE/Sig.	..	17
(3) SEE/Tele.	..	Nil
(4) JE/Tele.	..	14
(5) Technician/Gr. II/Signal	..	81
(6) Technician/Gr. III/Signal	..	62
(7) Technician/Gr. III/Tele.	..	70
(8) Wireless Instrument Mechanics		Nil

(iii) Total No. of Staff trained through Zonal Training Schools/Centres category wise during 2016–17.

Sl. No.	Name of the courses		No. of courses conducted		No. of staff trained
(1)	Refresher Course	..	21	..	280
(2)	Initial Course	..	12	..	94
(3)	Equipment Course	..	94	..	849
(4)	Foundation Course	..	7	..	121
(5)	Pre-promotional Courses				
	(a) ESMs/MSMs/TCMs	..	12	..	72
(6)	Other courses - Computer	..	6	..	55
	Other courses - Yoga	..	16	..	345
	Other courses - Modular	..	11	..	37
	Total		**179**	..	**1,853**

(iv) Signal and Tele-communication Units for 2016–17

Division		**DISTUs**
Chennai	.. ..	6,56,046
Salem	.. ..	1,86,015
Palakkad	.. ..	2,00,616
Thiruvananthapuram	.. .. ..	2,38,282
Tiruchchirappalli	.. ..	1,87,809
Madurai	.. ..	1,50,626
Total	..	**16,19,394**
ZISTUS		**45,34,956**

X. भंडार/STORES

1. ORGANISATION OF STORES DEPARTMENT:

The Stores Department is taking care of Materials Management activity and is fully committed to arrange adequate quantity of materials of right quality, at right time, at right price from right vendor to a right consignee. To meet the requirements of various Departments adopting professional method of procurement, as many as **26 stores depots** are functioning, spreading over six Divisions of Southern Railway. The Stores department is arranging about **6315** stocked items required on regular basis, apart from procuring high value Non-Stock items centrally at Headquarters Purchase Office and also purchase units at Depots and Divisions. Sale of Scrap is also a prime activity of Stores Department, generating direct revenue which was to the tune of Rs.199.67 Crores during 2016-17. Entire purchase and sale activities are done digitally on IREPS/iMMS platforms which has made the system more transparent and equitable for all participants. Steps have also been taken aiming towards paperless working.

2. The Details of Stores Depots are as under:—

2. 1 General and Divisional Stores Depot :—

Sl. No.	Name of the depot (Depot Code)	Brief function	No. of items stocked	Issue value 2016–17 (in Crs. of ₹)	Staff Strength
1	General Stores Depot, Perambur **(03)**.	Supply of materials required for Chennai Division, mainly ; Supply of uniforms throughout Southern Railway Supply of books and forms & money valued items to Southern Railway, South Western Railway & ICF;	632	31.54	237 (including 04 Depot)
2	General Stores Depot, Palakkad **(07)**.	Supply of materials required for Palakkad Division	276	6.12	14
3	Divisional Stores Depot, Erode **(13)**.	Supply of materials required for Salem Division.	405	6.99	15
4	Divisional Stores Depot, Madurai **(14).**	Supply of materials required for Madurai Division.	361	5.77	32
5	Divisional Stores Depot, Quilon **(20)**.	Supply of materials required for Trivandrum Division.	416	12.63	20
6	General Stores Depot, Golden Rock **(24)**.	Supply of materials required for Trichy Division.	458	8.78	38
7	Coach Maintenance Stores Depot, Basin Bridge **(25)**.	Supply of C&W materials required for Chennai Division.	230	4.49	13

2. 2 Depots attached with Diesel & Electric Sheds :

Sl. Nos.	Name of the Depot (Depot Code)	Brief function	No. of items stocked	Issue value 2016-17 (in Crs. of ₹)	Staff Strength
1	Diesel Stores Depot, Erode **(08)**.	Supply of materials required for Diesel Shed/ Erode.	959	17.98	25
2	Electric Loco Stores Depot, Royapuram **(15)**.	Supply of materials required for Electric Loco Shed /Royapuram.	254	1.49	8
3	Diesel shed/Stores Depot **(19)**.	Supply of materials required for Diesel Loco Shed /Goldenrock.	1445	24.15	35
4	Electric Loco Stores Depot, Arakkonam **(21)**.	Supply of materials required for Electric Loco Shed /Arakkonam.	647	8.97	24
5	Electric Loco Stores Depot, Erode **(22)**.	Supply of materials required for Electric Loco Shed /Erode.	615	11.76	17
6	Diesel Stores Depot, Ernakulam **(23)**.	Supply of materials required for Diesel Loco Shed /Ernakulam.	789	6.80	20
7	Diesel Stores Depot, Tondiarpet **(26)**.	Supply of materials required for Diesel Loco Shed /Tondiarpet.	660	3.72	14

2. 3 Depots attached with Workshop :

Sl. No.	Name of the depot (Depot Code)	Brief function	No. of items stocked	Issue value 2015-16 (in Crs. of ₹)	Staff Strength
1	Loco Stores Depot, Perambur **(01).**	Supply of materials required for Loco Workshop, Perambur.	1328	76.44	79
2	Carriage Stores Depot/ GOC **(28).**	Supply of materials required for Mechanical Workshop, Goldenrock.	851	86.76	195
3	Branch Stores Arakkonam **(09)**	Engineering Workshop, Arakkonam.	77	2.61	14
4	Diesel Stores Depot GOC **(18).**	Supply of materials required for Diesel POH Shop, Goldenrock.	1974	47.00	21
5	Carriage Stores Depot/ Perambur **(28).**	Supply of materials required for Carriage Workshop, Perambur.	1118	180.66	76

2. 4 Depots attached with EMU Sheds :

Sl. No.	Name of the Depot (Depot Code)	Brief function	No. of items stocked	Issue value 2016-17 (in Crs. of ₹)	Staff Strength
1	Traction Stores Depot/ Tambaram **(10).**	Supply of materials required for Traction Depot at Tambaram and Velachery.	566	14.05	22
2	Traction Stores Depot/ Avadi **(27).**	Supply of materials required for Traction Depot, Avadi.	608	13.95	18

2. 5 Depots attached to Manufacturing Shops :

Sl. No.	Name of the depot (Depot Code)	Brief function	No. of items stocked	Issue value 2015-16 (in Crs. of ₹)	Staff Strength
1	Signal Stores Depot, Podanur **(11).**	Supply of materials required for Signal & Telecom Workshop, Podanur.	289	83.89	34
2	Wagon Production, Golden Rock **(17).**	Supply of materials required for Wagon Production, Workshop, Golden Rock.	Items procured against RSP NS indents and direct Railway Board coverage.		37

2. 6 Other Depots :

Sl. No.	Name of the depot (Depot Code)	Brief function	No. of items stocked	Issue value 2016-17 (in Crs. of ₹)	Staff Strength
1	Combined scrap Stores Depot, Perambur **(04).**	Receiving of scrap from various shops at Perambur & other Scrap from Open Line and arranging its disposal through e-Auctions.	215	121.78	included in 03 depot
2	Combined scrap Stores Depot, Goldenrock **(05).**	Receiving of scrap from various shops of Central Workshop/GOC & other Scrap from Open Line and arranging its disposal through e-Auctions.	169	75.39	63
3	Press Stores Ward, Royapuram **(12).**	Supply of all types of Tickets, Money value books & Standard forms etc. to S.Rly.& other organisations viz., SWR, ICF, RRB, Construction Organisation, Railway Claims Tribunal, Railway Rate Tribunal, etc.	26	8.01	22

2.7 PRINTING PRESS: There are two printing presses in Southern Railway to meet with the requirements of Books & Forms and Money-valued items like tickets, EFTs, etc. as under:-

- General Printing Press at Royapuram, Chennai
- Ticket Printing Factory at Trichy

As per the extant instructions of Railway Board, the requirement of Books and Forms by South Western Railway, ICF, RRB, Construction Organisation, Railway Claims Tribunal, Railway Rate Tribunal, etc are met by Printing Press, Royapuram, Southern Railway.

2.7.1 PRODUCTIVITY OF PRINTING PRESS AT ROYAPURAM

The production output of the General Printing Press for the year 2016-17 is 7.96 Crores DFCI (Double Foolscape Impression) against the targeted out turn of 7.20 Crores per year. This includes standard forms and money value items.

2.7.2 NEW ACTIVITY AT PRESS/RPM

Web offset printing machine for printing of pre-printed PRS (Passenger Reservation System) and UTS (Unreserved Ticket System) tickets has been put into service for use from 15.02.2015. The total number of tickets produced for PRS / UTS (Monocolour) for the year 2016-17 is 22.10 Crs. Printing of Multi Colour PRS tickets has also been started and 32.30 lakh numbers have been printed upto March 31st 2017.

2.7.3 PRODUCTION OF TICKET PRINTING FACTORY AT TRICHY

Card Tickets are printed at Ticket Printing Factory. For the year 2016-17, only 2.15 Cr numbers of tickets have been printed against the Target of 3.5 Cr numbers. This is due to the fact that UTS tickets were introduced in various stations over Southern Railway resulting in reduction of work order for printing of card tickets and the total receipts for the year 2016-17 is Rs. 2.15 Cr numbers only i.e 100 percent compliance.

3.0 ISO CERTIFICATION:

Southern Railway is one of the first Zonal Railway to obtain ISO 9001:2000 certification for purchase office of Stores Headquarters, along with Associate Finance which was subsequently upgraded to ISO 9001-2008 with validity upto 22.08.2017.

Upgradation to ISO 9001:2015 is under process.

4.0 SCRAP DETAILS AND & INNOVATION IN SCRAP

4.1 Innovation / Pro-active measure:

Railway Board had directed for complete switch over to iMMS by March 2017. Accordingly iMMS depot module has been successfully implemented in all the 24 depots by August 2016 and iMMS purchase module has been implemented at Headquarters Office during January 2017, well within the target date set by Railway Board.

AS A MEASURE OF INNOVATION, MOBILE (WHATSAPP) GROUP KNOWN AS 'Scrap disposal in southern railway" has been set up for effective interaction, amongst the custodians at field units which helped to increase the inflow of scrap from an average of 1700 MTs to 5300 MTs per month.

Google Mapping for open line scrap available throughout this Railway is successfully implemented and therby facilitated the purchasers with availability of scrap, size of lot, road approachable locations.

4.2 **RTGS (Real Time Gross Settlement):** Southern Railway has collected Rs.174.08 Crores in 2016-17 through RTGS.

4.3 **10.5 SCRAP DESPATCHES TO RWF/YNK:**

Southern Railway has despatched 9248.295 MTs of Scrap Rails/HMS to RWF / YNK. (Value Rs.22.16 Crores).

4.4 SCRAP -SALES PERFORMANCE:

As against the Railway Board's target of Rs.175 Crores for Scrap Sale for 2016-17, Southern Railway has achieved Rs.199.67 Crores. The closing balance of scrap is brought down to ever best lowest of Rs. 3.36 Crs in this financial year.

5. Stores Balance–(2015-2016)

(Figs. in crores of ₹)

	Maintenance	Works	Total
(I) Opening Balance			
Phy. stock without Adjustment	79.46	0.18	79.64
Adjustment	-0.15	0.00	-0.15
Stores Suspense balance	-7.04	0.00	-7.04
Total as per approx accounts	**72.27**	**0.18**	**72.45**
(ii) Receipts during the year	**1310.04**	**0.09**	**1310.13**
(iii) Issues during the year	**1284.29**	**0.10**	**1284.39**
(iv) Closing Balance			
Phy. stock without Adjustment	98.02	0.17	98.19
Adjustment	-0.15	0.00	-0.15
Stores Suspense balance	-36.07	0.00	-36.07
Total as per approx accounts	**61.80**	**0.17**	**61.97**

6. Inventory Performance 2016–17 *(figs in crores of ₹)*

1)	Overall Balance without fuel as on 31/3/2017	-	38.70
2)	Overall Balance with fuel as on 31/3/2017	-	107.53
3)	Total Issues (without fuel)	-	860.67
4)	Total Issues (with fuel)	-	1283.31
5)	Turn Over Ratio (without fuel)	-	4.50%
6)	Turn Over Ratio (with fuel)	-	8.38 %

7. Economy Achieved in use of Stationery and Other Materials.

Stringent economy is enforced in the utilisation of stationery and other materials of general usage.

8. Purchase of Stores

8.1 Purchase -Value of Railway Equipment and Stores 2016-17

(figs. in crores of ₹)

1.	Total value of equipment & stores	-	2431.38
2.	Value of stores ordered through department of supply (DGS & D)	-	6.06
3.	Value of stores ordered through Railway Board	-	973.95
4.	Value of stores ordered by the Railway Direct.	-	1451.87

8.2 Details of purchases of Stores (2016–17)

Every year about 4,659 stock orders and 436 non-stock orders are conclude by the office of the COS/S. Rly.

(figures in crores of ₹)

1. Materials imported direct	-	4.72
2. Materials imported through agencies in India	-	4.56
3. Total imported direct and through agencies	-	9.28
4. Indigenous materials	-	2422.60
5. Total imported and indigenous	-	2431.88
6. Percentage of items (4) over (5)	-	99.60 %

8.3 Purchase From Khadi, Cottage and SSI Units

Value of purchases falling within the category of khadi, cottage and small scale industrial products during the year 2015-16 is to the extant of ₹ 478.02 Crs.

9. Supply Position of Materials

a. General :— The supply position of materials was generally satisfactory.

b. Steel :— Statement showing supply position of Pig Iron,steel, etc. (2016–17)

(figure in Metric Tons)

Sl. No.	Item	Quantity indented during the year	Stock at the beginning of the year	Receipts during the year	Issues during the year
1	Pig Iron	0.200	0.200	0.000	0.200
2	Structural	1158.434	202.338	1047.522	1139.749
3	Plates	1796.143	577.123	1205.803	1526.820
4	Sheets	1609.281	256.968	1653.352	1821.183
5	Spring Steel	200.000	163.310	0.000	160.000
6	Tool Alloy & Steel Plates	—	—	—	—

10. Disposal of Scrap - During 2016-17, Southern Railway generated a revenue of ₹ **199.67** Crores, by sale of various Scrap items :—

Category of Scrap	Balance as on 01.04.16		Receipts during the year		Scrap Disposed off during the year		Balance as on 01.04.2017	
	Qty/ MT	Value (in Crs. of ₹)	Qty/ MT	Value (in Crs. of ₹)	Qty/ MT	Value (in Crs. of ₹)	Qty/ MT	Value (in Crs. of ₹)
I. Ferrous Scrap								
a. P. Way scrap	250	2.41	42327	84.129	41918	79.25	658.54	1.34
b. Other than P. Way scrap	834	1.57	31860	67.53	32094	59.22	599.95	1.24
II. **Non-ferrous Scrap.**	14	0.5	609	10.59	3604	35.59	19.42	0.26
III. Rolling Stock	Qty./No. of ₹)	(in Crs. of ₹)	Qty./No.	(in Crs. of ₹)	Qty./No.	(in Crs. of ₹)	Qty./No.	(in Crs.
a. Wagon	1	0.12	136	2.34	137	2.51	0	0
b. Coaches	28	0.81	246	8.61	266	8.39	1	0.03
c. Locos	2	0.28	7	2.44	9	3.14	0	0
IV. Misc. Scrap No.	Qty/No.	Value (in Crs. of ₹)	Qty/No.	Value (in Crs. of ₹)	Qty/No.	Value (in Crs. of ₹)	Qty/No.	Value (in Crs. of ₹)
Misc. Scrap (*) in MT.	1215	0.15	4215	21.46	5070	11.57	360.1	0.49
Misc. Scrap in No.	32	0.04	0	0	0	0	0	0
Grand Total Value	2309	5.88	79011	183.70	82686	199.67	1639.01	3.66

(*) - Misc Scrap includes T&P items, Machineries, Paper, Glass, etc.- some of which is quantified in Nos.and some others weighed on MTs.

Scrap Reclamation :

Ferrous Scrap	: 10318.198 mt.	Value	2041.78 lakhs
Non-Ferrous Scrap	: 1472.810 mt.	Value	1459.50 lakhs
Misc.	: 4065.165 mt.	Value	330.47 lakhs

11. Supply of Uniforms

Clothing Factory is functioning at General Stores Depot, Perambur and caters to the uniform requirement of Southern Railway. Depending upon the scales, uniforms are issued to the eligible staff and compliance is as under for the year 2016–17 :-

Type of Fabric	No. of garments indented for	No. of Garments actually supplied	No. of Garments to be supplied	% of compliance
Terrycotton	2,38,329	2,32,069	6,260	97.37%
Serge (Winter)	738	738	Nil	100%
Total	2,39.067	2,32,807	6,260	97.38%

In addition, 29,198 Nos. of ready made garments and 4,70,018 bedroll items were issued during 2016–17.

12. Receipt, Inspection & Issues of Stores

12.1 Statistics on Receipts and Inspection :—

	2014–15	2015–16	**2016–17**
1. No. of Staff for clerical and supervision work (Nos.)	76	69	**72**
2. Yearly Expenditure of staff (₹ in Lakhs.)	405.782	420.92	**480.43**
3. Value of stores inspected/received (₹ in Lakhs)	60,399.23	66,844.85	**68,662.34**
4. Cost of receipts and inspection per ₹ 100 of value of stores	0.67	0.63	**0.70**
5. Receipt notes granted per clerk per month ..	34	33	**46**

12.2 Statistics on Accounts and Departmental Stock Verification

	2014–15	2015–16	**2016-17**
1. Percentage of items verified			
(a) with no discrepancy.	99.72	99.73	**99.84%**
(b) with discrepancies			
Upto limit of ₹ 50/-	0.00	0.00	Nil
Upto limit of ₹ 1000/-	0.16	0.14	**0.02%**
Above the limit of ₹ 1000/-	0.12	0.13	**0.14%**

12.3 Loss and gain brought to light as a result of departmental and Accounts verification (Stores Depots only).

(₹ in Lakhs)

Year	Loss	Gain	Net Gain	Net Loss
2011-12	1.66	0.90	..	0.76
2012-13	3.18	7.27	4.09	..
2013-14	2.51	7.36	4.84	..
2014-15	3.01	20.34	17.33	..
2015-16	4.97	5.16	0.19	..
2015-16	**0.245**	**14.99**	**14.80**	**0.06**

12.4 Statistic on Unit cost of Issues

	2014–15	2015-16	**2016-17**
1. Value of stores issued during the year from the depots (figures in lakhs of ₹).	85490.29	85862.43	**84970.53**
2. Pay and Allowances of depot staff (figures in lakhs of ₹).	2442.13	2443.43	**2959.01**
3. Cost of making issues worth ₹ 100/- (in Rs.)	2.86	2.85	**3.48**

13. Availability of items (as on 31st March 2016) *(Value in lakh of ₹)*

1. Total No. of stocked	6315
2. No. of items available	6102
3. Percentage	96.63%

14. Overstock and Surplus Stores

(Value in lakh of ₹)

Details	As on 31–3–2016	**As on 31–3–2017**
1. Surplus	4.58	**0**
2. Over Stock	159.65	**113.17**

15. Printing Press

15.1 Production :— The total out-turn of Press/RPM of the year was as under :—

Items	Value of Books and forms printed (in lakh of ₹)	Value of Card tickets printed (in lakh of ₹)	Total
Work done for S.Rly.	914.48	197.83	1112.31
Work done for other Rlys.	152.99	40.07	193.06
Total	**1067.47**	**237.91**	**1305.37**

15.2 Paper consumption for Press during the year 2015-16

For general stationery Printing of Forms and Books and for stations and ticket offices, Boards – 810 MTs.

15.3 Out-turn of Forms, Money Value Books and Card Tickets. –

Particulars	Books, Forms & Money value Items (In terms of Books)	Card Tickets printed in Numbers
(i) Work done for S.Rly.		
2012-2013	31,58,828	3,07,01,800
2013-2014	19,33,483	2,22,46,200
2014-2015	24,01,479	1,54,36,150
2015-2016	10,14,341	1,80,34,750
2016-2017	**25,47,200**	**1,78,92,650**
(ii) Work done for others		
2012-2013	3,12,155	5,76,950
2013-2014	5,72,093	32,33,350
2014-2015	2,01,578	36,84,600
2015-2016	1,65,000	39,58,000
2016-2017	**6,36,800**	**36,24,600**

16. Shipping and Imports :

The details of Imported Cargo cleared during 2016-17 is as under :

Sl. No.	Description	Qty.	Weight	Ultimate consignee
1	Diesel Electro Locomotive componenet Spares as per COS/PER Purchase Order No: 29/14/5073/1/41139 dated 25.06.2015; 29/14/5541/1/41262 dated 16.09.2015 29/14/3120/1/04619 dated 21.12.2015 29/13/2783/1/04645 dated 03.03.2014 29/15/3037/1/02658 dated 05.08.2016 29/16/5030/1/59017 dated 05.08.2016 29/15/2740/1/04390 dated 13.12.2016 29/16/5095/0/41238 dated 13.12.2016 29/15/2806/0/03319 dated 26.09.2016 Received through 2 shipments under 3 Bills of Lading Assessable value of the Cargo : Rs. 1,06,58,576/- Customs Duty Paid : Rs. 23,21,642/-	100 Items	1662.71 Kgs.	SMM/ DSSD/GOC/ SSE/DSL GOC SSE/E/DSL/ ED

17. Right to Information Act .

A total No. of 96 RTI applications were dealt with during 2016-17 and all were disposed within the prescribed time limit.

XI. चिकित्सा/MEDICAL

Introduction:

The Southern Railway Health Department is involved in providing comprehensive healthcare services which include:

(A) Medical services for disease prevention and health promotion services in the beneficiary population covering important Public Health matters concerning Communicable Diseases, Non Communicable Diseases, Maternal & Child Health, Family Welfare, National Health Programmes, Health Education.

(B) Monitoring of Drinking Water Quality Standards and Food Safety Standards.

(C) Industrial Health Services: The Industrial healthcare services include Pre-employment medical examination of Candidates, Periodical Medical Examination of employees, Prevention, Treatment, Monitoring & Reporting of Workplace Accidents in the zone, Health Awareness and Screening at Workplaces.

(D) Medical Services including primary, secondary and tertiary Health care are provided to approximately 5.2 lakh Railway serving and retired beneficiaries with their family members through 42 Health Units &10 Hospitals with the help of 198 Doctors, 515 Nursing Personnel and 1991 Paramedical staff.

(E) Environmental Health: The Health Department is also responsible for the upkeep of Major Railway Stations in the zone with mechanised cleaning contracts and upkeep of all Railway Colonies with in-house Safaiwalas. Garbage Collection and Disposal Contracts are also in place.

(F) Planning procurement and distribution of medicines, surgical consumables and laboratory materials. Material management for M&P equipment with a view to meet the tangible components of healthcare delivery for efficient functioning of Hospitals & Health Units in the zone.

(G) Evolving treatment protocols as per current evidence based medicine and conducting regular C.M.E (Continuing Medical Education) programmes for Medical Officers and paramedical staff. A regular training programme for Postgraduate DNB Courses are conducted in nine specialities / super specialities at the HQ Hospital, Perambur.

(H) Disaster Management protocols and readiness is maintained through the planned response along the Divisional jurisdictions with availability of two SPART at Chennai & Erode, Nine ARME Scale I and Twenty Eight ARME Scale II in the zone in order to provide prompt medical relief to passengers injured in Railway accidents or disasters.

(I) Emergency Medical Relief is provided to travelling passengers by the Railway Medical personnel during the journey at Railway Stations enroute. Medical Emergencies reported on board travelling passengers who are injured or taken seriously ill in trains or at Railway stations, are also attended to.

(J) Voluntary services organization like St John Ambulance is actively involved in training of members in First Aid & Safety along with rescue and relief activities during train disaster and Public Duties.

HEALTHSERVICES:

(A) Sanitation and Cleanliness

The Sanitation of 72 important stations in various categories viz., A1-8, A-37, B-24, C-1, D-1 & E-1 are under the control of Medical Department. The cleanliness works of these 72 stations are outsourced through Mechanized Cleaning contracts. Special cleanliness drives/campaigns are conducted at Railway Stations, Work places, Workshops, Railway Hospitals/Health Units every month. CCTV, Public address systems are being used for creating awareness on cleanliness. All Medical Officers of the Divisions, AHOs, CHI/HIs are monitoring the activities of cleanliness.

Intensive Cleaning Drives were undertaken in all A-1 and A category stations once a week on Saturday/Sunday during the period April to June 2016. Special campaigns were organised once a month in all A-1 category stations involving Social/Charitable organisations, NGOs, Bharat Scouts & Guides and NSS etc. The following were the Drives/ Campaigns held in the year 2016- 17:

- Swacch Rail Swacch Bharath was observed in Workshops, Sheds, Production Units and Depots from 01.05.2016 to 15.05.2016.
- It was observed in all Offices and other work places from 16.05.2016 to 31.05.2016
- Theme based cleanliness drives were undertaken at all Railway colonies from 01.07.2016 to 15.07.2016.
- Swachhta Saptah - A special week-long drive from 17.09.2016 to 25.09.16 was observed.
- Swachhta Saptah - A week long drive against Open Defaecation was organised from 25.09.2016 to 01.10.2016.
- Swachhta Saptah was observed in all Railway Hospitals & Health Units from 01.02.2017 to 15.02.2017.

Cleanliness Drives in 2016 - 17	Cleanliness Campaigns in 2016 - 17
1049	886

(C) FOOD SAFETY

(B) Quality of Water:

The Quality of water supplied at stations and colonies are monitored by conducting regular tests for residual chlorine and for bacteriological and chemical analysis. The details of water samples collected during the year 2016-17 are given below:

Bacteriological test :

No. of samples examined : 5826
No. of samples found Fit : 4339
No. of samples found Unfit: 1487
Percentage fit : 74.5%

Residual Chlorine Test :

No. of samples Examined : 71805
No. of samples found Fit : 56192
No. of samples found Unfit: 15613
Percentage fit : 78.3%

The Food Safety & Standard Act, 2006 was implemented in September 2011 to improve the quality of food distributed in the Railway premises and trains. Food Safety & Standard Wing of Southern Railway started working from August 2011 and New Food Safety and Standards Act 2006 has been implemented from September 2011 onwards. A separate Food safety wing consisting of One Designated Officer at HQ and Food Safety Officer for each Division is functioning to implement this Act throughout Southern Railway. New food licenses to catering units are being issued by this wing, and Food safety awareness campaigns were conducted for Food Handlers & licensees of catering establishments. All the Medical Officers, Assistant Health Officers, Designated Officer, Food Safety Officers and Chief Health Inspectors/ Health Inspectors conducted regular and surprise inspections on static & mobile catering units to improve the quality of food served to the travelling public.

Food samples were collected regularly under Quality Control & FSS Act, 2006 and sent for analysis and action initiated. The details of food samples collected during the year 2016-17 are given below:

Quality Control :

No. of food samples collected .. .. : 1147
No. of samples found adulteratedMisbranded/ Sub-std. : 70
No. of found samples found Unsafe .. : 53

FSSA:

No. of food samples collected .. .. : 66
No. of samples found adulterated/Misbranded/ Sub-std. : 04
No. of found samples found Unsafe .. : 02

(D) Family Welfare Programme:

Reproductive and Child Health services are rendered to the Railway beneficiaries effectively. Regular well baby clinic, antenatal clinic, post-natal clinic, Immunization clinic, well baby shows, Counselling for conception and contraception, Sterilisation services are rendered through the network of Railway Hospitals/ Health Units in Southern Railway.

A total of 399 tubectomies and 2 vasectomies were performed during the year in Southern Railway.

(E) Disease prevention & Health Promotion:

Disease Prevention and Health promotion are geared up by way of regular Observance of Public Health Importance days, conducting Health Education classes, talks, lecture at Railway Training centres, Railway Schools, Offices, Workshops, Colonies, conducting Wellness camps by screening for life style disorders and School Health Check-up camps.

The following are the details of the activities in the year April 2016 to March 2017 :

DISEASE PREVENTION & HEALTH PROMOTION ACTIVITIES APRIL 2016- MARCH 2017

	Public Health Important Days		Health Education Sessions		Wellness Camps		School Health	
DIVN	No.	Beneficiaries	No.	Beneficiaries	No.	Beneficiaries	No.	Beneficiaries
PER	17	6845	6	205	2	163	2	674
MAS	29	3372	40	2400	34	2743	2	1397
TPJ	31	1828	272	8177	63	4307	1	655
MDU	27	4052	447	12373	51	2601	7	947
SA	25	3504	7	655	36	5545	3	1364
PGT	27	1502	33	2370	26	1541	2	448
TVC	22	7861	271	5420	92	6309	0	0
Total	178	27941	1076	31600	297	23209	17	5485

Best Health and Family Welfare Centre Shield is awarded to the best performing Divisions/Unit in Family Welfare and Disease Prevention & Health Promotion Activities during Railway week celebration. **Tiruchirappalli** Division bagged this shield for the year 2016-17.

(F) Pulse Polio Immunization:

Pulse Polio Immunization was given to 25677 children below 5 years during Intensive Pulse Polio Immunization campaign in I Phase from 29.01.2017 to 31.1.2017 and to 31419 children in II phase from 02.04.2017 to 04.04.2017.

(G) HIV/AIDS Control:

Various awareness programmes like lecture sessions, talks in Group meetings, Cultural shows, Dramas, Rally, Quiz, Essay/Poster/Painting/elocution contests etc., are routinely conducted to create awareness about HIV/AIDS. The current pool size of HIV/AIDS in the Zone is 243 and all of them are asymptomatic. All the HIV cases are regularly followed up and required care and support have been rendered by the Counsellor attached to the Integrated Counselling and Testing Centres (ICTC)/RH/PER in Southern Railway. Anti-Retroviral Treatment is being administered at Railway Hospitals Perambur and at Golden Rock to all people living with HIV Positive to enhance their quality of life.

(H) Control of Tuberculosis:

Health education classes were conducted by Medical Officers and health education materials were distributed. Screening camps were conducted at Divisional Hospitals and Health Units on Southern Railway.

All TB patients registered are being given Anti-TB drugs without any interruption under DOTS. Protein food supplement are given to TB patients.

INDUSTRIAL HEALTH SERVICES

Total Railway Medical Certificates issued ..80465	
Total Man-days Loss	.. 905074 Days
RMC Man-days Loss per 1000 Employees..	2680 Days
Man-days Loss due to Injury on Duty	.. 45203 Days
IOD Man-days Loss per 1000 Employees..	157 Days

MEDICAL EXAMINATIONS	2015-16	2016-17
Pre-employment Candidates M/E	13152	2097
Periodical Employees M/E		
Aye One	1792	1905
Aye Two	5016	5717
Other Categories	1208	1039

Medical Services

Zonal Medical Care 2016–17

Total Outpatients	**1881323**
Total Inpatients	33891
Major Surgeries	2737
Minor Surgeries	4446
Special surgeries	1615

HEADQUARTERS HOSPITAL PERAMBUR

The Zonal HQ Railway Hospital, Perambur is a 505-bedded hospital. This is a referral hospital not only for the beneficiaries of Southern Railway, but also for the entire Indian Railways for Cardiology, Cardiovascular surgery, Nephrology, Neurosurgeries and Vascular Surgeries. The National Board of Examinations has recognized this hospital for training of D.N.B candidates in Medicine, Cardiology, Surgery, Obstetrics & Gynaecology, Paediatrics, ENT, Anaesthesia, Cardiovascular Surgery and Orthopaedics. It is also recognized by the Royal college of Surgeons, Edinburgh for Part II MRCS examinations.

1 DEPARTMENT OF CARDIOLOGY:

The Department of Cardiology is an all India Referral Centre for all types of heart diseases. This department undertakes treatment of all types of cardiac procedures like cardiac catheterization, coronary angioplasty, permanent pacemaker implantation, electro-physiology study etc.

The Department is equipped with all the equipment for treating cardiac patients, including two Cath Labs, IVUS, 2D echocardiogram with colour Doppler system, Holter monitoring system, Treadmill machines, etc. About 423 PTMC, PTCA, PVP, PTRA and 1540 Cardiac Catheterization and Coronary Angiography were performed last year.

2 DEPARTMENT OF CARDIO-THORACIC SURGERY:

The department of Cardio-Thoracic Surgery is an all India Referral Centre for all types of heart diseases, cardiac evaluation and management. The spectrum of work includes coronary artery bypass grafting, all types of valve repairs and replacements, congenital corrective surgeries, etc. In the recent years, beating heart surgery is very popular avoiding usage of heart lung machine.

In the year 2016-2017, 569 Open Heart Surgeries and 31 closed Heart Surgeries (this includes various surgical procedures for coronary artery diseases, congenital heart disease and rheumatic heart disease, pulmonary valvuloplasty etc.,) were performed.

3 DEPARTMENT OF NEUROSURGERY:

The 3 year old Neurosurgery Department specialises in treating diseases of the brain, spinal cord and nerves and carries out major neurosurgical operations yearly with the latest diagnostics and surgical equipment.

A Neurosurgical Microscopic was procured in January 2017. During the reported period 166 special major procedures, 16 major and 5 minor procedures were performed.

4 DEPARTMENT OF GENERAL MEDICINE:

This department has a total of 142 beds, inclusive of 10 ICU beds and 7 semi ICU beds. The modern Intensive Care Unit is known for its quality of work particularly for managing emergencies. The specialized services provided are ultrasound for in patients, Endoscopy, Bronchoscopy, Thoracoscopy, and Broncho alveolar Lavage and Trans bronchial biopsy, EEG, Renal biopsy, Spirometry, Ventilator assistance, pacemaker Implantation etc.

Well-equipped intensive care unit with non-invasive and invasive diagnostic techniques is available for effective management of medical emergencies. 673 endoscopies were performed during the year. This department is recognized by National Board of Examinations for Post Graduate degree in medicine.

5 DEPARTMENT OF GENERAL SURGERY:

This department is a major wing of the hospital, backed by the latest equipment and a dedicated team of surgeons. Latest equipments like contact laser, Fibre-optic endoscopes and laparoscopic surgical equipments backed by efficient team of qualified surgical expertise are available in this Department.

All types of surgeries including surgical oncology, vascular surgeries are performed by our eminent surgeons. 1991 general surgical, 269 urological and 176 vascular procedures including 15 special major and 182 major procedures were performed during the period. 1518 endoscopies were performed during the year. This Department is recognized by National Board of Examinations for Post Graduate degree in General Surgery.

6 DEPARTMENT OF ORTHOPAEDICS:

The department of Orthopaedics has been upgraded and all orthopaedic surgeries including spinal surgery, hip and knee replacements, revision hip replacement are being done. This Department is also recognized by National Board of Examination for post graduate degree in Orthopaedics.

During 2016-17, a total of 19 Hip replacement surgeries, 26 Knee replacements and 43 Hip modular Bipolar, Hemi-arthroplasty surgery were conducted in addition to various trauma surgeries.

7 DEPARTMENT OF OBSTETRICS & GYNAECOLOGY:

The Obstetrics & Gynaecology department has got 52 beds in its wards. Around one thousand deliveries are conducted every year. This department is well-equipped and offers good quality service to the patients.

A total no. of 1206 surgeries were performed during the period reported. This department is recognized by National Board of Examinations for Post Graduate degree in Obstetrics and Gynaecology.

8 DEPARTMENT OF NEPHROLOGY:

A Full-fledged nephrology unit with all therapeutic measures, short of transplant are being done here. However, a transplant programme with empanelled private hospital is in place.

In 2016-17, 6242 haemodialysis, 3 transplants, 13 CAPD (Continuous ambulatory peritoneal dialysis) were performed.

9 DEPARTMENT OF PAEDIATRICS:

The Department of Paediatrics has got 60 beds in its wards. This department is well equipped and offers good quality treatment to the patients. A 10 - bed Neonatal ICU is also available.

This department is also recognized by National Board of Examination for post graduate degree in Paediatrics.

10 DEPARTMENT OF PSYCHIATRY:

A full-fledged Department of Psychiatry is functioning in this hospital. De-addiction centre, Memory clinic, Counselling Centres are available to conduct regular awareness programmes every month for employees.

Alcohol and Drug related counselling services are also provided by the Counsellor.

11 DEPARTMENT OF CHEST DISEASES & PULMONARY MEDICINE:

The Department is a referral centre for Lung diseases like COPD, Asthma, Tuberculosis, sleep associated respiratory disorders and Cancer cases, which is also having facilities for Pulmonary Function Tests, Bronchoscopy and Broncho-Alveolar Lavage as diagnostic procedures.

12 DEPARTMENT OF OTOLARYNGOLOGY:

The ENT department has got full-fledged Endoscopic facilities, Micro-laryngeal surgical facilities and Micro Ear surgery facilities. Airway Laser surgical procedures are regularly done. A total of 172 surgeries were performed during the year. This Department is also recognised for DNB course.

13 DEPARTMENT OF OPHTHALMOLOGY:

Intra-ocular lens implantation and other routine procedures are done. Laser treatment for posterior segment disorders is performed in the Department. A "B" Scan equipment was procured during the period.

A total of 1486 cataract surgeries and 527 other ocular procedures were performed during the year 2016-17.

14 DEPARTMENT OF RADIOLOGY:

The Department of Radiology is equipped with two digital X-ray units and two high end ultrasound machines. A total no. of 58757 X-ray, 12,444 USG procedures which includes 615 Antenatal screening and were performed during 2016-2017.

15 DEPARTMENT OF LABORATORY MEDICINE:

This Department has the distinction of being the only NABL accredited Laboratory in Indian Railways. It has Clinical Pathology, Histopathology, Clinical Biochemistry and Microbiology Departments.

It is the only Laboratory in Railways to conduct PCR testing in Indian Railways. It has licensed Blood Bank with component separation facilities.

16 DEPARTMENT OF DERMATOLOGY & VENEROLOGY:

This Department is the Zonal referral centre for treatment of Skin and STD disorders with facilities for Electrocautery, and Photo therapy Unit (PUVA) for treatment of chronic pigment disorders.

17 DEPARTMENT OF DENTISTRY

This Department has 3 Dental Units with Dental chairs and is performing Maxillo-facial surgeries, Implant placements, Root Canal Treatments, Dental impaction surgeries, Cyst Extraction/Enucleation surgeries, dental Extraction, fillings and scaling procedures. Oral Health Awareness sessions are also conducted for the benefit of patients and during School Health Sessions.

CHENNAI DIVISION:

The Medical Branch Headquarters of Madras Division is at Madras Egmore and Chief Medical Superintendent is in-charge of the division. The Divisional Hospital is located at Arakkonam. It has 50 beds with an Operation Theatre and Laboratory. A Dental clinic is functioning at Health Unit, Egmore. X-ray facilities are available at Egmore and Arakkonam with 300 MA and 50 MA X-ray machines. The Family Welfare Centre for Chennai Division is functioning at Egmore, which conducts Health Awareness & Screening programmes.

Chennai Division has eleven Health Units located at Jolarpettai, Katpadi, Haffieldpet, Avadi, New General Office, Chennai Egmore, Tondiarpet, Royapuram, Tambaram, Chengalpattu and Sullurpet.

MADURAI DIVISION:

Primary and secondary care treatment facilities are being rendered at Divisional Railway Hospital Madurai. Family Welfare Centre at RH/MDU provides RCH, Immunisation and contraceptive services. All Disease Prevention and Health Promotion Activities are conducted by this centre.

Madurai Division has 9 Health Units located at Dindugul, Mandapam, Palani, Karaikudi, Sengottai, Tuticorin, Manamadurai, Tirunelveli and Virudhunagar.

PALGHAT DIVISION:

The Divisional Hospital at Palghat offers primary and secondary care treatment facilities. It has a well-equipped ICU unit. This hospital is also recognized by MCI for Senior House Surgeonship. The Sub-Divisional Hospital at Shoranur is also well equipped. Family Welfare Centre at RH/PGT provides RCH, Immunisation and Health Promotion Activities.

Palghat Division has four Health Units located at Mangalore, Kannur, Kozhikode and Pollachi.

TIRUCHIRAPALLI DIVISION:

There is a Divisional Hospital for Tiruchirappalli Division at Golden Rock. Railway Hospital/Golden Rock caters to Tiruchirappalli division with the one Sub Divisional Hospital at Villupuram and 8 health units. In the Divisional Hospital all primary and secondary care facilities are being rendered in all the fields. The Divisional Hospital has been recognised by MCI for Senior House surgeon-ship. Family Welfare Centre at DRH/GOC provides RCH, Immunisation and contraceptive services. All Disease Prevention and Health Promotion Activities are conducted by this centre.

Tiruchirappalli Division has eight Health Units located at Tiruchirappalli Junction, Trichy Fort, Srirangam, Virudhachalam, Tiruvannamalai, Mayiladuthurai, Tiruvarur and Thanjavur.

SALEM DIVISION:

In this division, there are two Sub-Divisional Hospitals, one at Podanur and one at Erode, which are well equipped and caters for primary and secondary care facilities to the Railway Beneficiaries. Disease prevention and health promotion activities are conducted by the Family Welfare Staff attached to CMS Office.

Salem Division has four Health Units located at Salem, Karur, Mettupalayam and Coonoor.

TRIVANDRUM DIVISION:

The well-equipped 50 bedded Divisional Hospital at Trivandrum Pettah and one Medical out post at Thycaud provides primary and secondary care treatment facilities to Railway Beneficiaries. In the Divisional Hospital Pettah, an Intensive Care Unit with 4 Beds is available. Facilities for X-ray, ECG & Lab. Investigations are available. A Dental clinic is also functioning. A physiotherapy unit with all major equipments is also functioning. Disease prevention and health promotion activities are conducted by the Health Inspectors.

Trivandrum Division has six Health Units located at Trichur, Ernakulam, Alleppey, Kottayam, Kollam and Nagercoil.

DISASTER MANAGEMENT

ACCIDENT RELIEF MEDICAL EQUIPMENT (SCALE I & II) LOCATIONS :

Division	ARME Scale I	ARME Scale II	
	Broad Gauge	Broad Gauge	Narrow Gauge
Madras	Chennai (SPART) Jolarpettai	Arakkonam, Katpadi, Sullurpet	—
Trichy	Tiruchirappalli (SPART) Villupuram	Virudhachalam Mayiladuthurai Tiruvannamalai	—
Madurai	Madurai (SPART) Sengottai	Dindugul, Karaikudi, Manamadurai, Mandapam, Virudhunagar, Tirunelveli, Tuticorin, Palani, Sengottai	—
Palghat	Mangalore, Shoranur	Kannur, Kozhikode, Palakkad, Pollachi	—
Trivandrum	Ernakulam (SPART), Trivandrum	Nagercoil, Trichur, Kollam, Kottayam, Alappuzha	—
Salem	Erode(SPART)	Podanur, Salem, Karur	Coonoor

BEST HEALTH UNIT

To improve efficiency of health services and to ensure patient satisfaction, rolling shield for best Health Unit is given to the best maintained Health Units in the zone every year. In 2016-17 Health Unit, Chengalpattu of Chennai Division was adjudged as the Best Health Unit and the shield was presented by GM during the Railway week celebrations in April 2017.

SOUTHERN RAILWAY HEALTH DEPARTMENT ACHIEVEMENTS

Medical Services:

1. A Road Mobile Van Service along with Doctor and Paramedical staff was inaugurated in Tirunelveli - Maniyachi - Ambasamudram - Tiruchendur section in Madurai Division on 6th June 2016 for providing medical care to beneficiaries in far and inapproachable areas.
2. A new modular operation theatre with laminar flow system in Southern Railway HQ Hospital was inaugurated by DG/RHS on 24.06.2016.
3. The 22nd Railway Forum of India Society of Anesthesiologists Conference was conducted on 24th and 25th June 2016 at Southern Railway HQ Hospital.
4. AYUSH Clinic was inaugurated by Hon'ble Minister of Railways in New Zonal HQ Hospital, Perambur as part of integrating alternative therapies within mainstream curative services for the patients in zone on 24th July 2016.

5. Southern Railway Headquarters Hospital has been a pioneering tertiary care centre over Indian Railways. During the period 2016-17, 569 Cardiothoracic Surgeries, 68 Neuro Surgeries, 48 Vascular Surgeries and 1540 Cardiology based interventions in Super Specialty medical care were provided for patients.

Public Health Services:

1. The Health Department has conducted 1890 Cleanliness related campaigns for improving the State of Cleanliness in Railway Areas under Swachh Bharat Abhiyan. 1147 food samples were collected for analysis under Quality Control &66 under Food Safety and Standard Authority of India Act in the Zone in 2016-17.
2. In 2017, 1076 Health Awareness and 321 Medical Screening Camps were conducted in the Zone, benefiting 78235 employees and beneficiaries.
3. Food Safety Awareness Programme for Licensees and Food Handlers regarding safe cooking, handling and storage of food items as per FSSAI Guidelines were given at major stations (Chennai Central, Chennai Egmore, Palghat, Tiruchirappalli, Salem, Madurai, Calicut, Mangalore & Ernakulam) in the zone.
4. 'Intensive Cleanliness Drives' were done on less intense activity days i.e., Saturdays/ Sundays on all A1 & A Category Railway stations plus important religious and tourist attraction stations. Special Cleanliness drives were held at all Workshops, Depots, Sheds etc. Phase-II from 16.05.2016 to 31.05.2016 Special Cleanliness drives was held at all Offices. Phase-III from 01.07.2016 to 15.07.2016-Special Cleanliness drives were held at all Hus and Railway Hospitals.
5. RAIL HUMSAFAR SAPTAAH – from 26.05.2016 to 01.06.2016. During this week special drives on cleanliness, catering and Passenger interaction were carried out.
6. Swachh Rail Swachh Bharat from 17.09.2016 to 25.09.2016, during this week special programmes were conducted on Swachh Paryavaran, Swachh Station, Swachh Railgadi, Swachh Neer, Swachh Parisar, Swachh Sahyog, Swachh Samvad, Swachh Samarpan and Swachh Aahar.
7. Swachhta Saptah from 25.09.2016 to 01.10.2016 was observed to emphasize and brings Open Defecation to an end.

AMBULANCE

The 20th Southern Railway district of SJAB is functioning effectively and First Aid Training to staff are imparted regularly. The highlights of SJAB activities during the year:

Number of First AID Training Sessions imparted : 13

Number of Employees who were trained in First AID. : 652

Date	Place of training	No. of trained employees
05.04.2016 to 06.04.2016	HU/CMS/MS	50
23.06.2016 to 24.06.2016	Madurai	150
16.07.2016	ETC/CW/PER	50
22.09.2016	Palakkad	40
27.02.2017 to 28.02.2017	CDO/O/TVC	56
08.03.2017	LBR shed/CW/ PER	100
09.03.2017	Wagon shop/ CW/PER	130
15.03.2017	RH/PER	30
27.03.2017 to 28.03.2017	Ernakulam	46

The SJAB Provided Relief work during Vardah Storm in Chennai in December 2016 in Railway Hospital premises, in Railway colony areas and adjacent roads of Carriage and Loco works removing fallen trees and debris.

Organized First Aid Booths services at Kottayam, Chenganur, Srirangam, Nagore and Velankanni Railway stations during the Sabarimala & Attukal Pongal festivals. In addition to these public duties SJAB personnel had involved in Pulse Polio Immunisation activities in MAS, PER and other Corps at Chennai.

STATISTICS FOR THE YEAR 2015-2016 AND 2016-2017

Sl. No.	Particulars	2015–16	2016–17
1	Total No. of staff ..	1,02,667	96,062
2	Cost of Medical services ..	2,18,68,51,000	2,34,98,62,000
3	Cost of Medical services .. per head per annum.	21,300.42	24,461.93
4	Cost of Health service in thousands of rupees	11,20,45,000	11,20,00,000
5	Cost of Health service per head per annum.	1091.34	1165.91
6	(a) Cost of drugs in rupees..	21,73,44,000	27,69,40.000
	(b) Total amount of reimbursement in rupees.	3,72,30,576	2,71,76,528
7	Total cost of Medical & Health service per annum per head in Rs.	24,324.89	28,446.73
8	No.of Rly. employees & their families treated – New cases.	4,69,171	4,27,038
9	No. of females & children treated – New cases	2,83,535	2,64,763
10	Daily average – out door attendance of Rly. employees & their familiesat Rly. Hospital/ health units/old & new cases	4,023	5,154
11	No. of Hospital ..	10	10
12	**No. of Health Units**		
A	With beds ..	41	41
B	Without beds ..	1	1
13	No. of Railway population per Railway Hospital/ health unit.	9686	10163
14	No.of chest clinics ..	7	7
15	No.of dental clinics ..	6	6
16	No.of maternity clinics ..	26	26
17	**No.of beds**		
A	General ..	907	907
B	TB ..	36	36
C	Maternity ..	102	102
D	Isolated ..	5	5
E	ICCU ..	85	85
	Total ..	1135	1135
18	**Health units**		
A	Emergency beds ..	52	52
B	Maternity beds ..	18	18
19	Total No.of beds in hospitals/ health units, chest clinics etc.	1205	1205
20	No. of beds per 1000 Rly.11.0 employees including TB beds.	12	11
21	No. of beds per 1000 Rly. employees excluding TB beds.	11	10
22	No. of TB beds reserved in Railway institutions.	0	0

23	**No. of Doctors**	2015-2016	2016-2017
A	Chief Medical Director	1	1
B	Chief Health Director	1	1
C	ACMD/T&A	1	1
D	Dy.CMD/H&FW	1	1
E	Medical Director/ Chief Medical Superintendent	6	6
F	SAG		
G	SG		
H	JAG	188	188
I	SS&JS		
	Total	**198**	**198**
24	No. of Rly. Population per Rly. doctor	2649	2669
25	No. of mobile vans	1	1
26	**Accident Relief Medical Equipment**		
A	ARME scale **I**	11	11
B	ARME scale **II**	26	26
27	**No. of Operations Performed**		
A	Major	4474	4352
B	Minor	2599	4446
C	Trivial	11235	10694
28	**Family Welfare Activities**		
A	Centres	4	4
B	Sub- Centres	2	2
29	**No. of Sterilization operation performed**		
A	Tubectomy	300	339
B	Vasectomy	11	2
	Total	**359**	**341**
30	No. of I.U.D. inserted	102	75
31	No. of conventional contraceptives distributed		
A	Condom usage per 1000 employees	1225	1013
	Oral pills		
A	No. of oral pills	603	221
B	No. of users of oral pills	46	17

XII. कर्मचारी/STAFF

1. General

During the year under review cordial and harmonious relations were maintained in this Railway.

2. Number and cost of Staff for 2016–2017 compared with 2015–2016.

Group of Staff	Group	Number of staff				
	Open line		Construction		Total	
	2015–16	2016–17	2015–16	2016–17	2015–16	2016–17
Group 'A'	512	679	105	101	617	780
Group 'B'	420	285	70	64	490	349
Group 'C'	88,817	90,093	1,304	1,260	90,121	91355
Group 'D'	2840	968	17	0	2857	968
Total	92,589	92,027	1,496	1,425	94,085	93,452

Cost of staff *(Rs. in lakhs)*

	2015–2016	2016–2017
Group 'A'	18,314.98	33,406.40
Group 'B'	8,519.64	8,806.97
Group 'C'	7,14,384.3	8,94,075.97
Group 'D'	6,355.96	2,699.92
Total	7,47,574.88	9,38,989.26

3. Recruitment of Scheduled Caste/Scheduled Tribe Candidates in Non-gazetted service.

(a) Recruitment of S. C. /S. T. Candidates in Group 'C' & 'D' Services :–

Group	No. to be appointed according to reservation in 2016–2017			No. actually appointed in 2016–2017		
	SC	ST	OBC	SC	ST	OBC
Group 'C' & .. Erstwhile Group 'D' ..	660	340	1,188	947	415	1,230

* Note ; (*)Total Number of SC/ST employees appointed includes the persons appointment on their own merit concept and also against backing vacancies.

(b) Promotion of S. C. /S. T. candidates in Group 'C' & 'D' Services : 2016–2017.

(i) Selection posts

Category	No. of vacancies reserved		No. of employees actually promoted	
	Scheduled Castes	Scheduled Tribes	Scheduled Castes	Scheduled Tribes
Group "C" includimg Erstwhile .. Group 'D'	*	*	249	108

ii) Non Selection posts

Category	No. of vacancies reserved		No. of employees actually promoted	
	Scheduled Castes	Scheduled Tribes	Scheduled Castes	Scheduled Tribes
Group "C" includimg Erstwhile .. Group 'D'	*	*	1473	727

Note : (*) Vacancy details are not available Special Reservation Cell/HQ. However total number of vacancies filled on both selection & non-selection is available and the same is furnished above.

c) Shortfall of SC/S.T/OBC as on 31st March 2017

Recruitment Categories	SC	ST	OBC
Group 'C' including Erstwhile Group 'D'	207	384	262

(d) Short fall of SC/ST as on 31st March 2017.

Promotional Categories	Scheduled Castes	Scheduled Tribes
Group 'C' including Erstwhile Group 'D'	1,410	1,017

e) Statement showing the number of employees belonging to Scheduled Caste and Scheduled Tribe as on 31-03-2017.

Group	Total No. of employees as on	Scheduled Castes	Percentage	Scheduled Tribes	Percentage
Group 'A'	814	139	17	36	4.4
Group 'B'	358	95	26.5	26	7.2
Group 'C' including Erstwhile Group 'D'	91,718	17,180	18.7	7571	8.2
Group 'D' Safaiwala)	1,249	356	28.5	71	5.6

4. Recruitment and Training

4.1 Recruitment :

(A) (i) *Group "A" and "B" Service*— Permanent appointment to Group " A " as well as appointment to Group " B " service that were made during the year 2016–2017, are as follows :—

Department	Group 'A'	Group 'B' (Promotion)
Personnel ..	..	4
General Management	..	5
Electrical ..	..	1
Transportation (Traffic & Comml.)	2	..
Engineering ..	..	..
Stores ..	..	3
S & T ..	..	3
Medical ..	..	..
Mechanical ..	8	1

(ii) Number of Group 'B' Officers absorbed in Group 'A' during the year 2016–2017.

IRPS—Nil, IRTS—Nil, IRSS—Nil, IRSME—Nil. IRSEE—Nil, IRSE—Nil, IRSSE—Nil,

4.1 (b) Appointments in Group 'C' and 'D' categories for the year 2016-17.

Group 'C'	No. Indented	No Supplied
I. Technical	..	70
II. Non-Technical	..	30
III. NTPC	10	..
Total	10	100
Group 'D'		1318
Grand Total	10	1418

4.1 (b) (ii) Recruitment of Non-gazetted staff for the year 2016-17 are as under :

Year	Group 'C'	Group 'D'	Total
2014–2015	2347	4334	6681
2015–2016	1399	10759	12158
2016–2017	110	1318	1428
Total	3856	16411	20267

4.1 (b) (iii) Number of persons appointed against physically handicapped quota and on Compassionate grounds for the year 2016-17.

-	Group 'C"	Group 'D"
(a) No. of physically handicapped persons appointed. (Including Group 'D')	10	72
(b) No. of Persons appointed on Compassionate grounds	447	..

4.2. TRAINING :

(a) (i)Group 'A' and 'B' Services.

Staff Strength on Southern Railway Department wise as on 31.03.2017.

Department	Group 'A'	Group 'B' (Promotion)
General Management	48	30
Personnel	31	23
Engineering	145	96
Transportation (Traffic & Comml.)	66	24
Mechanical & CMT	71	22
Stores	40	17
Electrical	78	34
Signal & Telecommunication	71	27
Medical	173	21
Total	723	294

(a) (ii) The number of officers who attended the training courses during the year 2016-2017 are as follows :

Training Institutions	Mandatory Cours
NAIR-Vadodara	43
IRICEN-Pune	51
IRISET-Secunderabad	29
IRIMEE-Jamalpur	2
IRIEEN-Nasik Road	52

4.2 (b) Training Group 'C' Staff

No	Branch	Initial	Re-fresher	Pro-motional	Special	Total
1.	Mechanical	29	62	38	76	205
2.	Electrical	221	637	158	1164	2180
3.	Engineering	575	1497	..	1552	3624
4.	S & T	762	556	654	542	2714
5.	Traffic & Commercial	930	2471	..	2147	5548
6.	Personnel	29	..	..	131	160
	Total	2546	5423	850	5612	14431

4.3 Statement for the Financial year ending 31st March 2017 Regarding Privilege Passes and P.T.Os issued to Railway Employees :—

Class	Group	Privilege Passes			PTOs		
		No. of Rly. Employees to whom issued	No. of Seats Available	No. of Persons Included	No. of Rly. Employees to whom issued	No. of Seats Available	No. of Persons Included
Class'A'	'A'	688	4128	16512	688	2752	11008
Group	'B'	620	3720	14880	620	5960	22840
Class	'C'	29557	88671	354684	29550	118200	472800
II Class	'C'	46908	140724	562896	46908	187632	750528
III AC	'C'	1510	4530	18120	1510	6040	24160
II Class	'D'	39069	117207	468828	39069	156276	624504

5. Relations with Labour :

There are two recognized federations at the apex level viz. AIRF & NFIR. SRMU is the only recognized Union at Zonal Level.

During the year 2017 the PNM meeting was conducted and various issues are sorted out across the table after mutual consultation with each other to the best satisfaction of both the organised Labour and the Administration.

6. Implementation of Labour Laws :

Provisions of all Labour Laws pertaining to Railways *viz.* Hours of Work and Period of Rest Rules, 2005, Payment of Wages Act, Trade Union Act, Workmen Compensation Act, Industrial Disputes Act, Minimum wages Act, Contract Labour Regulation and abolition Act, Factories Act etc. are being implemented to the satisfactory level duty taking into account the deficiencies pointed out by the various agencies like Regional Labour Commissioner, Assistant Labour Commissioner and Labour Enforcement Officers/Inspectors concerned.

7. STAFF WELFARE ACTIVITES

(i) Labour Welfare

The Welfare Organisation consisting of Staff & Welfare Inspectors headed by Sr. Divisional Personnel Officers, Divisional Personnel Officers. Workshop Personnel Officers and Senior Personnel Officers maintain regular contacts with employees and render assistance to staff in redressal of their grievances .

Staff Information Centres at all Divisional Headquarters and at Major Stations and Sheds provide information and assistance to staff on all Personnel and Welfare matters. These centres have been found to be of immense help to the staff. Staff & Welfare Inspectors have also been nominated exclusively to attend to the grievances of the sensitive categories of staff . Grievance Adalats are held periodically at nominated stations.

Pension Adalats and Mid-term Pension Adalats are conducted every year mid December and mid July respectively to redress the grievances of the retired employees.

Preretirement counselling is also arranged once in three/ four months to guide the employees retiring on superannuation .

"Social Security Scheme" is a Welfare scheme introduced by Railways for the benefits of Group 'C' and Group 'D' employees. A nominal amount is collected from every employee, who is a member of this scheme and the amount so collected is utilized as death relief *i.e.* to give financial assistance to the heirs of the deceased employees at the time of employee's death. This is purely a voluntary scheme. The scheme is managed by a committee consisting of Officers and the members of the Organized Labour at the Divisional and Headquarters level. The scheme also extends the benefits to the employees at the time of their retirement on superannuation /voluntary retirement duly presenting them with a 'Wrist Watch' and an 'Executive folder'.

There are **Fifteen** Rail Kalyana Mandapams existing in this Railway. A nominal and affordable rent is being charged to the serving employees to hold various functions like Marriage, Wedding Reception etc.

(ii) Railway Schools

There are Nine Railway Schools (*i.e.*, three Higher Secondary Schools and six High Schools) in English medium and one Malayalam medium school situated in the Territorial jurisdiction of this Zone, spread over Tamil Nadu and Kerala States, to extend educational facilities mainly to the wards of Railway Employees.

About **2919** children had studied in the Railway Schools during the year 2016-2017.

(iii) SUBSIDISED HOSTELS :

Subsidised Hostels are not functioning as there are no applicants.

(iv) Staff Benefit Fund :

(a) Educational Assistance :

Scholarship was given to 6035 Railway wards for prosecuting Professional /Technical education as well as Non-Professional/Non-Technical education. The total expenditure incurred in respect thereof from the Central Staff Benefit Fund is as under :

Professional/ Technical Degree Courses : 5384 x 12000/- = RS. 6,46,08,000/-

Professional/ Technical Diploma Courses : 146 x 9000/- = Rs. 13,14,000/-

Non Professional/ Non Technical Degree Courses : 505 x 6000/- = Rs. 30,30,000/-

Rs. 6,89,52,000/-

(Rupees Six crores eighty nine lakhs fifty two thousand only)

(b) Cash award to Meritorious Students:

Meritorius cash award is being sanctioned to Railway Wards who have obtained 90% and above in standard X & XII

(c) Book Bank :

Under the auspices of CSBF, the Southern Railway Book Banks have become very popular.

Altogether **seven** Book Banks are functioning at Hqrs. TPJ, MDU, PGT, TVC , PTJ and SA. These Book Banks cater to the needs of the wards of Railway employees pursuing Professional/Technical courses.

A sum **Rs.8,00,000/-** (Rupees Eight lakhs only) was allotted towards towards grant for Book Banks during the year 2016-2017.

(IV) SCHEMES OF BENEFITS TO THE SICK :

1. Financial Assistance towards 'Relief of Distress/ Sickness.

The following assistance were made under this head.

Type of Honorarium	Amount in ₹.
Honorarium to Barber @ RH / PER	₹. 24,000/-
Honorarium to HIV/AIDS Counselors, Lab Technician in Railway hospital/HUs.	₹. 1,16,000/-
Honorarium to Alcohol /Drug Counselors in Railway hospital/PER.	₹. 91,633/-
Provision of Light refreshment to Blood Donors at RH/PER.	₹. 3,67,187/-
Funeral expenses to the families of serving employees who had expired in Railway hospitals.	₹. 7,50,000/-
Assistance for sickness to all eligible Non-Gaz. employees	₹. 22,86,600/- (allotted)
Assistance for mentally/physically challenged employees & wards	₹. 51,83,250/- (allotted)

2 Indigenous system of medicine:

a) In order to provide medical assistance to such of those employees and their family members who are desirous of having treatment under indigenous system of medicines like Homoeopathy/Ayurvedhic etc. a comprehensive :AYUSH" facility is now made available at RH/PER complex.

The following Ayurvedhic, Yoga & Naturopathy, Siddha & Homoeopathy / dispensaries are now functioning in this Railway on four basis :—

Ayanavaram CW/PER	-	Homoeopathic Dispensary
Ayanavaram RH/PER	-	Siddha Dispensary
Ayanavaram RH/PER	-	Yoga & Naturopathy Dispensary
Ayanavaram RH/PER	-	Ayurvedhic Dispensary
Madurai Dn.	-	Homoeopathic Dispensary
Palakkad Dn. (PGT)	-	Homoeopathic Dispensary
Tiruchchirapalli Dn. (TPJ)	-	Homoeopathic Dispensary
Golden Rock Workshop (GOC)	-	Homoeopathic Dispensary
Podanur Workshop (PTJ)	-	Homoeopathic Dispensary
Shoranur (Palakkad Dn.) (SRR)	-	Ayurvedhic Dispensary
Cannanore (Palakkad Dn.) (CAN)	-	Ayurvedhic Dispensary

An amount of ₹.. **13,86,960/-** has been utilized in the Various AYUSH Dispensaries during 2016–17.

(ii) Place at which the dispensaries were opened during the year with date(s) of opening indicating the system *i.e.* whether Homoeopathic or Ayurvedic.

(iii)

Sl. No.	Location	Medicine	Date
1.	Ayanavaram RH/PER	Siddha	24.07.2016
2.	Ayanavaram RH/PER	Yoga & Naturopathy	24.07.2016
3.	Ayanavaram RH/PER	Ayurvedhic	15.03.2017

(iv) Particulars of buildings in which Homoeopathic dispensaries and other Non-allopathic dispensaries are functioning.

(i)	Railway Hospital Buildings	–	9
(ii)	Railway Health Unit Buildings	–	2
(iii)	In other Railway Buildings	–	Nil

(e) RECREATIONS AND AMUSEMENT :

1) Holiday Camps :

Holiday camps for Men/Women employees as well as Children of the employees are being conducted regularly in this Railway under the auspices of Staff Benefit Fund.

Details of Camps conducted in the year 2015 -16 is given below :

DN/ Unit	Holiday Camp Conducted During 2015-16	No. of Participants	Amount Spent ₹.	Places Visited
GOC	Women's	31	4,28,098/-	Cochin, Ernakulam, Allepy, Guruvayur.
PTJ	Employees	68	1,30,000/-	Kannyakumari, Nagarcoil.
TPJ	women	112	3,85,025/-	Munar
PGT	Family	94	1,34,612/-	Munnar
PTJ	Employees	67	1,90,248/-	Goa
MAS	Women's	52	3,79,520/-	Visakapattinam, Arakku Valley, Hydrabad.
AJJ	Family	48	2,20,000/-	Hydrabad, Secunderabad.
LW/ PER	Employees	70	1,81,995/-	Goa, Mangalore.
MDU	Children's	65	6,07,282/-	Ernakulam, Trivandrum

iv) Promotion of Cultural activity

(a) Expenditure for Cultural activity Activities Railway Schools - ₹. **5,00,000/-** allotted.

iii) Women empowerment activities :

Sl. No.	Expenditure Head	Amount sanctioned ₹ .
1.	International Women's Day Celebration at HQRS.	₹. 50,000/-
2.	International Women's Day Celebration at CAO/CN.	₹. 25,000/-
3.	Allotment to MAS Division	₹. 75,000/-
4.	Allotment to other Divisions & HQrs. ₹. 50,000 each/- & Allotment to Workshops and RPF ₹. 25000/- each	₹. 2,50,000/- ₹. 1,75,000/-
	Total	₹. 5,75,000/-

(d) Miscellaneous :

Sl. No.	Expenditure Head	Amount sanctioned ₹.
1.	Railway School/MDU	50,000.00
2.	Railway School/VM	20,000.00
3.	MAS Division towards purchase of computer	75,000.00
4.	Store NJO Canteen/PER	1,50,000.00
5.	Hqrs. towards purchase of computer	75,000.00*
6.	Catering expenses of 132th CSBF Meeting hels on 03–03–2016.	1,758.00
	Total	2,76,758.00

* Not claimed

SALIENT FEATURES OF SOUTHERN RAILWAY WOMEN'S WELFARE ORGANISATION (SRWWO)

1. Ashraya:

A School for mentally challenged wards of Railway men and outsiders is being run by the Southern Railway Women's Welfare Organization (Headquarters) Chennai.

There are 28 Children on roll with varying degrees of IQ who are trained in academics and vocation. Computer education is also imparted to the students. The students are provided with all necessary physiotherapy equipments. "Early Intervention" for the age group from 3 years onwards has been started to impart basic skills to them. Apart from the Headquarters organization, such schools for differently-abled children are run by Southern Railway Women's Organization/Tiruchchirappalli (Udaya) and Southern Railway Women's Organization/Madurai (Akshaya).

2. Welfare:

A Creche named "Blossoms" with strength of 23 is run at Perambur for the benefit of working parents.

3. Shop:

A retail shop with name "Swabhiman" is functioning at Railway Hospital, Perambur to cater to the needs of inpatients/and their family members.

4. Other Activities:

Tiruchichirapalli and Chennai Division have schools up to 10th Standard. Primaryclasses at Palghat and Trivandrum are run by this organization. Handicraft Centers for the wives and wards of Railway men are functioning at Chennai, Palghat, Tiruchchirappalli, and Madurai Divisions.

(a) Social Welfare Centers Nil.
(b) Mahila samities Nil
(c) Kalamandir Nil

Addition/deletion made during the year in respect of the above – Nil.

Any other matter not covered by the detailed heads mentioned above is – Nil.

V. Sports activities :

Sports activities in Southern Railway (2016–17)

Southern Railway has prominent Sportsperson who participate in State, National and International Tournaments and bring Laurels to India, Indian Railways and Soutyern Railway. The performance of Sportsperson of Southern railway at various Championships is highlighted below.

ACHIEVEME NTS OF SOUTHERN RAILWAY SPORTS PERSONS IN THE RIO OLYMPIC GAMES AT RIO DE GENERIO FROM 5TH TO 21ST AUGUST :

Sl. No.	Name	Discipline	Event
1.	Tintu Luka	Athletics	88 m
2.	Renjith Maheshwary	Athletics	Triple Jump
3.	S. Satish Kumar	Weightlifting	77 Kg.
	COACHES		
4.	P. T. Usha	Athletics	
5.	C. R. Kumar	Hockey Women	

ACHIEVEMENTS OF SOUTHERN RAILWAY SPORTS PERSONS IN THE INTERNATIONAL ARENA

USIC (World Railway Games)

Sl. No.	Name	Details of USIC		Event	Position
		Venue	Dates		
		CHESS			
1.	K. Ratnakaran	St Petergof (Petersburg)	4.9 July	Team Championship	Gold
2.	V. Ravichandran (Coach)				Gold
		TABLE TENNIS-MEN			
3.	E. Prabakaran	Berlin	1722 October	Team Champion-	GOLD
				ship Singles	BRONZE
				Doubles	GOLD
				Mixed Doubles	BRONZE

ACHIEVEMENTS OF SOUTHERN RAILWAY SPORTS PERSONS IN THE INTERNATIONAL MEETS :–

Sl.	Name	Details of Championship			Position
		Name	Venue	Date	
		ATHLETICS			
1.	Sajeesh Joseph	Series in European Commotions	Belgium	15.5.16 to 15.7.16	Participated
2.	Tintu Lunkha	Asian Grand Prix Athletic Meet	China	April' 17	Silver in 88 M
3.	Renjith Maheshwary	IAAF Diamond League Athletic Meet	Dhoha	5th May 17	Participated
		CUE SPORTS			
4.	S. Dilip Kumar	World Snooker Championship	Hydrabad	5-9 July	Participatted
		IBSF World 6 Red and Team Snooker	Egypt	20th to 30 July	Participatted
		Asia City Snooker Championship	China	09-01-17 to 13-01-17	Participatted
5.	Rafath Habib	IBSF World 6 Red and Team Snooker	Egypt	20th to 30th July	SILVER
		WEIGHTLIFTING			
6.	Satish Kumar	Asian Weightlifting Championship	Taskent, Uabekistan	21-30 April	Participatted

SOUTHERN RAILWAY OFFICIALS NOMINATED IN THE INTERNATIONAL MEETS AS COACHES/REFEREES :

Sl. No.	Name	Details of Championship		
		Name	Venue	Dates
		CUE SPORTS		
1.	Wasim Ahmed	Asian Billiards & Asian U-21 Snooker Championship	Colombo	1st to 8th March
		World Snooker Championship	Hydrabad	5-9th July
		World 6 Red and Team Snooker	Egypt	20th to 30th July
		HOCKEY - WOMEN		
2.	C. R. Kumar	4 Nations Tournament	Darwin, Australia	25 May to 6 June
		POWERLIFTING		
3.	S. Nagarajan	Asian Powerlifting Championship	Udaipur	7-12 June
		SWIMMING		
4.	Wilson Cherian	Jr. World Swimming Championship	Singapore	September
		Asian Swimming Championship	Tokyo, Jappan	14-20 November

ACHIEVEMENTS OF SOUTHERN RAILWAY SPORTS PERSONS IN THE NATIONAL CHAMPIONSHIP :–

Sl. No.	Name	Details of Championship			Position
		Name	Venue	Dates	
1.	Tintu Lukha	Open National Championship	Lucknow	27th to 30th sep. 16	800 - Gold
2.	I. Surya	-Do.-	-Do.-	-Do.-	5000 & 10,000 M Gold
3.	Sini Jose	-Do.-	-Do.-	-Do.-	4 x 400 M - GOLD
4.	Chavi Sharwat	-Do.-	-Do.-	-Do.-	4 x 400 M - GOLD
		NEN & WOMEN VOLLEY BALL			
5.	Poornima	Sr. National Meet	Chennai	24th to 30th Dec. 16	GOLD
6.	Minimol Abhraham	-Do.-	-Do.-	-Do.-	GOLD
7.	K. J. Kapil Dev	-Do.-	-Do.-	-Do.-	SILVER
8.	Manu Joseph	-Do.-	-Do.-	-Do.-	SILVER
9.	Pirai Sudan	-Do.-	-Do.-	-Do.-	SILVER
		WEIGHTLIFTING			
10.	S. Sathish Kumar	-Do.-	Nagercoil	26th - 30th December 2016	77 KG - GOLD
		BALL BADMINTON			
11.	D. Jayakumar	-DO.-	Moodbidri	January' 17	GOLD

Sl. No.	Name	Details of Championship		Venue	Dates
		Name			
		WATER-POLO			
12.	Abhilash	-DO.-	Ranchi	24th to 28th September 2016	GOLD
13.	Annesh	-DO.-	-DO.-	-DO.-	-DO.-
		BOXING			
14.	Vikas Malik	-DO.-	GHY	8th to 28th Dec. 17	BRONZE
		WOMEN CRICKET			
15.	M. D. Thirushkamini	One day Sr. Ntional	Guntur	Oct.' 16	GOLD
16.	Niranjani	-DO.-	-DO.-	-DO.-	-DO.-
		POWERLIFTING			
17.	M. Paramasivam	Sr. National Meet	Jamshedpur	7th to 11th Sept'. 17	SILVER
18.	P. Anitha	Sr. National Meet	Puducherry	8th to 14 Jan' 17	BRONZE
19.	Alagu Tamil Mozhi	-DO.-	-DO.-	-DO.-	-DO.-
20.	Shruti Radhakrishnan	-DO.-	-DO.-	-DO.-	-DO.-
21.	Raja Priyadashini	-DO.-	-DO.-	-DO.-	-DO.-

All India Railway Championship

Sl. No.	Discipline	Details of All Indian Railway Championship			Position
		Railway	Venue	Dates	
1.	Table Tennis Men	North Frontier	Guwahati	3-7 July	First
2.	Cue sports-8 Ball Pool	Southern	Chennai	24th August to 4 September	First
3.	Athletics-Women	Southern	Tiruchchirappalli	25-27 August	Second
4.	Basketbal-Women	South Central	Secundrabad	25-30 November	Second
5.	Cue sports-9 Ball Pool	Southern	Chennai	24th August to 4 September	Second
6.	Volleyball-Women	Southern	Chennai	14-18 November	Secon
7.	Athletics-Women	Southern	Tiruchchirappalli	25-27 August	Third
8.	Cue sports-Snooker	Southern	Chennai	24 Aught to 4 September	Third
9.	Chess	Eastern	Kolkatta	15-21 June	Third
10.	Powerlifting	MCF	Rae Barelli	2-5 August	Third
11.	Volleyball-Men	South Central	Secundrabad	4-11 November	Third

All India Railway Tournaments organized by SOuthern Railway Sports Association

Southern Railway Sports Association has organize the following Championship in 2016–17

Sl. No.	Discipline	Details of All Indian Railway Championship		
1.	Junior Criket	Railway Stadium/Perambur	Chennai	29-29 May
2.	*Athletics-Men &Women	SDAT Stadium	Tiruchchirappalli	25-27 August
* Initially this game allotted to C. Rly. and they refused to organize this meet, RSPB advise us to conduct the meet in a short notice and the same was organized by successfully.				
3.	Cue sports	TNBSA	Chennai	24 August to 4 September
4.	Volleyball-Women	J. N. Indoor Stadium	Chennai	11-18 November

VI Joint Councils

As on date there does not exist any joint council.

8.1 Details of Co-Operative Society

Multi-State Co-Operative Socity

Sl. No.	Name of the Socity/Bank
1	Railway Employees Co-Operative Credit Socity/Chennai
2	Railway Employees Co-Operative Credit Socity/Trichy

8.2 Consumer Co-Operative/Credit /Socity

Sl. No.	Name of the Socity/Bank
1	Consumer/Co-Operative/Socity/MDU
2	Consumer/Co-Operative/Socity/Virudhu nagar
3	Consumer/Co-Operative/Socity/Dindugal
4	Consumer/Co-Operative/Socity/Thenkasi
5	Consumer/Co-Operative/Socity/AJJ
6	Consumer/Co-Operative/Socity/PGT (2 Societies)
7	Consumer/Co-Operative/Socity/Thanjavur
8	Consumer/Co-Operative/Socity/TVC & ERS
9	Consumer/Co-Operative/Socity/QLN
10	Consumer/Co-Operative/Socity/JTJ
11	Consumer/Co-Operative/Socity/ED
12	Consumer/Co-Operative/Socity/ONR
13	Consumer/Co-Operative/Socity/PER

8. Provision of Staff Quarters :

Sl. Nos.	Type of Qtrs.	Programmed Quarters No. of Quarters completed				No.of quarters under various stages of construction as on 31st March-2017	Quarters involved in schemes, new lines, doubling etc. No. of quarters completed				No. of quarters under various stages of Construction as on 31st March 2017	Total No. of quarters provided upto 31st March, 2017, including quarters involved in schemes, new lines-doubling, etc;
		No. of units	2015–2016 Approxi-mate cost (₹in lakhs)	2016–2017 No. of units	2016–2017 Approxi-mate cost (₹in lakhs)		2015–2016 No. of units	2015–2016 Approxi-mate cost (₹in lakhs)	2016–2017 No. of units	2016–2017 Approxi-mate cost (₹in lakhs)		
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Type I	..	..	..	..	..	..	..	..	..	..	..
2.	Type II	14	104.63	**46**	**570.30**	182	..	..	**4**	**77.33**	**64**	**1078**
3.	Type III	4	20.00	**9**	**137.36**	30	..	..	**2**	**38.67**	**49**	..
4.	Type IV	..	..	..	**2**	56	..	..	..	..	**17**	**73**
5.	Type IV (Special)	..	..	..	..	..	..	..	..	..	..	..
6.	Type V	..	..	..	..	..	..	..	..	..	..	..
7.	Barracks	..	...	8	**117**	8	..	..	..	..	**8**	..

II. Improvements to old type quarters have been carried out during the year 2016–2017 at an estimated cost 1078/- Lakhs.

9-Provision of Staff Quarters.

(ii) The position regarding quarters for Class III and Class IV as indicated below.—

Sl. No.	Category	No. of staff Qrs. as on 31st March 2017 Essential	Non-Essential	No. of Staff Quarters available as on 31st March 2017
1.	Class III	25427	55440	Type I = 11,623
2.	Class IV	2832	5653	Type II = 8,316 Type III = 1,791 Type IV & V= 774
	Total	**28,259**	**61,093**	**22,504**

10. Additional information of staff strength required to be incorporated *vide* Board's letter No. 86/Stat. 1/5 dated 5th June 1986 is given as under :

	2016-2017 Group 'C'	Group 'D'	2015-2016 Group 'C'	Group 'D'
1. Signal & Telecommunication Department				
(i) Signal (SSE)	219	..		
(ii) Tele-communication (SSE)	157	..		
(iii) Microwave (Artisans)	40	..		
2. Civil Engineering Department				
(i) Civil Engineering Permanent Way (SSE & JE)	556	..		
(ii) Civil Engineering Works (SSE & JE)	311	..		
(iii) Civil Engineering Bridges (SSE & JE)	37	..		
(iv) Civil Engineering Workshop (SSE & JE)	40	..		
3. Electrical Department				
(a) Workshop & production Units				
(i) EMUs	..	..		
(ii) Others	140	18		
(iii) Electric Locos	..	..		
(b) Open Line				
(i) Electrical Loco Shed	..	..		
(ii) EMU Shed	..	..		
(iii) Rolling Stock Operation	246	..		
(iv) Traction Distribution	..	..		
(v) General Services	279	..		
(c) Construction				
(i) Railway Electrification			..	..
(ii) Organization			..	..
4. Commercial				
(i) Commercial Clerks			2,947	..
(ii) Ticket Checking Staff			3,652	..
(iii) Catering Staff (Bungalow lascar)			261	..
5. Operating				
(i) Train Clerks			354	..
(ii) Guards			1,648	..
(iii) Traffic Signallers			..	..
(iv) Shunting Staff			5,627	..
(v) Yard Staff				
(vi) Others			..	..
6. Mechanical				
Workshops & Production Shops			10	HQRS controlled (Ex-Cadre post)
(i) Steam Locos			..	Divin. Control
(ii) Diesel Locos			..	Divin. Control
(iii) Carriage & Wagon			12	..
(iv) AC Locos			..	Divin. Control
(v) Other activities			64	39
Ministerial			65	
CRC/PRC/Chief loco Ins			6	23
SSE/DSL/HQ/Mech. & Elc.			9	..

XIII. यात्रियों को सुख-सुविधाएं/AMENITIES FOR PASSENGERS

1. Permanent Augmentation during the Financial year 2016–17.

Month	Train No. & Description	Notifi-cation dated	With effect from	WGFAC	WGFACCW	LWACCW	WGACCW	LWACCN	WGACCN	WGSCN	LWSCZAC	WGSCZAC/J	WGSCZ	GS	SLR	TOTAL	No. of Rakes	Net chs added
Apr.16	Nil	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
May16	Nil	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
June16																		
	12617/18 ERS-NZM Mangala Lakshadweep Exp.	02/2016-17 dt.30.05.16	19.06.16/ 22.06.16	..	..	..	1	..	..	..	..	..	..	..	..	1	6	6
	12666/65 CAPE-HWH Weekly Exp. ..	..	25.06.16/ 27.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	5	5
	16340/39	..	20.04.16/ 22.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	0	0
	16352/51 NCJ-CSTM Exp.	..	23.08.16/ 25.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	0	0
	16125/26 MS-JU Exp.	..	25.06.16/ 27.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1
	12667/68 MS-NCJ Exp.	..	23.06.16/ 24.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	0	0
	16346/45 TVC-LTT Exp.	..	19.06.16/ 21.06.16	..	..	..	..	..	1	..	..	..	..	..	..	1	4	4
	16303/04 TVC-ERS Exp.	..	20.06.16	..	..	..	..	..	..	..	..	..	..	2	..	2	4	8
	16305/06 ERS-CAN Exp.	..	21.06.16	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..
	16307/08 ALLP-CAN Exp.	..	22.06.16	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..
	16313/14 ERS0CAN Exp.	..	23.06.16	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..
	56761/64 TEN-TCN Passr.	04/2016-17 dt.18.06.16	24.06.16	..	..	..	..	..	..	..	..	..	..	2	..	2	2	4
	56770/69 TCN-PLNI Passr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
																	22	**28**
July16	56765/64 TEN-TCN Passr.	07/2016-17	01.07.16	..	..	..	..	..	..	..	..	..	..	2	..	2	2	4
	56763/67 TEN-TCN Passr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
	56767/66 TEN-TCN Passr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
																	2	**4**
																	24	**32**
Aug.16	16733/34 RMM-OKHA Exp.	14/2016-17	26.08.16	..	1	..	..	..	..	..	..	..	..	..	..	1	1	1
	16613/14 CBE-RJT Exp.	..	25.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	16617/18 CBE-RMM Exp.	..	30.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	22630/29 TEN-DR Exp.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	22648/47 TVC-KRBA Exp.	..	22.08.16	..	..	..	..	..	1	..	..	..	..	..	..	1	3	3
	12643/44 TVC-NZM Exp.	..	23.08.16	..	..	..	..	..	1	..	..	..	..	..	..	1	0	0
	22646/45 TVC-INDB Exp.	..	27.08.16	..	..	..	..	..	1	..	..	..	..	..	..	1	0	0
	12641/42 CAPE-NZM Exp.	14/2016 dt.	24.08.16	..	..	..	1	..	..	..	..	..	..	..	..	1	2	2
	16353/54 NCJ-KCG Exp.	..	30.08.16	..	..	..	1	..	..	..	..	..	..	..	..	1	0	0
	16181/82 MS-MNM Exp.	..	24.08.16	1	..	..	..	..	..	..	..	..	..	..	..	1	1	1
	12659/60 NCJ-SHM Exp.	..	28.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	22611/12 MAS-NJP Exp.	..	31.08.16	..	..	..	..	..	..	2	..	..	..	..	..	2	1	2
	16336/35 NCJ-GIM Exp.	..	23.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	16334/33 TVC-VRL Exp.	..	29.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	12698/97 TVC-MAS Exp.	..	03.09.16	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	22659/60 KCVL-DDN Exp.	14/2016/17	26.08.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
																	14	**15**
																	38	**47**

1. Permanent Augmentation during the Financial year 2016–17.

Month	Train No. & Description	Notifi-cation dated	With effect from	WGFAC	WGFACCW	LWACCW	WGACCW	LWACCN	WGACCN	WGSCN	LWSCZAC	WGSCZAC/J	WGSCZ	GS	SLR	TOTAL	No. of Rakes	Net chs added
Sep.16	22613/14 MAS-HLZ Exp.	14/2016/17	01.09.16	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1
	22621/22 RMM-CAPE Exp.	..	03.09.16	..	..	..	..	..	..	1	..	..	..	..	..	1	2	2
	16780/79 RMM-TPTY Exp.	..	03.09.16	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	22606/05 VM-PRR-VM Exp.	..	03.09.16	..	..	..	..	..	..	1	..	..	..	..	..	1	3	3
	22604/03 VM-KGP-VM Exp.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	16855/56 VM-MAQ Exp.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	16857/58 VM-MAQ Exp.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	0	0
	56707/08 TPJ-DG Pssr.	4/2016/17	05.09.16	..	..	..	..	..	..	..	..	..	..	1	..	1	4	4
	56703/04 DG-TPJ Passr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
	56713/12 TPJ-PGTN Passr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
	56714/11 TPJ-KIK Exp.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0
	12687/88/ MDU-DDN-CDG Exp. ..	4/2016/17	28.09.16	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2
	12685/86 MAS-MAQ-MAS Exp. ..	..	29.09.16	..	..	..	..	1	..	..	..	..	..	..	..	1	2	2
	56742/41 TEN-TN-TEN Exp.	..	28.09.16	..	..	..	..	..	..	..	..	..	..	1	1	1	3	3
	56718 TEN-NCJ Passr.	..	29.09.16	..	..	..	..	..	..	..	..	..	..	1	1	1	0	0
	56719 NCJ-CAPE Passr.	..	29.09.16	..	..	..	..	..	..	..	..	..	..	1	1	1	0	0
	56715/16 PUU-CAPE-PUU Exp. ..	..	29.09.16	..	..	..	..	..	..	..	..	..	..	1	1	1	0	0
	56717 CAPE-TEN Exp.	..	30.09.16	..	..	..	..	..	..	..	..	..	..	1	1	1	0	0
																	17	**17**
																	55	**64**
Oct.16	16021/22 MAS-SBC Exp.	20/2016-17	21.10.16	..	1	..	..	..	..	..	..	..	..	..	..	1	2	2
	22659/60 KCVL-DDN Exp.	21/2016-17	28.10.16	..	..	..	1	..	..	..	..	..	..	..	..	1	1	1
																	3	**3**
																	58	**67**
Nov.16	16115/1611 MS-PDY Exp.	22/2016-17	11.11.16	..	..	..	..	..	..	..	..	..	2	..	..	2	1	2
																	59	**69**
Dec.16	12669/70 MAS-GPR-MAS Exp. ..	25/2016-17	03.12.16	..	1	..	..	..	..	..	..	..	..	..	..	1	2	2
	126691/92 MAS-SSPN-MAS Exp. ..	..	02.12.16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	12694/93 TN-MS-TN Exp.	26/2016-17	07.12.16	..	..	..	..	..	..	..	..	..	..	1	..	1	2	2
	12084/83 CBE-MV-CBE Exp.	27/2016-17	10.12.16	..	..	..	..	..	..	..	..	1	..	..	..	1	1	1
																	5	**5**
																	64	**74**
Jan.17	12084/83 CBE-MV-CBE Exp.	4/2016/17	20.01.17	..	..	..	..	..	..	..	..	..	2	..	..	2	1	2
	12077/78 MAS-BZA-MAS Exp. ..	28/2016-17	20.01.17	..	..	..	..	..	..	..	..	..	2	..	..	2	1	2
	12075/76 TVC-CLT-TVC Exp. ..	28/2016-17	21.01.17	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1
	22643/44 ERS-PNBE-ERS Exp. ..	31/2016-17	30.01.17	..	..	..	..	..	..	..	..	..	..	1	..	1	2	2
	16864-63 MQ-BGKT-MQExp.	31/2016-17	30.01.17	..	..	..	1	1	..	..	..	..	..	..	..	2	1	2
																	6	**9**
																	70	**83**
Feb.17	16101/02 MS-RMM-MS Exp. ..	33/2016-17	28.02.17	..	..	..	1	..	..	..	..	..	..	..	..	1	2	2
	16183/84 MS-TPJ-MS Exp.	..	27.02.17	..	..	..	..	1	1	..	..	..	..	..	..	2	2	4
																	4	**6**
																	74	**89**
Mar.17	22621/22 RMM-CAPE-RMM Exp. ..	35/2016-17	09.03.17	..	..	..	..	1	..	..	..	..	..	..	..	1	1	1
	Total	..	..	..	..	..	..	..	..	18	..	..	..	..	..	..	**75**	**90**

2. Drinking Water Arrangements

Sl. No.	Divisions	Name of work	Estimate cost (Rs. in lakhs)
(I) Works Completed			
(i) Works costing more than Rs. 5 lakhs each :—			
1	MAS ..	CGL - Provision of water taps, pipeline & borewells.	40.00
		KOTR-PTMS - Lorry water supply through contractors by lorry.	17.5
		BBQ - Repairs to carriage watering hydrant pipeline at BBQ Coaching Yard.	215.00
		BBQ, MAS Augmenation of water supply arrangements.	182.00
		MPK, MMC, MSF & MSB - Provision of deep bore wells at ADEN/II/B/MAS sub division.	19.94
		NBK-GI - Provision of water taps at various station.	69.89
		PER/PTC - Supply of drinking water by tanks mounted on lorry for Railway colonies and stations.	101.51
		RPM -Transportation for supply of portable drinking water and construction of 50,000 ltr capacity - 3 Nos.	127.00
		MS-SG Supply of drinking water by tanks mounted on lorry for Railway colonies and stations at MS-SG sec.	153.38
		MS-SG - Supply of drinking water by tanks mounted on lorry for railway colonies and stations.	39.63
		MS-SG - Summer water arrangements to Railway station, service building and colonies.	21.84
		MCPT - Water supply through CMWSSB and metro water through lorry.	50.00
		Total	1037.69
2	SA -		
3	PGT -		
4	TVC -	NCJ Jn - Provision of carriage watering arrangements between road No.8 & 9 for rake maintenance in pit line.	26.5
		TVC Coaching Depot - Provisional carriage watering arrangements between Road No.12 & 13.	36.5
		TVC Coaching Depot - Provisional Carriage watering arrangements.	26.5
5	TPJ -		
6	MDU -		
7	CE/CN/MS -		
8	CE/CN/ERS -		
9	MTP -		
b.Works costing less than Rs.5 lakhs each.			
1	MAS -	MS-SG - Tanking water from metro water filling points to Railway Colony and station.	2.45
2	SA -		
3	PGT -		
4	TVC -		
5	TPJ -		
6	MDU -		
7	CE/CN/MS -		
8	CE/CN/ERS -		
9	MTP -		

Sl. No.	Divisions	Name of work	Estimate cost (Rs. in lakhs)
(I) Works Completed			
B. WORKS IN PROGRESS			
a. Works costing more than Rs.5 lakhs each.			
1	MAS -	JTJ section - Supply of drinking water by tanks mounted on lorry for railway colonies and stations in JTJ Phase II.	89.52
2	SA -		
3	PGT -		
4	TVC -		
5	TPJ -	TPJ - Improvements and augmentation to the existing water recycling plant at BG Coaching Complex/TPJ.	54.65
6	MDU -	RMM - Additional drinking water supply in tank mounted lorry to station & colony for 12 months.	14.40
7	CE/CN/MS -		
8	CE/CN/ERS -		
9	MTP -		
b.Works costing less than Rs.5 lakhs each.			
1	MAS -		
2	SA -		
3	PGT -		
4	TVC -		
5	TPJ -		
6	MDU -	PMK - Supply of good drinking water to travelling public and staff.	3.10
		RMD - Supply of drinking water by RMD Municipality.	4.38
		PDKT - Supply of good drinking water from PDKT Municipality.	0.21
		SQD - Supply of good drinking water for station and passengers.	1.48
7	CE/CN/MS -		
8	CE/CN/ERS -		
9	MTP -		

2. Drinking Water Arrangements

Drinking Water Arrangements Taps/Hand Pumps/Water Huts Provided:

Division	Taps available during 2014 - 15	Taps available during 2015 - 16	Taps provided during 2016- 17
MAS	2,399	2,738	**2,879**
TPJ	1,965	1,895	**1,965**
MDU	2,026	2,244	**2,458**
SA	1,039	1,107	**1,143**
PGT	1,264	1,422	**1,463**
TVC	1,473	1,748	**1,952**
Total	**10,166**	**11,154**	**11,860**

Water Coolers Provided

Division	Coolers available during 2014 - 15	Coolers available during 2015 - 16	Coolers provided during 2016 - 17
MAS	96	121	**168**
TPJ	35	30	**30**
MDU	51	51	**51**
SA	24	33	**45**
PGT	46	50	**86**
TVC	50	58	**74**
Total	**302**	**343**	**454**

3. Passenger Amenity Works.

During the year 2015–16, Eighteen (18) passenger amenity works costing Rs. 33.40 crores were completed.

For the year 2015–16, the Budget Grant was Rs. 123.80 crores out of which Rs. 95.90 crores was spent which is 77 % of BG.

In the current year 2016–17, the Budget Grant allotted for PA works is Rs. 63.37 Crores whereas Rs. 70.70 crores was spent which is 112% of BG.

4. Catering :

5. Departmental Catering at Station :

Three jan Ahars are functioning at MAS, ED and CAPE.

6. Departmental Catering on Trains :

Train No. 12081/12082 Jan Shatabdi Exp. (TVC - CAN) is managed departmentally.

7. Contract Catering :

Details of mobile units holding by Southern Railway are furnished as annexure 1 and trains under the control of M/s. IRCTC are furnished as annexure 2.

Asper Railway Board letter No. 2016 /TG-III/600/pt dated 27.02.2017, Commercial Circular 20/2017, with the objective to provide qulaity food to our customers, unbundling of catering services on trains has been envisaged in catering policy 2017.MThis policy supersedes catering policy 2010. M/s IRCTC has been mandated to carry out the unbundling by catering a distnction primarily between food preparation and food distribution. M/s. IRCTC shall be rseponsible for catering servicesthrough mobile catering units, base kitchens, cell kitchens, refreshment rooms at A1 & A category of stations, Food plazas, food courts, train side vending, jan ahars.

In view of the new catering policy 2017, the jan ahars, major refreshment rooms and mobile catering units are being handed over to IRCTC.

8. Affordable food Packets :

Janata Khana is available both at static units and in trains at Rs. 15/ - and 20/- respectively. Combo North Indian and South Indian meals, mini meals sandwich are available at departmental jan Ahar, Chennai Central. In addition to that, one more prices by utilizing the existing departmental staff.

9. Catering supervisory committee :

Catering monitoring cell is functioning at Headquarters and Divisions. Catering Inspectors are continuously monitoring the services of Pantry cars. From March 2016, a scheme called "Own your pantry car" has been introduced under which, each CIR has been assigned with a pantry car to improve the services and to redress the complaint received. Catering flying squads have been nominated in each division to conduct inter divisional surprise checks.

10. Details of Amenities provided during the Year 2016-17

Sl. No.	Description of Amenity	Unit	Amenities MAS Divn.		Amenities SA Divn.		Amenities PGT Divn.		Amenities TVC Divn.		Amenities TPJ Divn.		Amenities MDU Divn.		Amenities CE/CN/ERS		Amenities CE/CN/MS		Total Expenditure (in thousands of) Rs.
			Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	Provided during the year 2014-15	Expenditure in thousands of Rs.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Waiting hall	Sq. m.	..	..	60	1339.00	..	..	479.00	190.85	..	..	..	..	45.27	155.00	..	..	1584.85
2	Seating arrangements	Nos.	2500	8330.00	40	360.00	..	..	..	..	297.00	496.00	..	..	50.00	351.00	..	..	9437.00
3	Covering platforms	Sq. m.	6153	39994.00	336	797120	..	..	..	..	2403.00	2775.00	..	..	225.00	2100.00	..	..	840691.00
4	Drinking water arrangements																		
	1. Hand pumps	Nos.	28	2100.00	2	200.00	..	..	..	..	..	..	..	..	..	..	..	..	2300.00
	2. Taps	Nos.	204	3060.00	..	..	..	..	..	..	90	11.00	..	..	6.00	7.00	..	..	3078.00
5	Foot over bridge	Sq. m.	..	..	..	..	..	..	..	..	2500	..	..	..	..	..	..	..	2500.00
6	Waiting rooms	Sq. m.	200	4500	180	1092	..	..	..	..	..	120	737	..	..	..	..	..	6319.00
7	Suitable platform including raising	Nos.	200	4500.00	180	1092.00	..	..	..	..	120	737.00	..	..	..	..	..	..	72870.17
8	Booking windows-cum-reservation counter.	Nos.	21838.5	54596.00	..	..	..	..	19086	792.17	2064	17374.00	..	..	2	108	..	..	3287.00
9	Sanitised latrines	Nos.	9	225.00	2	272.00	..	..	..	..	..	..	..	..	..	..	..	..	217.00
10	Waiting-cum-booking office	Nos.	3	45.00	1	147.00	..	..	..	..	..	..	..	..	1	15.00	..	..	15008.00
11	Retiring rooms	Nos.	..	..	2	2560.00	..	..	..	..	..	..	..	..	..	..	..	..	2562.00
12	Enquiry counter	Nos.	4	100.00	2	278.00	..	..	..	..	..	..	..	..	..	..	..	..	378.00
	Total		30944.00	127950.00	625	803950.00	..	..	19565	983.02	7378	26668.00	..	..	333.27	879	..	..	960130.02

11. Passenger Amenities Works Completed During 2016-17

Sl. No.	Name of Work	Cost in Lakhs
1	EKAMBARAKUPPAM – Extension of medium level platform on up line side & raising of Platform from RLto ML on down line side (Id:1503/09-10)CE/OL	129.80
2	CHENNAI BEACH-VLLUPURAM section – provision of IRS type PF shelters at sataions TBM, PV, GI, VDR & STM.(Id:1464/ 10-11) CE/OL	195.45
3	Tiruninravur – Replcement of existing FOB connecting PF NO. 1 & 2	129.65
4	KTPADI – Provision of Washable apron to road no. 1	151.68
5	TAMBARAM- Imp. To second of TBM station (Eastern side)	250.00
6	MAS-GPD sec-Extn of PF to accommodate 12 car EMU rakes in suburban lines at TNP,KAvM,AIPP & NPKM incl. extn stabling lines for 12 car rakes at GPD	183.47
7	Pamban Koil Shandy- proposed extension of exg. Low level and rail level Platfrom NO. 1 &2 to the length of 580m.	187.63
8	NLAMBUR-Provision of new booking office and circulating area at second entry and highLevel PF with 18 coaches length (Id:1483/10-11) CE/OL	248.91
9	PALGHAT DIVISION –Provision of LCD TV at waiting rooms of A & B class station PF at 5 Station.(Id:1524/09-10)CSTE.	40.62
10	SHORANUR-Provision of PF shelter 4 bays 11.50 m wide (IR type) on PF NO.1 and on PF NO.6/7 (2 bay each at PGT and MAQ ends)(Id:1481/10-11)CE/OL.	194.11
11	VADAKARA- -Provision of PF Shelter 4 bays ,7.14m wide (IRS type) on Down line PF at SRR end at SSR end.(Id:1476/ 10-11)CE/OL.	103.00
12	Amenities at Adarsh Station - -Provision of High level Platfrom at kannapuram and kottikkulam.	202.06
13	BUDDIREDDIPPATTI- Proposed extension of PF 1 & 2 for 24 coach length and Provision of FOB to connect PF 1 & 2.(Id:1470/10-11)CE/OL	280.25
14	SALEM Dn –Proposed widening and improvement to circulating area.(Id:1474/10-11) CE/OL	257.85
15	SA divn:Camtech Desigh Watering Facilities at ED platform	131.15
16	SA Divn: -Provision of FOB and Extension of PLatfrom at Samalpatti Station	198.95
17	Thiruvananthapuram Division – Extension of platform for holding longest stopping trains	388.71

Passenger amentities works in progress 2016–17

1	Chennai & salaam Division – foot over bridges (5 NOS) (D-Category Stations)	330.00
2	Chennai & salaam Division- Raising of rail & medium level Platform to high level (B-category-2 & D-catedory-13 stations	900.00
3	Palghat & Trivandrum Division – Foot over bridges (10 NOS) (D-category-station)	331.00
4	Southern Railway – platform Shelters (2 NOS -b-category station & 23 NOS –D -category-station)	1125.00
5	Southern Railway – Lift at A1, A & other pilgrim Station (With high Passenger density) (35 NOS)(PB#854/1415/NR	341.97
6	Palghat & Thirvanduram Division – Raisinsg of rail & Medium level Paltforms hwaramto high level (B-category-3 & D-category -24 station)	1620.00
7	Southern Railway –Escalators at Various Station (22 NOS) (10 station)	1972.34
8	Southern Railway – Escalators at important Station (18 NOS) (PB#855/1415/NR)	1845.98
9	Madurai, Rameshwaram & Tiruvananthapuram – Joint development of station in association With Ministry of Tourism (PB 781/2012-13/NR).	3300.00
10	Provision of Minimum Essential Passenger Amenities at station in MSB-VM & MAS-GDR section	98.99
11	CHENNAI DIVISION - Provision of elevated level booking office at MKK, GDY & STM, Section.	196.62
12	Sulurpeta –Gummidipundi & Tiruvallur- Arakkonam – Extension of Platform for 12-car electrical multiple units	427.31
13	136 Sullurpeta – Construction of reitiring rooms (Ac-1 no. & non-AC-2 nos), waiting hall	28.00
14	136 Sullurpeta -model Station – Contruction of designer compound wall and landscapingy	30.00

Passenger amentities works in progress 2016–17

Sl. No.	*Name of Work*	*Cost in Lakhs*
15	134 Nayudupeta – Extension of Platform nos.1&2 for 26 Coach length including Provision of Platform Shelter and Water booth	30.00
16	133 Sullurprta- Extension of Platform nos.1&2 for 26 Coach length including Provision of Platform Shernitlter and Water booth	25.00
17	35 Nayudueta – Improvements to Waiting hall including furniture, concourse area and platform surface	20.00
18	Ambur & Jolarpettai – Upgradation as model stations	577.01
19	107 Wimco Nagar – provision of new FOB of foot over	53.76
20	Basin Bridge Jn - Rept of foot over bridge	450.00
21	140 MAS-AJJ Section - - Extension of Platform to accommodate 12 car EMU rake in UP & Down Slow line at Pattaravakkam & Ambattur	49.32
22	141140 MAS-AJJ Section - - Extension of Platform to accommodate 12 car EMU rake in UP & Down Slow line at Tirumullaivoyil & Annanur	42.53
23	142140 MAS-AJJ Section - - Extension of Platform to accommodate 12 car EMU rake in UP & Down Slow line at Pattabiram	36.43
24	143140 MAS-AJJ Section - - Extension of Platform to accommodate 12 car EMU rake in UP & Down Slow line at PTMS & Hindu College	46.92
25	Ennore, Attipattu,Anuppampatu,Kavaraipettai & Elavur – Repl of Steel foot over bridges	472.49
26	CHENNAI CENTRAL –Provision of 10 lakh litre GLR incl.replacement of existing corroded water supply pipelines.(id:1466/ 10-11) CE/OL.	196.02
27	CHENNAI DIV-Rep of exg platform benches at stations in TBM-VM ,MRTS,BBQ-TRL,RPM-GPD,AJJ-RU&TRLJTJ sections	20.96
28	CHENNAI CENTRAL –Renewal of corroded pipelines and separation of Raw water and potable pipelines .(id:1463/10-11) CE/OL.	135.28
29	CHENNAI EGMORE-Convection of service building into waiting hall,Constrn. Of FFof building ,toilet block,impr to the concourse and imp to FOB	169.42
30	MAS-AJJ section –Proposed passenger subway at NEMILICHERY station	198.70
31	MAS-AJJ section –Extension of platforms to accommodate for 12 car EMU rakes in Up & Down slow lines at BBQ,VPY,PER,PCW,PEW &VLK stations	189.22
32	MAS –Renovation and modification of parcel office duly constructing FF over the exg parcel office building	177.92
33	MAS-GPD sec- EXtn of PF to accommodate 12car EMU rakes in Suburban lines at TNP,KAVM,AIPP & NPKM incl. extn of Stabling lines for 12 car rakes at GPD	182.47
34	MAS-AJJ section-Proposed Passenger Subway at LOCO WORKS Station.	189.97
35	Basin Bring – Augumentation of Water Supply arrangement by installation of recycling plant & electotronic monitoring system	730.00
36	Chennai Egmore-Improvement passenger amenities incl. beautification	769.70
37	MAS-GDR- provision of borewell & RCC OHT at KVP,RCC OHT one each at pON & GPD,PVC tank at NYP including pumping. (Id:1501/09-10)CE/OL	58.27
38	AJJ- JTJ Section–WJR-Extension of PF NO1,2&3 to hold 24 bogies.	193.51
39	Chennai Egmore- Extension of Existing FOB No.23C from PF no. 7 to PF !)/11	197.64
40	Chennai Division- Improvement to Adarsh station (8station)	750.00
41	Royapuram- Improvements as Adarsh station	67.26
42	CHENNAI-ARAKKONAM Section- provision of station building at PER.PCW,PEW,AVD &NEC, elevated level booking office at TI,CBE.(Id:1456/10-11)CE/OL	198.54
43	CHENNAI-GUDUR Section - Provision of IRS type PF shelter at Attipattu Pudhu nagar(2x32 m) and Arambakkam Stations. (2 Nos.) (OT/2004-05) CE/OL	15.09

Passenger amentities works in progress 2016–17

Sl. No.	*Name of Work*	*Cost in Lakhs*
44	Chennai Division - Minimum essential passenger amenities incl. amenities for disabled persons	1396.02
45	KATPADI- Setting of Information centre.	41.06
46	Provision of digital clock at all class A & B station	49.88
46	Provision of digital clock at all class A & B station	75.15
47	103 Pallavaram-Windening of the existing FOB stairwat	76.20
48	104 MS-VM sec-Strengthening of RCC staieway, gangeway coloumns, beams, stringers of FOB at GDY & Prov of roof & sternhthen of exg steel structures FOBs at SP&STM	94.75
49	195 MSB-VM sec-Strengthening of gangeay floor slabs & steps by Gutting method/Shortcrete method for FOBs at MASB, MSF and Chennai Park	93.90
50	108 AJJ-JTJ & AJJ-RU sec strengthening of structures, renewal of gangway, stairway slabs of FOBs at WJR, KPD, KVN, GYM, VLT, AB, VN, JTJ, TRT, TDK & PUT stations.	96.00
51	109 MAS-AJJ sec -Strengthening of structures,renewal of gangeway, stairway slabs of FOBs at BBQ,PER, VLK, KOTR, ABU, PAB, TI, SVR, TRL, TRT, KBT, MAF, MSU &AJJ stations.	41.65
52	110 MAS-GDR sec-Repl of existing gangway and stairway slabs and strengthening of FOBs at Gummidipundi and Nayudupetta stations.	63.01
53	115 Pallavaram-Provision of elevated level booking office and laying of approach road on western side	86.90
54	127 Chromepet-Repl of exg gangway and Provision of new stairway over exg foundation & strengthening of existing FOB structures.	29.00
55	Renovation of BOs at PEW, PCW, imp to PF fencing at PCW, Repl. of AC gutters, down water pipes, PVC down water pipes at VLK, PER & BBQ imp to subway to VPY.	25.00
56	ADEN/NWL sudivision - Painting of station name boards and provision of Trolley mark on platform surfaces	71.64
58	158 Chennai Central - Laying of washable CC Arpon on Platform Nos. 3, 4 & 5 in MAS yard	60.25
59	159 Chennai Central - Laying of washable CC apron in VIP siding and SPART siding in MAS	29.00
60	164 AJJ-JTJ section-Strengthening of the existing high level tank at KPD	17.25
61	166 Tiruvallur-Provision of roof for FOB	16.00
62	176 ADEM/TBM Subdivision-imp to water supply arrangements by providing borewells at St. Thomas Mount, Palavanthangal, Pallavaram, Urapakkam.	29.40
63	178 MAS div-Prov of seperate rooms for gen sets of the BOs at NBK, MKK, GDY, STM, PZA, MN, TL,, PV, TBMS, ENR, AIP, MJR, APB, PON, KVP, GPD ELR, AKM, SPE & NYP.	12.00
64	179 MSVM section - improvements to water supply arrangements by providing borewells at Kodambakkam and Mambalam stations.	29.00
65	188 MRTS- Improvements to passenger amenities at various stations between Park Town and Velachery	29.90
66	MS-Improvements to Hydrant pipe line in Platform No. 4 & 5, 2 & 3 and Waiting halls	15.00
67	Nandiyambakkam and Attipattu Pudhu Nagar - Provision of CBE type shelter	69.17
68	96 MSB-TBM section - Paving of Platform Nos. 7 & 8 at Chennai Beach and Platform No. 5 at Chennai Fort	76.06
69	AJJ-JTJ section Widening of PF No. 1, CC paving of PF No. 1, 2 and 3 at SHU and provision of CC tiles on FOB at KPD (Id : 1497/09-10) CE/OL.	99.69
70	Chennai Central - Replacement of existing AC sheets with galvalume sheets for platform Nos. 1, 2 and 2A. (id : 1498/ 09-10) CE/OL.	44.58
71	CHENNAI MRTS Section-Improvements to pipelines, PF benches and circulating area at MPKT, MCPT, MCPK, MTCN AND MLHS & MTMY (ID : 1909/07-08), CE/OL.	60.00
72	309 MAS-GDR Section - Raising and paving of platforms at AIPP, AIP, NPKM and MJR stations	40.00
73	310 MAS-GDR Section - Raising and paving of platforms at PON, APB, KVP AND GPD stations	62.86

Passenger amentities works in progress 2016–17

Sl. No.	*Name of Work*	*Cost in Lakhs*
74	98 KOKG - Paving of open wagon unloading area in KOKG goods yard	62.86
75	168 Eakmbarakuppam-Standardization of up and down line platform i9ncluding improvements to passenger amenities	69.86
76	250 MAS-GDR section-Extension of platforms at AIPP to accommodatre 12 car rakes	29.09
77	251 MAS-GDR section-Extension of platforms at NPKM and MJR to accommodatre 12 car rakes	28.12
78	DEN/East/MAS Jurisdiction - Provision of mini PF shelters incl. benches and paving	94.34
79	DEN/CENTRAL JURISDICTION - Provision of mini PF shelters incl. benches and paving	94.04
80	MS-CGL Section - Provision of IRS PF shelters at various suburban stations	64.18
81	DEN/South Jurisdiction - Provision of mini PF shelters incl. benches and paving	94.34
82	Sr. DEN/West/MAS Jurisdiction - Provision of mini PF shelters incl. benches and paving	94.04
83	MSB-VM Sec-Provision of IRS PF shelter at TBM	94.76
84	Chennai Egmore - Improvements to yard drainage arrangements (id : 1460/10-11) CE/OL	227.00
85	165 MS-VM section - paving of platform at way side stations	27.00
86	MAS-AJJ section - Provision of engraved non-slippery tiles for physically challenged/blind persons at ABU, AVD, TrRL	29.90
87	Vyasarpadi Jeeva-Improvements to platform shelter (5 bays)	29.90
88	187 Chennai Central - Extension of water hydrants for 24 coaches for OF Nos. 7 & 8	25.00
89	207 Chennai Div-Strengtrhening of steel structures, renewal of damaged AC sheets with galvalume sheets on FOBs at PER, AVD, VLK, TI, KBT and TRT.	29.90
90	Perungalathur - Extension of platform 2 & 3 to hold 12 car EMU	24.00
91	161 Chennai Egmore-Provision of PF benches in platforms 3 & 4, 10 & 11 and replacement of coping at PF 1 & 2	15.00
92	151 improvements to GLRs at MCPT, MLHS, MTMY ; laying and maintenance of Lawns in works/MCPT section ; and improvements to CMWSSB inlet at MPKT	28.0
93	206 MCPT-Impo to fencing arrangements, landscaping & Repl of corroded door frames & ladders at MRTS stations from MPKT to MTMY.	9.60
94	EKAMBARAKUPPAM - Extension of medium level platform on up line side & raising of platform from RL to ML on down line side (id : 1503/0909-10) CE/OL.	95.53
95	Guindy - Improvements to the circulating area	21.00
96	CHENNAI DIVISION - Provision of purified drinking water to stations through water treatment system. (Id : 1504/09-10) CE/OL.	37.86
97	148 MS-VM-Imp by providing Eurocon tiles to FOB, steel hand rails at MBM, STM, Guindy, Saidapet, Nungambakkam, Kodambakkam, Pallavaram and Chrompet.	30.00
98	208 Nayudupeta-Replacement of the existing corroded CI tank with RCC OHT of 1 lakhs litres capacity including pumping arrangements.	45.50
99	Improvement of Auto announcement system in MAS dvn	93.10
100	212 Katpadi-Replacement of corroded GI gutters with Aluminium gutters in PF No. 1 & 2	29.00
101	MUGUNDARAYAPURAM-Provision of PF shelter on UP loop line and DOWN loop line (Id : 1913/07-08) CE/OL	37.13
102	DG Jn-Proposed alternate road for new goods shed and construction of culvert @ 1.5 m dia span	4.62
103	DG Jn-widening of existing approach road to goods shed and construction of culvert @ 1.5 m dia	22.65
104	SNKL stn improvements to waiting room, booking counter etc.	50.00
105	VPT-repairs to existing approach road to railway station from NH	5.00
106	Madurai Jn-Widening of platform No. 1 by re-sitting cash office, HI's office, etc,	41.00
107	MDU Jn-proposed basic structure for deluxe toilet	30.00
108	MDU Jn-proposed reconstruction of Pay & Use toilet	40.00
109	RMM Stn- PRO passenger shelter for 2 bays on BG PF No. 2 & 3	22.17

assenger amentities works in progress 2016–17

Sl. No.	Name of Work	Cost in Lakhs
10	RMM Stn-Proposed construction of ladies waiting room	29.68
11	Arumuganeri stn- Proposed extension of existing BG medium level PF to hold 24 bogies	30.00
12	Construction of modern toilets at CVP model station	15.00
13	NRK - Proposed extension of exg. BG PF to hold 24 bogies	30.00
14	KGD-Proposed extension of exg. BG PF to hold 24 bogies	30.00
15	MDU Jn proposed CC apron in remaining length of PF line in PF No. 2	32.00
16	MVN-New RCC OHT - 90,000 litres	26.43
17	Reconstruction of toilets at SRT, SVKS, SVPR and RJPM	30.00
18	TEN Replacement of broken AC sheets and gutters with Galvallum sheets at TEN on PF-1, 2 & 3	32.00
19	CVP-Replacement of broken AC sheets and gutters with Galvallum sheets at CVP on PF-1	28.00
20	TEN-Provision of storayed type parking facilites	25.00
21	DG sub DN-Repairs and maintenance of PF shelter	22.00
22	Kallalstn-pro extension of exg. BG medium level PF No. 1 & 2 to hald 24 bogies capacity	52.00
23	MNM Jn-Improvements to goods PF and goods approach road	99.00
24	SCT stn-Improvements to circulating area, carparking lot, pay & use toilet	30.00
25	SCT stn-widening of approach road provision of pay & use toilet circulating area	33.00
26	SNKL station : Pro Construction of GLR 20,000 litres capacity and provision of 200mm dia Borewell with pumping arrangements	30.00
27	MEJ-Provision of PF benches, approach road, circulating area, trolley path etc.	15.00
28	MEJ- Construction of new FOB	90.00
29	TDn stn-Proposed construction of II class waiting hall, passenger latrine and approach road	33.00
30	VPT : Improvements to circulating area	95.00
31	Dindigul Jn-Extension of existing FOB No. 1374A (2x20.40m steel) with additional span of 1x28.605m at km. 454/10-11	49.44
32	MADURAI Jn-Provision 3 bays platform shelter each on PF No. 2 & 3 and 4 & 5	50.00
33	Madurai Jn-Proposed passenger amenity works such as waiting hall, spacious concourse, toilet facility in Western entry.	85.00
34	Tirunelveli-Provision of 5 bays PF shelter on PF 4	37.00
35	TUTICORIN : Provision of 5 bays platform shelter on PF No. 1	37.00
36	KOVILPATTI STATION-Provision of passenger shelter for 6 bays in PF No. 1 and 6 bays in PF No. 2 & 3 (Id : 1708/08-09), CE/OL.	40.25
37	MDU Dn-Provision of PF shelters at TEN & VPT including PF surface improvements and provision of water taps in sheltered area (Id : 1499/10-22) CE/OL.	152.00
38	TIRUNELVELI Jn.-Provision passenger shelter for 6 bays in PF No. 2 & 3 (Id : 1709/08-09) CE/OL	45.86
39	TUTICORIN STATION-Provision passenger shelter for 6 bays in PF No. 2 & 3 (Id : 1710/08-09) CE/OL	40.66
40	TUTICORIN-Remodeling of station building and provision of greeneries in circulating area (Id : 1335/06-07) CE/OL	75.00
41	RAMESWARAM - Provision of new second class waiting hall and VRR cum dining hall (Id : 1549/09-10) CE/OL	80.00
42	MDU Dn- TPJ-DG-MDU Section - Provision of low level shelters at KLS, AYR, VPJ, VDM & TMP and ABI, KQN, VDP & SER (Id : 1551/09-10) CE/OL.	96.90
43	Rameswaram-Construction of ticket examiner's rest room with 12 beds in cubicle partition, study room, kitchen etc. (Id : 1554/09-10) CE/OL.	45.50

Passenger amentities works in progress 2016–17

Sl. No.	*Name of Work*	*Cost in Lakhs*
144	MDU-Provision of purified drinking water in all modern stations (MDU, DG, VPT, KKDI, RMM, TEN, TN, PLNI, TSI) (Id : 1555/09-10) CE/OL.	37.39
145	MDU : Improvements to carriage water hydrants by replacement at platform & pit line	35.00
146	PBKS pro of PFS 4 bays cantilever type at PF No. 2	22.00
147	Madurai Jn-Secon entry-Remodeling of booking counter, PRS, approach road, etc.	55.00
148	DKO, SUX, SQD, MMM & PBM : Provision of PF toilets	36.00
149	Rajapalayam-Provision of FOB (Id : 1333/06-07) CE/OL	62.00
150	Madurai Division - Extension of Platform to hold 24 bogies at SVPT, SNKL & KDNL and extension of PF to hold 20 bogies at VPJ	48.00
151	Madurai Divn,-Provision of standard signages at TEN, TN, DG, VPT, CVP and remaining platforms at MDU (Id : 1332/06-07) CE/OL.	49.52
152	TCn : Proposed carriage water hydrants in between road No. 1 & 2 for VIP siding	30.00
153	Madurai Division-Development of Adharsh stations	7.02
154	SCT Station : Pro. Construction of Pump house & approach road to Pump house	29.80
155	SDN stn-proposed extension of exg PF No. 2 for 51m & 5.50m wide at 0.84 m rail level to hold 26 bogies capacity	30.00
156	SNKL Station : Replacement of exg. Steel tank with RCC OHT-45000 litres capacity and replacement of Exg. Corroded pipelines for station.	20.00
157	MDU : Improvements to circulating arear near new parcel office	20.00
158	RAMESWARAM-Impr to PF 4 & 5 by providing addl. water taps, PF shelter and construction of toilet impr to circulating area, ticketing concourse.	150.00
159	PALGHAT DIVISION-Extension of rail level PF at 6 stations-Lakkiti, Elathur, Jagannath temple gate, Tikkoti, Kannur south and Pappinisserri.	192.43
160	Karkad, Bekal Fort, Vallikunnu & Trikarpur-Foot over bridge	287.49
161	Palghat Division-Foot over bridges (5 stations)	363.93
162	PGT Division-Provision for Mini shelters 3 each at 14 stations in DEN/West/PGT jurisdition	99.86
163	Reconstruction of station building at Elimala (ELM) station	41.61
164	PALGHAT DIVISION-Provision of new station building and other passenger amenities at AAM (Id : 1514/09-10) CE/OL	99.00
165	Trikkarpur-Making the platform level uniform at platform No.	39.58
166	Provision of waiting room at Charvattur (CHV) station	16.99
167	Palghat Jn-Provision of seperate OH water tank with 2.25 lakhs litre capacity and 20m height for coach watering arrangements.	95.18
168	Extension of rail level platforms with pucca foundations at Chemancheri and Dharmadam stations	64.78
169	Shoranur Jn-Provision of separate OH water tank with 2.25 lakhs litre capacity and 20m height for coach watering arrangements.	83.42
170	Kozhikkode-2nd foot over bridge at Shoranur end connecting platform Nos. 1, 2/3 & 4	652.79
171	PGT Divn. Improvements to lighting arrangements by providing "High Mast Tower" in Circulating area at CLT, BDJ, TLY, CAN and MAQ 2nd entry.	29.99
172	Kannur-Extension of PRS/UTS circuits and communication arrangements and provision of furniture at 2nd entry	9.23
173	TIRUR & UPPALA-Provision of second FOB at TIR and provision of FOB at UAA (Id : 1478/10-11) CE/OL	153.53
174	CAN-Provision of subway connecting PF 1 and 2/3 at Kannur Station	196.98
175	Reconstruction of station building at Trikarpur (TKQ) station	41.91
176	ELIMALA-Making the platform level uniform at platform No. 1	52.83
177	BOMMIDI-Extension of PF No. 1 for 295 m and PF No. 2 & 3 (island) for 150 m to accommodate 24 coaches trains for length of 650 m (Id : 1507/09-10) CE/OL	246.26
178	ADEN/N/SA Portion shifting of name boards to platform ends at various stations between TPT-LCR	30.00

assenger amentities works in progress 2016–17

Sl. No.	Name of Work	Cost in Lakhs
79	Provision of PF surface paving at OML, MCRD, DSPT stations	30.00
80	ADEN/KRR subdivision - EDU-Extension of high level PF No. 1-180m long and proposed Highlevel platform at PF No. 2 for a length of 450 m.	95.56
81	ERODE & TIRUPPUR-Provision of cable trays for the electrical cables to ensure safety and give aesthetic look (Id : 1505/09-10) CE/OL.	17.82
82	SALEM Dn-Provision of true colour LED display Boards over SA Division (Id : 1471/10-11)	211.77
83	SA Divn : Provision of FOB and extension of Platform at Samalpatti station	199.77
84	SA Divn : Developing second entry at SA duty widening og PF 5 & extension of FOB & etc.	198.00
85	Renovation of Retiring Room at UAM	29.00
86	PTJ-Improvements to leaky roof of PF shelter by replacing AC sheets with galvalium sheets	16.85
87	ADEN/KRR & ATU Subdivision-(i) Proposed roof covering for exg. FOB at KRR & KMD stations and (ii) Proposed FOB with roof covering at CHSM station	84.35
88	ADEN/PTJ Subdivision-Extn. of HL PF @ PF No. 1 at SUU & SNO and extension of RL PF @ PF No. 2 & 3 at SUU, PF No. 2 at SNO.	96.13
89	CBE Jn-Provision of CC apron on line of PF No. 5 for length of 180m	63.84
90	CBE-Provision of additional Retiring Rooms at first floor of west side of Booking Office (2 Nos.)	28.32
91	ADEN/PTJ Subdivision-Extension of high level platform @ PF No. 1 at KAY, PF No. 1 & 2 at PKM, PF No. 1 & 2 at PLMD	95.44
92	ED-Provision od side drain on line of PF No. 1 for length of 570m	22.15
93	Provision of Train information display syatem through LCD Television at VIP Lounges, Waiting hall & Concourse-SA Dn	25.84
94	Provision of GPS Based LED Clocks at important locations in Category A1/A/B stations over SA Divisions	9.56
95	Provision of True colour LED Coach Guidance and coach direction display boards at salem junction as per RDSO Spec. RDSO/SPN/67/2008 ver. 1 or latest.	55.66
96	Provision of True colour LED Coach Guidance and coach direction display boards for Three platforms at Coimbatore	87.05
97	Provision of True colour LED Coach Guidance and coach direction display boards for Three platforms at Erode Junction	86.66
98	Provision of True colour LED Coach Guidance and coach direction display boards for Two platforms at Tirupur	55.55
99	SA-Extension of PF shelter at PF No. 3 and replacement of AC sheet roof with Galvalume sheet at PF No. 2 & 3	51.76
200	Salem Division : Provision of glow sign board and CLS panel at SE/E/SA & JE/E/ATU section	6.37
201	Improvements to unloading facilities at IGU	95.00
202	Improvements to goods line at TUP	95.00
203	TUP-New VIP lounge and pay & use toilet in PF No. 2	30.00
204	CBE-Proposed PF shelter and light weight PF shelter base at PTJ, CBF, PLMD, SHI, IGU, SUU, SNO, VNJ (Id : 1472/10-11 CE/OL.	192.75
205	Watering facilities at Coimbatore & Mettupalayam	109.76
206	SALEM DIVISION-Provision of drinking water facilities at Goodsheds of SA, SAMT, ED, IGU, PLMD, & CBF (Id : 1679/08-09) CE/OL.	49.50
207	SA Divn : Provision of Concrete pavement at unloading platforms at SAMT	173.83
208	SA Divn- Replacement of the defective LTUG cable feeding station and platform lighting loads	25.89
209	Construction of PF toilets at CVD, PAS, KMD, PGR, MMH, LP, KLT, PLI, PGN, EL & VEI, PALM, EDU stations in KRR sub-division.	29.78

Passenger amentities works in progress 2016–17

Sl. No.	*Name of Work*	*Cost in Lakhs*
210	SALEM DIVISION-Provision of purified drinking water to stations through water treatment systems (Id : 1506/09-10) CE/OL.	20.00
211	ADEN/KRR Subdivision-VEI & PALM-Extension of High level PF at PF No. 1 - 180m each length	77.87
212	Provision of True colour LED Coach Guidance display boards for 2 platforms at Salem	62.00
213	KLT-Proposed light weight PF shelter on PF No. 2	20.00
214	Improvements to water supply arrangements at SA station	30.00
215	TIRUPPUR and COIMBATORE- Provision of Coach Guidance on 2 platform each (Id : 1301/06-07) CE/OL	49.99
216	Provision of washable aprons at Tiruchchirappalli PF No. 1A & VIP siding and Kumbakonam PF No. 1	139.27
217	TPJ (i) Provision of PF shelter on PF No. 1 and (ii) Provision of additional multilevel parking for two wheelers in main entry (id : 1497/10-11) CE/OL	111.48
218	Puducherry-Conversion of existing goods PF into passenger PF No. 4	198.76
219	TPJ Division- Provision of Minimum Essential at railway stations to make good the shortfall arised due to revised change of category.	171.28
220	Proposed High Pressure jet cleaning system at Pit No. 1 & 2 of BG	35.09
221	TPJ & TP stations-Replacing of ACC sheets with pre colour coated iron sheet in platform shelter TPJ PF No. 6 & 7 and TP Pf No. 1.	39.39
222	TPJ : Replacement of Parcel Lift in PF No. 6 & 7 at Tiruchchirappalli Junction	39.90
223	KMU Mahamaham festival 2016-VM-TPJ (ML) sec. Proposed raising of Rail level platform No. 2 at TT, PDV, SPL into Medium level PF & PF No. 1 at PVL.	185.93
224	Improvements to PF surface at stations NPM, PRT, SXR and ALP in VM-TPJ main line	105.91
225	TPJ-Provision of Kota stone paving a length of 175m in PF No. 1 (DG end)	21.33
226	PDY-Construction of GLRwith a capacity of holding 1 lakhs litres water	20.00
227	TPJ-Provision of carriage watering arrangements at PF No. 7	29.40
228	Thiruvananthapuram Division-Raising / extension of platforms (17 stations)	1431.00
229	TRIVANDRUM DIVISION-Provision of FOB at KCVL connecting PFs, main entry & second entry (Id : 1542/09-10) CN/TVC	248.00
230	Thiruvananthapuram Division-Extension of platforms for holding longest stopping trains	410.00
231	Varakala, Paravur & Quilon Jn.-Improvement to passenger amenities	300.00
232	THIRUVANANTHAPURAM DIVISION-Extension of platforms to hold 24 bogies (3 stations) (Id : 1963/07-08) CE/OL	235.58
233	Kollam-SEcond entry on NH 208 side with circulation area booking office & extn. of foot over bridge	785.00
234	TUVR : Paving of PF No. 1 and improvements to passenger amenities	43.83
235	ERS-Replacement of Carriage Watering Pipe Line with Hydrant and booster pump between PF 3 & PF 4	47.25
236	TRVZ-Adarsh stations-Raising and improvements to Platforms	96.85
237	CAPE : Augmentation of water supply scheme provision of open well and pipe line arnagements	160.45
238	CNGR-Raising resurfacing and provision of PF shelter on PF No. 1	119.82
239	NCJ Sub Division : Proposed Rainwater Harvesting at NCJ, AAY, VLY, NPK, NNN, SGLM, MP, ERL and KZT including provision of GLR.	141.87
240	Alleppey, Shertalai & Turavur-Improvement to passenger amenities	370.00
241	KZK : Raising of PF 2 & 3, Provision of PF Shelter, waiting room and improvements to circulating area	178.97

12. Expenditure incurred on Passenger and Other Railway Users' amenities 2016–2017

(Figures in lakhs of Rs.)

1	2	3	4	5
Details of basic amenities and additional facilities	Plan-head Passenger and Other Railway Users Amenities	Plan-head Computerisation	Other Plan heads like New Lines, Doubling etc.	Total
A. Basic Amenities—				
1. Proper booking arrangements..	149	0	0	149
2. Waiting Hall	146	0	0	146
3. Benches	390	0	0	390
4. Suitable arrangements for Electric Lighting	81	0	0	81
5. Drinking water supply arrangements at stations	96	0	0	96
5(a) Drinking water supply arrangements in the trains	43	0	0	43
6. Platform with well maintained surface (Rail level platforms at flag stations)	7	0	0	7
7. Latrines	69	0	0	69
8. Shady trees	0	0	0	01
B. Additional facilities—				
1. Urinals	1	0	0	1
2. Platform Covers	642	0	0	642
3. Bath facilities	0	0	0	0
4. Water Coolers	60	0	0	60
5. Foot Over Bridges or Subways	1602	0	0	1602
6. Washable Aprons	137	0	0	137
7. Retiring Rooms & Rail Yatri Niwas	13	0	0	13
8. Refreshment Rooms, Base kitchens and Trolleys/Stalls for Catering & Vending.	0	0	0	0
9. Improved lighting and fans on platforms	57	0	0	57
10. Enquiry Offices, Train indicator Boards	9	0	0	9
Total ..	3502	0	0	3502

Expenditure incurred on Passenger and Other Railway Users' amenities 2016–2017

B. Additional facilities—(Concld).				
11. Reservation Offices—Computerised Reservation.	0	527	0	527
12. Improvements to circulating area	387	0	0	387
13. Car, Tonga, Cycle stands	2	0	0	2
14. C. C., TV	0	0	0	0
15. Cushioning of Second Class Berths	0	0	0	0
16. Renovation/Remodelling of station buildings	813	0	0	813
17. Carriage Watering	5	0	0	5
18. Book Stalls	0	0	0	0
19. Raising, lengthening, widening and resurfacing of platforms ..	1722	0	0	1722
20. Public address system	16	0	0	16
21. Exhibition of Time-Table sheets on Glass Fronted Frames.. ..	0	0	0	0
22. Improvement to existing Carriages such as provision of Fans, improved lighting & lavatories, special insulation in roofs, bigger water tanks in Carriages, better fittings, etc. ..	26	0	0	26
23. Improved latrines	0	0	0	0
24. Miscellaneous improvements to existing amenities, viz., provision of seats, hedges, etc.,	152	0	0	152
C. Other Railway Users' amenities (for Goods Sheds and Parcel Offices)—				
1. Arrangements for drinking water including water coolers, water trollies, etc.,	0	0	0	0
2. Waiting accommodation	36	0	0	36
3. Refreshment Rooms & Vendors Stalls	0	0	0	0
4. Latrines	0	0	0	0
5. Miscellaneous arrangements like provision of seats, hedges & shady trees	389	0	0	389
6. Lighting arrangements and provision of fans	16	0	0	16
7. Rest shelters for licensed porters	0	0	0	0
Grand Total	**7,066**	**527**	**0**	**7,593**

13. Statement of Actual Expenditure under Amenities for Staff for the year 2016–2017

Sl. No.	Description	(Figures in Thousands of Rs.)		
		Gross	Credit	Net
1	New Hospitals, Dispensaries, additions and improvements to existing ones.	1,68,713	2	1,68,711
2	New Schools, additions, alterations, improvements & additions to Existing ones.	387	0	387
3	New Institutions, rest houses, sports grounds, reading rooms, Improvements & additions to existing ones.	2,954	0	2,954
4	Provision and improvement of health and welfare works & maternity centres.	0	0	0
5	Cooking arrangements for workshops canteens & rest houses for workmen.	2,117	0	2,117
6	Provision and improvements of sanitation, water supply, road lighting and marketing facilities in Railway colonies.	35,294	–42	35,336
7	Improvements Alterations to Existing quarters whatever type ..	11,509	0	11,509
8	Others Works	14,613	0	14,613
9	Total Col. 1 to 8 (Staff Amenities)	**2,35,587**	**–40**	**2,35,627**
10	Provision for Officers' Quarters	19,655	0	19,655
11	Quarters for Class III Staff	1,82,651	1,986	1,80,665
12	Quarters for Class IV Staff	25,305	0	25,305
13	Total Col. 10 to 12 (Staff Quarters)	**2,27,611**	**1,986**	**2,25,625**
14	Total Col. 9 +13	**4,63,198**	**1,946**	**4,61,252**
15	Medical Expenses — J 200	22,43,119	0	22,43,119
16	Health and welfare services — J 300	4,20,086	0	4,20,086
17	Education — J 100..	6,75,399	0	6,75,399
18	Canteen and other staff amenities — J 400	73,425	0	73,425
19	Staff Training — K 500	6,66,428	0	6,66,428
20	**Total Col. 15 to 19 .. .. ..**	**40,78,457**	**0**	**40,78,457**
21	**Grand Total Col. 14 + 20 .. .. ..**	**45,41,655**	**1,946**	**45,39,709**

14. Fairs and Meals :–

No revision in Fairs and Meals.

15. No. of stations functioning for issue of Passenger Traffic during 2016–17

(i) No. and Name of city/Town Booking Offices .. 2

(ii) No. of Name of City/Town Booking Agencies .. Nil

(iii) No. of Name of Out Agencies .. 2

(iv) No. of Street Collection and Delivery service (pertains to Dy. CCM/FM)

16. No. of Stations Opened/Closed during 2016–17 for issue of passenger Traffic.

(i) No. and Name of City/Town Booking Offices opened/closed **Nil**

(ii) No. of Name of City/Town Booking Agencies opened/closed **1***

(iii) No. of Name of Out Agencies **Nil**

(iv) No. of Street Collection and Delivery service (pertains to Dy. CCM/FM)

* Thirunallaru Town booking office has been closed on 15–08–2017.

17.

No. of Halts functioning during 2016–17 154

(includeds Halts presently closed as a result of Gauge conversion in that section)

(i) Train halts converted into flag stations Nil

(ii) Stations opened/closed for traffic Nil

(ii) Flag stations downgraded into train halts 1*

(iv) Train halts opened for passenger traffic Nil

(v) Train halts closed for passenger traffic 2*

(vi) Train halts re-opened for passenger traffic Nil

* Narthamalai ana Karupatti train halts have been closed for passenger traffic w.e.f. 15–08–2017.

* Capperquarry flag station downgraded into train halt w.e.f. 11–02–2017.

18. Station opened/Re-opened for Goods Traffic during 2016-2017.

Name of Station	Division	Date of opening	Opened for
Gummidipundi (GPD)	MAS	19.04.2016	Temporary opened for Goods traffic for outward local booking for a period of three months, i.e. upto 18.07.2016.
Ulundurpettai (ULU)	TPJ	11.08.2016	Opened for full rake full rake handling point both Inward and outward in local thriugh booking for Wagon/Train load facilities.
West Hill (WH)	PGT	23.08.2016	Opened for Inward NMG traffic.
Tiruvalla (TRVL)	TVC	24.08.2016	Re-opened for half rake handling point for Inward and Outward traffic in Local and through booking.
Chennai Harbour (Jawahar Dock) (CHJD)	MAS	02.03.2016	Temporary permission for loading of Iron Ore upto 31.03.2017.
Angamali for Kaladi (AFK)	TVC	14.03.2017	NMG rake for both Inward/Outward and Local/Through booking.

19. Station Closed for Goods Traffic during 2016-2017.

Name of Station	Division	Date of Closing	Closed for
Tiruvalla (TRVL) BG	TVC	07.04.2016	Temporary Closed for goods traffic due to doubling work. Extended upto 30.04.2016
Shoranur (SRR)	PGT	14.09.2016	Closed for all description of Goods Traffic.

20. The converted GG Line opened for Passenger/Goods Traffic during 2016–17

Section	Division	dated of opening	Opened for
Tenkasi Jn.–Quilon (QLN) section viz	MDU	31.03.2017	Sengottai (SCT)–New Arayankavu Block (AYVN) and Punalur
(AYVN) and Punalur (PUU)–Edaman (EDN).			(PUU)–(PUU)–Edaman (EDN) is opened for Passenger traffic.

21. Section/Line closed for Passenger Traffic during 2016-17.

–NIL–

22. Siding opened for receipt and dispatch of goods traffic in tain/rake loads

Sl. No.	Name of the Siding	Serving station	Division	Date of opening	Remarks
1.	Kamarajar Port Ltd., Container Terminal Siding.	Attipattu	MAS	31.03.2017	–
2.	BPCL–KR siding	Irumpanam	TVC	30.03.2017	Through distance and EOL facility granted.

This has the approval of Dy. CCM/R & FM

23. Following improvements have been carried out in the existing lower class carriages during 2016-17. (Deendayalu Coaches)

* Aquaguard UF (Ultra Filtration) water filter-2 Nos. per coach-one at each end near doorway.
* Interior paneling with Aliminium Composite Panels (AC) and aluminium extrusions with concealed screws. Doorway areas provised stainless steel panels for durability.
* Exterior painting with orange colour band (Z shape) and anti graffiti coating.
* Cushioned transverse luggage racks.
* Hand hold at suitable height on doorway partitions.
* Coat hook below longitudinal luggage racks as well as on opposite side between windows.
* Bio-toilets and polymerised floor coating over toilet floor.
* Glass tube water level indicator with red colour flot at both ends.
* Toilet occupation indication display at both ends above water level.
* Each compartment has two mobile charging sockets-one on transverse seat side and one on longitudinal seat side.
* Two fire extingguishers-one on each end of coach below water purifier provided with anti-theft attangement.
* LED lights.

XIV. संरक्षा/SAFETY

The Safety Department of the Railway was created based on the recommendations in the reports of Kunzru and Sikri committees' which inquired into certain serious accidents on the Indian Railways. The Safety Department is essentially a department monitoring the safety performance of various departments and helping them to discharge their safety related functions effectively. The scope and functions of the Safety Department have been defined over the years and basically include the following:

(1) To sensitize all the concerned departments about the safety related issues.

(2) To oversee all safety matters concerning train operations.

(3) Identify safety susceptibilities and vulnerabilities based on various accidents and incidents occurring in the system.

(4) To establish an effective response mechanism to handle situations arising out of the accidents.

(5) To enable the departments to deliver the functions which make the above possible.

ACCIDENT STATISTICS

Trend of Train Accidents

(a) Consequential Accidents

Consequential accidents are train accidents associated with loss of human life or grievous injury, damage to railway property or interruption to rail traffic above the laid down threshold levels. The trend of consequential accidents for the last 5 years is given below:-

2011–12	2012–13	2013–14	2014–15	2015–16	**2016–17**
7	6	4	2	6	**8**

The Incidence of accidents per million train kms for the past five years on

Southern Railway is as follows.

2011–12	2012–13	2013–14	2014–15	2015–16	**2016–17**
0.100	0.080	0.082	0.026	0.078	**0.105**

The Category-wise break-up of consequential train accidents for the past five years given below :—

Type of accidents	2011-12	2012-13	2013-14	2014-15	2015-16	**2016-17**
Collision	1	Nil	Nil	Nil	Nil	1
Derailment	..	..	..	..	..	
a) At stations	1	1	3	Nil	2	4
b) In mid-section.	1	Nil	Nil	Nil	3	3
LC accidents						
a) Manned	Nil	Nil	Nil	Nil	Nil	Nil
b) Unmanned	4	5	1	2	Nil	Nil
Fire in trains	Nil	Nil	Nil	Nil	Nil	Nil
Miscellaneous	Nil	Nil	Nil	Nil	1	Nil
Total	**7**	**6**	**4**	**2**	**6**	**8**

b. Indicative accidents

The number of indicative accidents during 2016-17 was 3. The trend of indicative accidents with category-wise break-up for the last 5 years is given below :—

Type of accidents	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
Averted collision	Nil	1	Nil	Nil	1	Nil
Train passing signal at danger.	1	6	5	5	6	3
Breach of block rules.	Nil	Nil	Nil	Nil	Nil	Nil
Total	**1**	**7**	**5**	**5**	**7**	**3**

SAFETY MEASURES

With the assent on maximizing the usage of existing assets for improving the loading, safety assumes prime importance. Corporate Safety Plan 2003-2013 provided the broad guidelines for improving safety and preventing accidents. Many of the safety measures are arising out of those guidelines.

(A) Railway Safety Review Committee Recommendations

Railway Safety Review Committee set up under the chairmanship of Justice H.R. Khanna, submitted a total of 278 recommendations under Part I and Part II of the report. Out of these, 240 have been accepted fully or partially by the Railway Board. Implementation of the accepted recommendations is in progress and a total of 150 recommendations have already been implemented till March 2012. 60 recommendations are not pertaining to Southern Railway. Implementation of remaining 24 accepted/partially accepted recommendations is at various stages depending upon availability of resources, success of trials, etc.

(B) High Level Committee on Disaster Management System:

A high level committee was constituted in September 2002 to review Disaster management system over Indian Railways and to give recommendations for its strengthening and streamlining. This committee has given 111 recommendations, 4 were deleted by Railway Board. All others have been accepted for implementation. 10 recommendations are not pertaining to Southern Railway. 90 recommendations have been implemented in Southern Railway up to March 2013 and balance recommendations are in various stages of implementation.

(C) Development of Human Resources

In view of the fact that a majority of accidents on Indian Railways have some link to human failure. The Railways are following the twin policy of development of human resources and providing better and fail-safe equipment. Development of human resources is a continuous process on the Railways. Some of the steps taken in this direction are:-

(1) Initial and refresher training for staff, Training Curricula are reviewed from time to time and modern aids are used to give training to the staff. The duration of various courses have also been rationalized.

(2) Uniform, standard training modules for Induction, Refresher and Promotional Courses for loco Running Staff have been introduced. Running staff are also given training in Yoga to keep them physically fit and mentally alert in carrying out their sensitive duties.

(3) Staff connected with train operations are specially screened from time to time and those found deficient are given crash courses at the training Centers.

The Zonal Railway Training Institute at Tiruchchirapalli is the major institution for imparting training in train working rules and procedures to all staff concerned with train operations such as Station Masters, Loco Pilots, Guards, etc. Staff requiring technical training in addition to rules and procedures are given training at the Zonal Electrical Traction Training Centre at Avadi,Signal and Telecommunication Training Centre at Podanur, Southern Railway Civil Engineering Training Centre at Tambaram and Diesel Traction Training Centre at Golden Rock. Carriage and Wagon staff get their technical training at STC, Bangalore, now under South Western Railway. In addition to the above, there are six training centres for Group-D staff of Traffic department and five training centres each for C&W, Civil Engineering staff and RPF personnel are trained at RPF training centre/Kimber garden/Trichy, JR/RPF Academy/Lucknow.

(4) To ensure that staff work as per rules and that their knowledge is up to date, a system of on the job counselling is done by nominated Supervisors and Inspectors. Loco Pilots in particular are placed under the charge of Loco Inspectors who act as mentors.

(5) At divisional level, various functions and propaganda campaigns are organized to highlight the importance of Railway safety. These activities include street dramas, folk dances etc., as a medium to take the message to the masses. Trade fairs organized by State Governments and other organizations give yet another opportunity to have direct contact with the public.

(6) In a view to educate the public using Unmanned LCs, posters and pamphlets were issued to School children, nearby villagers and Motor Vehicle drivers passing through UMLCs and they were counseled on safety rules to be observed while crossing UMLCs **(D)**

(7) A summary of safety activities carried out during the year and comparison with the previous year is as follows:

Year	Safety propaganda	Safety seminars	Safety drives
2012 - 13	485	448	47
2013 - 14	681	444	36
2014 - 15	843	570	24
2015 - 16	971	345	34
2016 - 17	856	411	28

(8) Safety Propaganda

- Safety propaganda is conducted through media such as TV, Radio and Newspaper appealing to public for proper caution at level crossings, not carrying inflammable articles, not to travel at foot board/roof top etc.
- Road users are educated through interaction and display of safety posters at Village Panchayat Offices etc., by distributing handouts at retail outlets of Hindustan Petroleum Corporation, Indian Oil Corporation and Bharat Petroleum Corporation and through display of cinema slides.
- Action is being taken to educate the road users on the importance of strictly following Motor Vehicle Act provisions at unmanned level crossings through publicity campaigns. These are in the form of short films, slides in cinema halls, local cable TV networks, etc. campaigns in schools, fairs and other areas like weekly markets where public gather, issuing safety pamphlets/hand-bills and conducting street plays.
- A special effort is being made to educate road users about the precautions to be taken while crossing the Unmanned LCs through **"SMS"** to mobile users **in Kerala and Tamil Nadu**.
- Thiruvananthapuram, Tiruchchirappalli and Chennai Divisions have a group of staff trained to perform street plays for carrying the safety messages to the masses.
- Advertisements are carried in daily new papers appealing to public not to carry inflammable articles, not to light fires inside the coaches, avoid footboard travel, safety at unmanned LC, etc. Special campaigns are done during Deepavali festival season to ensure that passengers do not carry crackers.

(E) Annual Safety Week

With a view to bring into focus various safety related aspects and also to involve all categories of staff in the effort to improve safety, an **Annual Safety Week** was observed from 12.03.2016 to 18.03.2016. The following were the highlights of the Safety week:

- Safety Seminars at Zonal Railway Training Institute, Tiruchchirappalli focusing on various safety related issues were presented by eminent railway officers.
- Safety Seminars at Zonal Railway Training Institute, Tiruchchirappalli focusing on various safety related issues were presented by eminent railway officers.
- Competitions on Safety related topics such as Essay, Poster designing, Safety Quiz, Safety Drama and Ex-tempore speech were held during that period.
- Prizes for the winners of various competitions and an overall shield were presented at a colorful valedictory function.

At divisional level, various functions and propaganda campaigns are organized to highlight the importance of Railway safety. These activities include street dramas, folk dances etc., as a medium to take the message to the masses. Trade fairs organized by State Governments and other organizations give yet another opportunity to have direct contact with the public.

(F) Other Safety Activities

(i) Fire audit of all AC and Non-AC conducted and deficiencies noted was corrected at the field level.

(ii) A Safety calendar for 2017 was printed and distributed during the end of December 2016.

(iii) Four issues of Quarterly Safety Bulletin "SUJOG" were printed and distributed to all concerned during the year.

(iv) A gazette extra ordinary was published and distributed to all divisions in connection with prevention of carriage of inflammable articles during Deepavali season.

(v) Safety becomes a priority in Railways. Being a Service organization and a major mode of transport, it becomes imperative to provide safety to the passengers and materials transported. In order to achieve this, the human resources in the organization had to be trained. The officers of Southern Railway were trained in their sphere of work. The Safety Department Officers were sent to training programms to enhance their safety skills and knowledge. Indian Railway Institute of Transport Management, Lucknow and National Academy of Indian Railways, Vadodhara provide such training programs to officers in Safety and Disaster Management. Two officers are trained in the year 2016-17.

(vi) The Zonal Railway Training Institute at Tiruchchirapalli is the major institution for imparting training in train working rules and procedures to all staff concerned with train operations such as Station Masters, Loco Pilots and Guards etc. the training is provided in different stages, namely, Initial and Promotional, Refresher and General courses. The training courses organized by ZRTI in four stages comprise to 166 for the year 2016-17 in which over 4518 staff benefitted.

(vii) Safety camps are organized to create safety awareness amongst staff and to discuss day to day practical problems and to exchange views. During 2016-17, 89 Safety camps were organized which benefitted 2471 employees.

I. (a) Accidents involving Casualities during 2016–17

(Excluding Manned/Unmanned LC accidents)

K–Killed G–Grievous M–Minor

Sl. No	Details of accidents	Casualty								
		Railway staff			Passenger			Others		
		K	G	M	K	G	M	K	G	M
1	On 05.05.2016 at 20.15hrs. while Train No. 12623 (Down) Chennai Central – Trivandrum Mail passed PRES Down fast line Home signal No.E2 at "ON" and hit the Train No. 43121 Chennai Central (MMC) – Pattabiram Military Siding (PTMS) Down EMU Local train near PRES Cabin.(Loco No.WAP7 -30342/RPM, SLRD -06720 and GS08402 got derailed)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	4
2	On 19.05.2016 at 17.05 hrs. While starting Train No. 42801 MSB – SPE EMU Local train from Road-3, 7th trailer coach No. 12417, of two pair of wheels of front truck derailed after Point No. 62.A in the lead rail between point and crossing at Ponneri station.Derailment (D-3)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	On 20.05.2016 at 12.40hrs. While Train No 15905 Up CAPE – DBRG "Vivek" Express was running between ERL – KZT stations in NCJ – TVC section at Km. 268/14 Loco No. WAP1-22013 leading pair of wheel derailed, due to obstruction caused by land slide in heavy rain.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
4	On 16.07.2016 at 12.40hrs. While the Train No. 70105 DEMU Passenger leaving from Rd-3 of MAJN station, all the wheels of leading truck of 3rd trailer Coach No. KR/SWR 22419 from leading DPC No.22008 derailed between crossover Point No.63A and 63B in the track between 2 CMS crossings.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
5	On 04.08.2016 at 01.45hrs While Train No 22651 MAS-PLNI Down Express derailed at Dasampatti station slip siding in JTJ-SA section. Loco 22512 and SLR 15799 derailed.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
6	On 18.08.2016 at 00.12hrs. While Train No 40158 TBM – MSB EMU with 12 Car, while entering into Road. 11 at Chennai Egmore suburban side, 8th car from leading MC, TC No 12335,all the 4 wheels of the front bogie derailed.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
7	On 28.08.2016 at 02.20hrs. While Train No 16347 TVC-MAQ EXP running between AFK-KUC Block sections at km 74/100. 12 coaches derailed.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
8	On 19.09.2016 at 23.59 hrs. While KTYM/ Pilot 21 BCNL Fertilizer loads, which left STKT at 23.48 hrs, 4 wagons derailed and 5 wagons capsized at km 130 in UP line between STKT-KPY block section of QLN-KYJ section.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

(b) Details of Accidents Involving Casualities During 2015-16 Due to Negligence of Road Users—

Sl. No.	Brief Details	Killed	Injured	
			Grievous	Minor
Nil		Nil	Nil	Nil

II. Accidents Statistics – Details

No. of train accidents classified under principal heads which occurred on this Railway (excluding Workshops) during the year 2015-16 and 2016-17:

Sl. No.	Particulars	2015–16	**2016–17**
1	(a) Collision involving passenger trains	Nil	**1**
	(b) Collision involving other than passenger trains.	Nil	**Nil**
2	(a) Derailments involving passenger trains.	Nil	**6**
	(b) Derailments involving other than passenger trains except train wrecking.	Nil	**1**
3	Derailments due to train wrecking	Nil	**Nil**
4	Trains running into road traffic at LCs	Nil	**Nil**
5	Fire in trains	Nil	**Nil**
	TOTAL ITEMS (1 to 5)	Nil	**8**
6	Failure of coupling and draft gear	Nil	**Nil**
	(a) Passenger	Nil	**Nil**
	(b) Goods	Nil	**Nil**
	(c) Other failure of Rolling Stock	Nil	**Nil**
	(d) Other failure of P. Way	Nil	**Nil**
7	Attempted train wrecking	Nil	**Nil**
8	Train running over cattle	Nil	**Nil**
9	Train running over obstruction	Nil	**Nil**
	TOTAL ITEMS (6 to 9)	Nil	**Nil**
	GRAND TOTAL (1 to 9)	Nil	**8**
10	No. of persons killed :	Nil	**Nil**
	No. of Railway Servants in workshops	Nil	**Nil**
10A	Accidents on the Railway		
	(a) Passengers	Nil	**Nil**
	(b) Railway Staff	Nil	**Nil**
	(c) Other than Passengers & Railway Staff.	Nil	**Nil**
	Total other than Workshop		**Nil**
11	No. of person injured	Nil	**Nil**
	No. of Railway servants in workshops	11	**7**
11A	Accidents on Railways		
	(a) Passengers	Nil	**Nil**
	(b) Railway Staff	Nil	**Nil**
	(c) Other than Passengers & Railway Staff.	Nil	**Nil**

III. (a) Comparative Figures of Consequential Train Accidents attributed to failure of Human Element for the Last 5 years.

Sl. No.	Category	2011-12	2012-13	2013-14	2014-15	2015-16	**2016-17**
1	Collision	1	Nil	Nil	Nil	Nil	**1**
2	Derailment :						
	(a) At stations	1	1	3	Nil	2	**4**
	(b) In mid-section	1	Nil	Nil	Nil	3	**3**
3	LC accidents						
	(a) Manned	Nil	Nil	Nil	Nil	Nil	**Nil**
	(b) Unmanned	4	5	1	2	Nil	**Nil**
4	Fire in trains	Nil	Nil	Nil	Nil	Nil	**Nil**
5	Miscellaneous	Nil	Nil	Nil	Nil	1	**Nil**
	Total	**7**	**6**	**4**	**2**	**6**	**8**

(b) Comparative Figures of Indicative Train Accidents attributed to failure of Human Element for the last 5 years.

Sl. No.	Category	2012-13	2013-14	2014-15	2015-16	**2016-17**
1	Averted Collision	1	Nil	Nil	Nil	**Nil**
2	Train Passing Signal at danger.	6	5	5	7	**3**
3	Breach of Block rules	Nil	Nil	Nil	Nil	Nil
	Total	**7**	**5**	**5**	**7**	**3**

IV. STATUS OF ELIMINATION OF UNMANNED LCs BY MANNING/ ELIMINATION DURING 2016-17

Year	Total Nos. Targeted	Total Nos. Achieved
2016-17	248	161

V. STATUS OF INTERLOCKING OF LCs DRUING 2016-17

Year	Total Nos. Targeted	Total Nos. Achieved
2016-17	30 Gates	39 Gates

IV. Train Accidents per million train kilometres on Southern Railway Since 1994–95

Year	Collision	Derailments	Level crossing accidents	Fire in trains	Misc	Total	Million Train kms.	Incidence of accidents per million train kms.
1994–95	3	31	27	1	..	62	60.22	1.029
1995–96	3	35	14	..	..	52	63.27	0.822
1996–97	..	29	11	..	..	40	64.20	0.623
1997–98	2	53	10	1	..	66	65.73	1.004
1998–99	1	50	7	1	..	59	64.83	0.910
1999–00	3	37	7	1	..	48	67.07	0.715
2000–01	2	33	7	1	..	43	68.39	0.628
2001–02	2	23	10	..	..	35	68.80	0.508
2002–03	1	17	8	..	..	26	69.75	0.372
2003–04	..	16	6	2	..	24	59.46	0.403
2004-05	..	2	3	1	2	8	58.63	0.136
2005–06	..	3	4	1	1	9	59.79	0.150
2006–07	..	4	11	..	1	16	60.50	0.240
2007–08	..	4	6	1	1	12	61.62	0.195
2008–09	1	3	5	0	0	9	63.63	0.141
2009–10	1	3	1	0	0	5	65.03	0.077
2010–11	0	3	3	0	0	6	67.34	0.088
2011–12	1	2	4	0	0	7	69.68	0.100
2012–13	0	1	5	0	0	6	70.92	0.080
2013–14	0	3	1	0	0	4	73.08	0.082
2014–15	0	0	2	0	0	2	69.75	0.026
2015–16	0	5	0	0	1	6	76.24	0.078
2016–17	**1**	**7**	**0**	**0**	**0**	**8**	**76.53**	**0.105**

V Comparative details of Inspections, surprise checks, mock drills etc on Southern Railway Since 2012-13 to 2016-17

S.No.	Details of Inspections	2012-13	2013-14	2014-15	2015-16	2016-17
1	No. of inspections at station	24301	24706	22891	22302	21655
2	No. of inspections at yard	8870	8902	8642	8761	8352
3	No. of motor trolley inspection	1890	1941	1935	1930	1608
4	No. of footplate inspections	26437	27531	26374	25637	24551
5	No. of station working order checked	4798	4807	4682	4699	4718
6	No. of surprise check	12206	12804	11985	12102	11556
7	No. of ambush checks conducted at LC in co-ordination with Civil authorities.	5728	5793	5682	5668	4856
8	No. of mock drills conducted	18	24	19	17	14
9	No. of safety meeting, talks, group discussions	5631	5714	5684	5732	4810
10	No. of safety seminars	448	444	435	438	389

Highlights for the financial year 2016-2017 Pertaining to Traffic Safety

I) Safety Rules :

Safety Rules are indispensable for the safe working of trains. Periodical reviews of the existing Rules are being done to keep abreast with the changing circumstances. As part of this exercise Three corrections to GRS (Correction Memo Number 02/2016 dated 01/06/2016, C. Memo No. 03/2016 dated 06.10.2016.,C. Memo No. 04/2016 dated 02.12.2016) have been issued.

The first correction to Block Working Manual Part - 1 was also issued during the year as Correction Memo No. 1/ 2016 to BWM dated 28–07–2016.

II Details of Safety Drives ordered by COM from 01–04–2016 to 31–03–2017.

(a) Check od securing of EMU stabled at stations 25–07–2016 to 31–07–2016.

(b) Decloaration by SMs and Night Inspections at Stations 04–08–16 t0 12–08–16.

(c) To ensure correctness of the details recorded in the TSR 06–09–2016 to 20–09–2016

(d) Dealing trains during signal failure on 16–11–16 to 29–11–16.

(e) Safety Awareness Campaign on 05–01–17 to 05–02–17.

(f) Precautions to be followed during Shunting on 25–02–17 to 11–03–17.

III) Training :

Training enhances the knowledge, skill and attitude of staff to suit job needs. Training plays a vital role in promoting human resources for achieving safety & efficiency in operations.

ZRTI/TPJ plays a crucial role in enhancing the efficiency and Safety consciousness of staff of Southern Railway and South Western Railway for upgrading Human resources.

Highlights :

During the financial year 2016–17 ZRTI adopted various Trainee centered learning activities such as Table Top Simulation Workshops Paper Presentation Debate Group Exercise and Audio Visual Intraction through video clippings. These activities have been structured based on the deficiencies found in field working with a focus on training as catalic mechanism to enhance the competency and efficiency of field staff involved in train operations commercial activities and other non-core activities.

a) Training Details :

S. No.	Name of the course	2016		2017		Culmulative			
						April-March 2015–16		April-March 2016–17	
		No. of Courses	No. of Trainees	No. of Courses	No. of Trainees	No. of Courses	No. of Trainees	No. of Courses	No. of Trainees
1	Initial	2	43	**7**	**162**	**50**	**1800**	**42**	**1092**
2	Promotional	2	140	..	..	**11**	**524**	**9**	**413**
3	Refresher	9	257	**10**	**262**	**94**	**2264**	**92**	**2582**
4	General	3	46	**1**	**10**	**21**	**440**	**23**	**427**
5	Safety camp	9	257	**10**	**262**	**91**	**2247**	**89**	**2467**
	TOTAL	25	742	**28**	**696**	**267**	**7275**	**255**	**6981**

(b) Seminars :

Seminars have been conducted on topics such as 'Unmanned Level Crossings' in June 2016. 'SPAD' in September 2016, Shunting precautions to avoid bumping of trains and 'Effective Enginemanship' were conducted in October 2016. About 1000 LPs, ALPs Guards Station Masters practicipated in the seminar. Many staff shared their practical experience with valuable suggestions to prevent accidents. Brochures with information to prevent accidents have also been distributed to all participants during the seminar.

(c) Workshop :

A Workshop was organized on the subject 'SPAD' (Signal Passing At Danger) Shri S. Anantharaman, COM/S. Rly. inaugurated the workshop and released a brochurs on 'Psychological and Physiological factors contibuting to 'SPAD' Shri A. K. Agarwal, DRM/TPJ also spoke on the subject. About 200 PLs, ALPs particiapated in the workshop Guest Lecturers were invited to speak on the 'Psychological and Physiological sapects of running staff.

(d) Workshop :

Table Top Simulation has been regularly conducted on the second day for all Station Masters attending Refresher Course Various failure conditions were slimulated and trainees were asked to respond to those situations on real time basis. These works were serutinzed by Sr. Instructors and the deficiencies found were discussed in the class to make them more clear with the procedure. The reult of this exercise is encouraging and the participants expressed that they understood the concept better than ever.

(e) Paper Presentation :

In order to a uniform procedure in observing rules particularly during failure conditions and to eliminate deficiencies in preparation of various operating form paper presentation is chosen as a useful exercise. RC, LPs, ALPs, Station Masters, Guards are given various topics to prepare a power point presentation whether the available rule is followed with any deviation if there is a deviation what are the risks and if the exiting rule is inadequate how to modify it or what are the addition/deletion required were the points discussed during the paper presentation. This learning method has reached well to all the participants. To encourage the participants the presentation has been assessed by Principal and ATM and the first three have been given a token prize a pen with a certificate.

(f) Sanraksha Shivir :

Based on Board directives, Sanraksha Shivir was conducted at ZRTI/TPJ on 1st and 2nd February 2017. It was inaugurated by Shri S. Anantharaman, COM/Souther Railway During the Inauguration, COM has released a bronchure with the Sanraksha Shivir message Material ,ay full even machine may fall but an alert safety category staff will never fail and addressed the gathering Concentration, Consistency and Co-operation as mantra for sucess Various activities such as Safety Drama, Quiz Programme, Poster Designing, Case Studies, Power Point Presentation were organized during these two days programme to highlight that Only an Alert Safety Category Man can prevent Accident.' The programme was conducted with Shri H. K. Sharma, ADRM/TPJ administering safety pledge to all the participants.

(g) Special Courses :

During the financial year 2016–17, to make the Traffic Supervisors more conversant and competent with various duties during Accident and in conducting Accident Enquiry a special training course was organized exclusively for Station Masters and Traffic Inspectors Experienced faculties were drawn from open line to handle classes. An exercise was given in preparing Inspection Report and Accident Reports to all the participants.

Two special courses on Commercial Policies and two courses on 'E-connect' were conducted to update the knowledge of Commercial Supervisiors and Front Line Staff with the recent developments 113 staff attending the training course.

(h) Yoga :

Yoga has been conducted for all the trainees as per Board guidelines. During this year 6405 trainees from 146 batches has undergone Yoga Training.

(i) Meditation :

Preceptors of Shri Ramachandra Mission is regularly organzing meditation to the staff undergoing various training programme During this year. 558 trainees fro various batches had undergone the meditation.

(j) Improvements to the Infrastructure :

Renovation of Hostel No. III and expansion of Ladies Hostel by providing 10 additional rooms has been sanctioned and expected to be completed in the year 2018.



XV. सुरक्षा व्यवस्था/SECURITY ARRANGEMENTS

I. General:

RPF Southern Railway has taken effective preventive and detective measures to contain crime against Railway Property and Crime against Passengers. Crime against Railway property has been brought well under control and all assistance is rendered to GRP in containing crime against passengers.

II. Crime on Southern Railway :

a Theft of Railway Property :

i Theft of Booked Consignment – Localized cases :

Year	No. of cases reported	No. of cases detected	Property stolen	Property recovered	Total arrest made	
					OS	RE
2015-16	11	7	177410	35280	16	0
2016-17	25	12	869705	254024	20	0

ii) Theft of Railway Material - Localised cases :

Year	No. of cases reported	No. of cases detected	Property stolen	Property recovered	Total arrest made	
					OS	RE
2015-16	197	192	1798672	1614236	269	4
2016-17	202	192	884086	743709	248	0

OS - Outsider & **RE** - Railway Employee

b. Performance under Railway Property (Unlawful Possession) Act, 1966:

i. This act provides an effective leverage to control crime against Railway Property. Surveillance is kept over suspects & criminals by RPF personnel of this railway and the offenders are booked under the provisions of this act with seizure of stolen railway property. The performance under this act is as follows:

Year	No. of cases registered	Value of stolen property recovered	Arrest made	
			OS	RE
2015-16	390	Rs.25,60,653/-	556	03
2016-17	396	Rs.11,41,953/-	458	03

ii.**Special mention of cases booked under RP(UP) Act:**

★ On 08 & 17.09.2016, IPFs/Arakkonam & CIB/Chennai Division with staff arrested 08 outsiders and recovered 104 nos. of rice bags and 30 nos. of cement bags total worth **Rs.1,64,024/-** and registered a case in Arakkonam Post RP (UP) Cr.No.07/16. All the accused persons were produced before Hon'ble JFCM/R/ Nellore and remanded them to judicial custody. The case is under trial in the Court.

★ On 12.03.17, RPF/Avadi detected a case related to theft of 310 Mtrs. of 120 Sq.mm. copper cable, valued Rs.99,200/- at Car Shed, Avadi on 20.02.17 with the arrest of 04 criminals including 02 receivers and recovered the stolen property worth Rs.89,430/-. All the accused persons were produced before Hon'ble JM/I/Poonamallee and remanded them to judicial custody. The case is under trial.

c. Performance under Railways Act, 1989:

Relentless drives are conducted against anti-social elements indulging in illegal sale of reserved rail tickets, cornering of berths/seats, gents travelling in ladies compartment, travelling on footboard, hawking, begging, etc., in stations and trains. Defaulters are prosecuted under various provisions of this act. The results achieved during the year 2016-17 is furnished below:-

Year	No. of cases booked	Fine amount realized
2015-16	110168	Rs.3,08,18,240/-
2016-17	109888	Rs.3,28,13,155/-

d. Summary of achievements under Important Railways Act sections during the year 2016-17:

Sl. No.	Offence u/s	No. of cases booked	Fine realized
1.	Alarm Chain Pulling (141)	1313	Rs.8,21,730/-
2.	Transfer of reserved rail tickets(142)	72	Rs.34,500/-
3.	Unauthorisedly procuring and selling of rail tickets (143)	163	Rs.7,32,300/-
4.	Unauthorized Hawking/ Vending (144)	24516	Rs.1,26,63,760/-
5.	Footboard travelling (156)	12096	Rs.25,94,270/-
6.	Gents travelling in ladies coaches (162)	2615	Rs.6,55,240/-
7.	Smoking (167)	6875	Rs.7,02,750/-

e. RPF ASSISTANCE TO TICKET CHECKING STAFF:

RPF is providing necessary assistance to commercial branch in ticket checking drives. The following are the details of ticketless travellers apprehended and fine amount realized for the year 2015-16 & 2016-17.

Year	RPF staff deployed	No. of ticketless travelers fined	Amount of fine realized
2015-16	11311	4,78,872	Rs.18.67 Crores
2016-17	14540	4,52,260	Rs.18.77 Crores

f. Crime against passengers – Comparison of Crime:

Category	2015-16		2016-17	
	Registered	Detected	Registered	Detected
Murder	1	1	1	1
Dacoity	2	2	1	1
Robbery	63	41	52	34
Theft	637	318	545	285
Chain Snatching	60	20	52	22
Drugging	8	1	9	6
Total	771	383	660	349

➢ Crime rate has decreased by 14.40 % during the year 2016-17 as compared to 2015–16.

➢ Detection % has increased by 3.20% during the year 2016-17 as compared to 2015–16.

III.ACHIEVEMENTS IN THE FIELD OF PASSENGER SECURITY 2016-17:

a. Apprehension of accused persons in "Theft of Passengers Belongings" cases:

- On 11.05.2016, one passenger reported missing of his suitcase containing cash of Rs.1.65 lakhs. and filled 10 cheque leaves, valued Rs. 2,54,726/- **(Total worth Rs.4,19,726/-)** at Ernakulam North Railway station. In the meantime, CPDS RPF team apprehended one person who was going to board in T.No.56366 Punalur-Guruvayur Pass., carrying the suitcase through off side. Interrogation revealed that he committed theft of the suitcase. The culprit was handed over to GRP/Ernakulam North who in turn registered a case in their station Cr.No.279/16 u/s 379 IPC and remanded him to judicial custody.
- On 11.02.2016, RPF staff / Shoranur, in T.No.16302 Exp. at Shoranur Railway Station, noticed one person jumped out of the train and tried to escape. On personal search he was found in possession of 04 nos. of **gold chain weighing about 431 gms.,** 01 mobile phone, 05 ATM cards and cash Rs.15,300/- suspected to have been stolen. He was handed over to GRP/Shoranur who inturn registered a case in their station Cr.No.47/16 u/s 41 (1) (d) & 102 Cr.PC. The case is under investigation.
- On receipt of frequent complaints about continuous missing of two wheelers parked in Madurai Railway station premises. On 01.12.2016, the CPDS team / Madurai Division apprehended one accused by name Palanikumar of Madurai with the help of CCTV footage which resulted in recovery of 96 Nos. of **two wheelers of Railway staff, passengers and public, valued Rs.45,00,000 /-** and handed over to Local Police/ Madurai.
- **Doping gang nabbed by special squad of Chennai Division:** RPF Anti Doping Squad busted an interstate gang with the arrest of two offenders Satrajit Singh and Sadhu Singh with recovery of 6 Nos., of Mobile phone, Cash Rs.44,115/- and dry fruits mixed with sedative substances etc. They were arrested u/s.12 of RPF Act 1957 and handed over to GRP/Chennai for further legal action.
- On 21.09.2016, CPDS Team of Madurai Division apprehended one accused person on suspicion and on interrogation it was revealed that he had committed theft of passenger belongings on 02 occasions including one of the passengers of T.No.56701 Pass. on 28.05.16 and T.No.12633 Exp. and recovered 18 ½ sovereigns gold ornaments worth **Rs.3,10,000/-**. The accused was handed over to GRP/ Tirunelveli for further legal action.

b. Seizure of Unaccounted Cash:

- On 31.05.2016, RPF apprehended two persons for having **unaccounted cash an amount of Rs.65.43 Lakhs** in their possession while detraining from T.No.12655 Ahmedabad-Chennai Navjeevan Exp during its unscheduled halt for signal in Vyasarpadi and Korukkupet section. They were handed over to Income Tax officials for further action.
- On 07.02.2017, RPF/Palghat apprehended one person for illegal transportation of **2.80 Kgs. of gold ornaments** worth **Rs.60,00,000**/- in T.No.17230 Exp. The RPSI/Palghat seized the property under cover of a Mahazar and registered a case in Cr. No.26/2017 U/s 41(1) (d) 102 Cr.PC against him and took up investigation.
- On 18.09.2016, RPF CPDS Chennai during track patrolling duty in Vysarpadi-Korukkupet section apprehended one person with **Rs. 33.50 lakhs** and **200 grams gold** for which he could not account, while he was getting down from T.No.12968 Jaipur-Chennai Central Exp. at Korukkupet Railway station. Later he was handed over to Income Tax department for further action.
- On 11.11.2016, ASIPF/BDS/ Chennai with staff recovered unaccounted currency of **Rs.13,32,000/-** from a passenger at Chennai Central station and he was handed over to GRP/Chennai Central.

c. Details of notable seizures of contraband goods by RPF/Southern Railway:

- On 23.08.16 while RPF staff/Chennai Central was performing duty at passenger luggage Scanner, noticed some suspected articles in a suitcase which was carried by one person. On suspicion, the suitcase was opened and found to contain **150 live star tortoises** packed in 3 bags valued approximately **Rs.60 Lakhs**. The same were handed over to Forest Department for further action.
- On 09.04.2016, SIPF/Trivandrum and staff along with GRP/Trivandrum jointly seized **45 Kg Ganja**, valued about **Rs.09 Lakhs** in Trivandrum Railway station. IRP/ Trivandrum registered a case in Cr.No.397/16 U/S 20 (b), (ii) B Amendment of NDPS Act and took up investigation.
- On 12.07.2016, while IPF/Chennai Egmore seized two gunny bundles containing **85 Kgs., of dry Ganja** valued about **Rs.8.5 lakhs.**, from two persons. They were handed over to Narcotic Control Bureau, Chennai where a case in Cr.No.66/16 U/s. 8 (c) r/w.20 (B) II of NDPS Act was registered against them.
- On 13.12.2016, IPF/Palghat with staff & special squad of Excise department Palakkad jointly seized 21,000 Packets of **banned tobacco Packets (Hans),** valued **Rs. 6,30,000**/- at Palghat Railways station and handed over to Inspector/Excise Narcotic Special Squad/Palakkad who in turn registered a case in Cr.No.266/16 U/s 24 COTPA.
- On 22.12.2016, RPF/Palghat & Excise Department jointly seized 15000 packets of **banned tobacco products "Hans"**, 30 Tins of Panmasala & 34 packets of banned tobacco (500 Grams each), valued **Rs. 5,00,000/-** from GS coach of T.No.56651 Pass at Palghat Railway station. Excise Inspector/Palghat seized the above tobacco products and registered a case in Cr. No.283/16 U/s 24 COTPA.

DETAILS OF ALL SEIZURES OF CONTRABAND BY RPF - 2016 – 17	No. of instances	Value
Seizure of contraband goods include narcotic items such as Heroin, Cocaine, ganja, Cannabis and Ephedrine, Nytrosun, Netravet tables, banned Tobacco products, Illicit liquor, Wild life, etc.,	199	Rs.1.43 Crore

d. PROACTIVE MEASURES TAKEN BY RPF TO CONTAIN THE PASSENGER RELATED OFFENCES:

- During the year 2016-17, towards relentless efforts to curb passenger offences, RPF has apprehended **178** criminals involved in theft of passengers' belongings and other passenger related crime and handed over to the concerned GRP for registration of cases.
- On an average, **405** Mail/Express, Passenger and EMU trains are escorted by **966** RPF staff on daily basis. Apart from this, **178** trains Mail/Express and Passenger trains are escorted by **410** GRP staff on daily basis. Almost all the night trains are escorted by RPF/GRP personnel.
- In first phase, 14 major Railway Stations viz. Chennai Central, Chennai Egmore, Basin Bridge, Chennai Beach, Mambalam, Tambaram, Tiruvallur, Trichy, Madurai, Coimbatore, Mangalore, Calicut, Trivandrum Central & Eranakulam South over Southern Railway were covered under Integrated Security System. Further, as advised by Railway Board, 27 other vulnerable Railway stations over this zone have been identified for the implementation of ISS in 2nd Phase and a proposal has been sent to Railway Board.
- Under Nirbhaya fund, Rs.67.94 Crores has been sanctioned for the provision of CCTVs in the 136 Railway stations classified as A1, A, B & C including Suburban Railway stations over Southern Railway. Joint Survey by RPF & S&T Officials for identifying the location for installing CCTV Cameras at the stations proposed has been completed. Railway Board has allotted the work to Railtel Corporation Ltd.
- On trial measures CCTV cameras are provided in T.Nos.16101/16102 (Ex.Chennai Egmore – Rameswaram – Chennai Egmore) and T.Nos.16175/16176 (Ex.Chennai Egmore –Karaikal – Chennai Egmore) for onboard surveillance.

e. Measures taken for the safety and security of Women Passengers:-

- **Sakthi Padai**, a group of 35 RPF/RPSF women staff are escorting 04 Ladies special EMUs and ladies coaches of 88 other EMUs. Furthermore, ladies coaches in night EMU trains running between 18.00 hrs and 06.00 hrs are also being escorted by male RPF personnel.
- **Mahila Vahini** has been introduced by the Railway Board to provide better safety and security to the women passenger and to assist them in security related issues. 03 Mahila platoons of RPSF is being utilized to escort ladies coach especially in Suburban Sections and in passenger trains.
- For the security of women passengers over Kerala, 3 RPF Women Sub-Inspectors, 47 RPF Women Head Constables/Constables and 08 RPSF Women Constables are deployed exclusively. Similarly, GRP/ Kerala are also deploying women Police in ladies compartments and utilizing the services of Kerala Local Police to escort the Passenger trains.
- Staff on train escort duty are travelling in the coaches adjacent to the ladies coach to provide security to the lady passengers. The escorts are attending the ladies compartment during halt of train in the mid section/ stations.
- Various passenger awareness programs such as distribution of pamphlets, skit/drama, meeting with coolies/ vendors/ auto/ taxi drivers are conducted regularly to make them vigilant and aware besides to collect clues regarding crime and potential criminals at a later stage through them in case of any crime.
- Southern Railway has commissioned an **All Women Facilitation Centre** at Chennai Central, Chennai Egmore, Trichy, Coimbatore, Calicut and Trivandrum Railway stations to help woman passengers with adequate privacy and facility for women passengers to feed their infants. The centre is manned by women staff of Commercial and RPF.

f. BANDOBUST:

- During the year 2016-17, on **18** occasions RPF/S.Rly. rendered assistance to the Engineering branch in evicting unauthorised encroachments from the Railway land in co-ordination with Local Police/GRP.
- During **Velankanni festival** (Trichy Division) from 28.08.16 to 09.09.16 with huge inflow of pilgrims from all over the country to the festival, RPF in co-ordination with GRP & Local Police and sister departments of Railways, has arranged special bandobust to the passengers. The escorting of all trains originating from/to Velankanni, CCTV coverage, checking of passengers baggages through DFMD, luggage scanner, utilization of sniffer dogs, fire/stampede preventing preparedness, etc., were undertaken by RPF. The festival went-off peacefully without any untoward incident.
- During **Sabarimala pilgrimage season**, a strength of 172 (01-GO, 13 SOs & 158 other ranks) RPF personnel from all divisions of Southern Railway & RPSF was directed to Trivandrum Division for bandobust duty at Railway stations used by Sabarimala pilgrims. A strength of 147 (30 SOs & 117 other ranks) RPF personnel was also drawn from Trivandrum Division itself and exclusively deployed for the safety and security of the pilgrims. Further teams with specific tasks, viz. Quick Reaction Team (QRT), Crime Prevention & Detection Squad (CPDS), surveillance teams (CCTV), were also in place.

- **Good work done during Cyclone Vardha:** On 12.12.2016 when Cyclone Vardhah was at its peak ferocity, T.No.42013 Ex. Madras Moore Market Complex and Gummidipundi was suddenly stopped when it was cruising between Wimco Nagar and Kathivakkam due to a fallen tree affecting OHE and cutting of electric supply. The communication lines between the trains motorman and the control room and section engineer was lost due to the cyclone. On getting information, RPF Team /Chennai walked four kilometre stretch along the Railway track braving the ferocious wind and rain. The passengers were found huddled inside the compartment. One by one, the team reached out to the passengers and safely brought them to the ground. The RPF officials also coordinated with the local Police for help. When the last passenger was removed, they were put on specially arranged MTC buses to Ennore.

- **"Attukal Pongala"** a famous/traditional festival is held every year at the temple situated nearby Trivandrum Railway station. It was celebrated on 11.03.2017 wherein about 35 Lakhs women devotees thronged the temple and Railway premises. Elaborate bundobust arrangements were made by RPF at Trivandrum Railway station in co-ordination with GRP, Local Police & Civil authorities. The festival went off peacefully without any untoward incident in Railway premises and no disruption to any train service was reported.

g. AWARENESS PROGRAMMES CONDUCTED:

- **Regarding sabotage activities on Railway:** As per the direction of DG/RPF, awareness programmes were conducted by SOs of RPF at Post & OP level by involving Gangmen, Keymen, Gate men, people residing nearby railway track etc., to sensitize them against sabotage activities such as placing of obstructions on the railway track, pelting of stones etc.

- **Against taking selfie at vulnerable locations in the Railways:** Pamphlets/ stickers containing exclusive safety tips explaining the vulnerability of taking selfie by passengers, common public, etc were distributed by all divisions. A total of 6,500 Nos. of pamphlets were distributed among travelling public and 850 Nos. of stickers were pasted at conspicuous places of Railway stations/ trains and 10 Nos. of flexi banners were erected at few Railway stations.

- **On protection of child rights:** On 21.03.2017 the members of Tiruchchirappalli District Child Protection Unit under the leadership of Smt.M.Geetha, District Child Protection Counselor and her team enacted an awareness play focusing on Child Protection Awareness like ill effects of Child Marriage, Child labour, infanticide, etc. in front of Tiruchchirappalli Railway station &bus stand from 12.30 hrs to 13.30 hrs. Pamphlets/notices containing awareness tips on Child Protection were distributed. Child help line number 1098 was familiarized during the course of the program.

- **On rights of runaway children:** On 21.03.2017, a sensitization programme for safe guarding rights of runaway children was organized at Mayiladuthurai in co-ordination with State Child Welfare Committee, Nagapattinam Dist. with the participation of Dist Police officers of Nagapattinam, GRP and IPF/ Mayiladuthurai with staff. District Child Protection Officer addressed the participants about JJ Act, POSCO Act and Rescue of Children.

- **Rail Hamsafar Saptaah:**

  As per the direction of Honorable Minister for Railways, a week long programme 'Rail Hamsafar Saptaah' from 26.05.16 to 01.06.16 was observed over Southern Railway. During the programme, the officers and Inspectors conducted various activities such as cleanliness drive, planting of saplings, checking of catering stall, kitchens, pantry cars, travelling in trains, interacting with passengers for hearing grievances, etc. Press release was done to highlight the achievements of the RPF during the drive period as well as for the financial year 2015-16. Intensive drive was done to create awareness of All India Security Help Line No.182 amongst Rail passengers and general public.

Passenger Awareness Programmes Conducted :

Sl.No	Programme	2015-16	2016-17
1	Skit/Forum Drama conducted	181	81
2	Interaction with Coolie porters	275	345
3	Feedback Forms obtained	13665	17254
4	Pamphlets Issued	255199	386305
5	Awareness programme outside the Railway premises	522	607
6	Stickers pasted	120477	82462
7	FM Channel	7	7
8	Slides projected in cinema hall	41	39
9	Video coverage of GS coaches	9281	10603
10	Assistance from NGOs/Scouts etc., utilized	40	29
11	Decoy Checks conducted	767	205

IV. RPF FACILITATION FOR PASSENGER TRAVEL:

a) PASSENGER FACILITATION:

- Tourist Help Desks with RPF participation have been commissioned at 3 Railway Stations at Trivandrum, Rameswaram and Madurai

- **Implementing 'Operation Dignity':** RPF has taken up an ambitious project of rescuing old aged, disabled and hapless persons who were found taking shelter in the Railway stations and trains. During the year 2016-17, **218** destitute and homeless persons were secured and handed over to various NGOs. Such humanitarian gesture is continued.

b) FACILITATION FOR DISABLED PASSENGERS:

- **Sensitization programme on the theme 'Empathize with disabled persons'** was organized with the participation of members from Federation of Tamilnadu Differently Abled Persons Association, Chennai and RPF Staff in order to ensure their hassle free journey.

- **Meeting with Secretary of 'December-03 Movement' for Disabled:** Sri.T.M.Deepak, Secretary of the 'December-3' movement interacted with RPF staff on 27.06.16 with regard to the problems faced by the disabled Rly passengers during their journey. Accordingly he sensitized RPF staff citing various practical issues. 350 RPF staff attended the session.
- Following the complaints of unreserved passengers occupying sleeper class and coaches meant for disabled persons, a special squad called **'Suvidha'** has been formed to deal with against the menace in selected Howrah bound trains.

c. RPF role in saving lives of suicidal persons and tracing out of missing persons:

- During the year 2016-17, lives of 04 persons who attempted to commit suicide on railway areas was saved by RPF personnel by securing them and were handed over to their family besides providing life saving medical assistance.
- 48 missing persons were traced out by reviewing the CCTV footages and on information by identifying the missing persons and reunited with their families / handed over to NGOs for their care and protection.

d. REDRESSAL MECHANISM OF PUBLIC GRIEVANCES:

Public grievances pertaining to Security are received through letters, telephone calls, Twitter, All India Security Helpline No.182, CPGRAMS and E-mail.

- **Twitter Complaints:** During the year 2016-17, **161** Twitter complaints were received. They were promptly attended for redressing the grievances of the complainants.
- **All India Security Helpline No.182:** Security Helpline No.182 was established over Southern Railway during December-2014. During the year 2016-17, **895** calls were received at Helpline No.182 over various divisions, which were promptly attended for redressing the grievances of the passengers in distress on real time basis.
- **Popularising Security Helpline No.182:** In order to give wide publicity in spreading the facility of All India Toll Free Security Help Line number 182 among the travelling public, various awareness programmes were conducted throughout the Division in which pamphlets were issued among the passengers and stickers/posters were pasted inside the coaches of Mail/Exp.,/ EMU trains. The Manager, Bharti Airtel Ltd., Chennai has been requested to relay SMSs to their subscribers as 'RPF at your service. Call at Security Help Line No.182 for railway passenger security related assistance. Railway Protection Force (RPF), Southern Railway, Chennai Division'.

2,50,000 Nos. of awareness stickers and 4,00,000 Nos. of awareness pamphlets were printed and pasted on the coaches / distributed to the passengers.

Awareness on RPF Security Help line No "182" through FM channel: A programme giving wide publicity regarding RPF Help line No "182" was conducted in Radio FM Channel "93.5 Red FM" throughout on 20th July 2016.

e. Implementation of Protection of Child Rights in Railways:

- **Child Trafficking detected by RPF/Southern Railway:** On 30.06.2016, RPF/Palghat rescued 06 girls in the age group of 17-19 years, besides 23 women, 05 men and a child, all from Odisha state were handed over to CWC/Palakkad for safe custody and informed to GRP for further investigation. After due investigation, the GRP/Shornur registered a Case in Cr. No. 223/16 U/s 370 (5) IPC r/w 75 & 76 JJ Act 2015 against the five male members. On 03.07.2016, they were produced before the Hon'ble JFCM/Ottappalam. The case is under investigation.
- Modified Standard Operating Procedure (SOP) issued by Railway Board is being implemented in this Railway with establishment of Child Help Groups (CHG) and necessary infrastructure at selected Railway Stations ie. Chennai Central and Chennai Egmore. GM/S.Rly. has addressed Railway Board to include 06 A-1 stations (Coimbatore, Madurai, Ernakulam South, Calicut, Trichur & Trivandrum) over S.Rly. to establish Child Help Desk. **For outstanding performance in child rescue, RPF received excellence award from Ministry of Home Affairs in 2016.**
- During the year 2016-17, **606** children in distress were rescued from trains and Railway premises and reunited with parents /guardians/handed over to NGO/ Police or produced before the Children Welfare Committee of State Government.

V.RPF DOG SQUAD:

a. Southern Railway RPF is the pioneer in forming of RPF Dog Squad over Indian Railways. The Southern Railway Dog Squad was formed in the year 1958 on the pattern of Madras State Police Kennel and later expanded. At present, Southern Railway has 12 Kennels with a total strength of 32 dogs consisting of Labrador, Doberman and German Shepard. 65% of the existing strength of RPF dogs comprise of Sniffer dogs trained in detection of explosives. The dog squad conducts regular checks at important Railway junctions and randam checks at way side stations.

b. A Zonal RPF Dog Training Centre is functioning at Podanur with all equipments and infrastructure facility for imparting basic training to sniffer and tracker dogs of Indian Railways. It is the first of its kind on Indian Railways and merits as a significant achievement towards modernization of the Force. So far (upto 31.03.2017), 214 dogs (152 sniffer and 62 tracker dogs) of various Zonal Railways have been trained at this training centre.

VI. PARADES CONDUCTED:

a.Independence Day Celebrations:

On 15.08.2016, 70th Independence Day Celebration was held at RPF Parade Ground, Ayanavaram, Chennai with GM/Southern Railway as the Chief Guest. Contingents of RPF, RPSF, St. John's Ambulance and Scouts and Guides participated in the marchpast. Amidst the impressive ceremonial parade conducted by RPF, GM/S.Rly hoisted the National Flag. Cultural programmes were performed by the students of Railway School and RPF. Similar parades were held in all divisions.

b. RPF Raising Day Celebrations:

As a part of the 31st Raising Day celebration from 20.09.16, various programmes including Blood Donation Camps, Passenger awareness programme, facilitation of women and children at station premises and trains, tree plantation at Posts/OPs and Railway areas, widespread publicity of 182 Security Helpline, Mass cleanliness drive, co-operating with NGOs for rehabilitation of rescued children / hapless men / women, holding Suraksha Sammelan, special health check-up for RPF staff, convening of press meet to highlight achivements, distribution of passenger friendly information pamphlets/articles by escorting staff of RPF/RPSF to passengers, were held. On 20.09.16, a colourful ceremonial parade was held at RPF Parade Ground, Ayanavaram which was graced by Sri. Vashishta Johri, GM/S.Rly. as Chief Guest. On the eve of the Raising Day Parade Barakhana was arranged at Kalayna Mandapam Egmore.

c. National Police Day Parade:

On 21.10.16, National Police Day Parade was held by RPF/ S.Rly in remembrance of RPF, State Police and Central Armed Police Forces' personnel who laid down their lives at the altar of duty. IG-cum-PCSC/S.Rly and other officers of RPF paid homage to the martyrs by placing wreaths on the martyr's memorial.

d. Republic Day Celebration: -

On 26.01.2017, a ceremonial parade was organized by RPF at RPF Parade Ground/Ayanavaram, Chennai on the eve of the 68th Republic Day Celebrations with GM/S.Rly., as the Chief Guest. GM/S.Rly. unfurled the National flag, took the salute and conveyed the Republic Day message to the gathering. Similar ceremonial parades were also held at all Divisional Hqrs. and Production Units of this Railway. RPF contingent also took part in the Republic Day parade held at State level held at Chennai Marina Beach and Trivandrum Central Stadium respectively.

VII. SWACHCH RAILWAY ABHIYAAN :

The agenda of Hon'ble Prime Minister of India, Swachch Bharat Campaign was given top most priority and carried out by RPF/S.Rly. During the year 2016-17, all RPF institutions/Posts/Offices carried out intensive drives to ensure a smart, neat and tidy appearance. Assistance was also rendered by all RPF Posts to ensure the cleanliness of the respective railway stations in which they were located.

VIII. SYSTEM IMPROVEMENT :

- **Soft Skill Training Programme:** Shri.S.C.Parhi, IG-cum-PCSC/Southern Railway conducted workshop on soft skill to RPF Personnel at Railway Kalyana Mandapam, Chennai Egmore on 27.06.2016 and sensitized the participants regarding their behavior with Railway passengers, particularly ladies, elders and physically challenged. The following were the strength of participants – GOs-04, IsPF-11, SIsPF-09, ASIPFs-20, HCs-45, CONs /WCs-63 & RPSF (1 SIPF + 20 HC/CON). Similar Soft skill training workshops were conducted throughout the zone at divisional level and RPF Posts level also. Sr.DSC/DSCs/ASCs of the zone visited 43 Posts/Out Posts and conducted mass parade, Suraksha Sammelan and briefed the officers and staff regarding their behavior towards passengers. Behavioral/Soft skill training was also imparted to the RPF staff of Southern Railway at Training Centre/KG/Trichy and is being continued.
- **Workshop on Wide Life Crime on Railways:** On 27.10.2016, in Trichy Division, IPF/Tiruvarur conducted a course on "Workshop on Wild Life Crime on Railways" for RPF officers and staff of Kumbakonam. They were briefed about the wild Life (Protection Act, 1972, Amended Act 53 of 1972) applicable in all States except J&K and wild life crime Control bureau. Further, explained the role of RPF and briefed the ingredients of Article 48A, 51 (a) (g) of Indian Constitution and Sec.2(37) of wild Life (Protection) Act 1972. Similarly, on 28.10.2016, IPF/CIB/Trichy conducted a course on "Workshop on Wide Life Crime on Railways" for the benefit of RPF officers and staff of Trichy Goods Yard Out Post.
- **Session on Drug Law Enforcement conducted by Narcotic Control Bureau, Chennai:** On 21.02.2017, one day session on Drug Law Enforcement was organized by Narcotic Control Bureau, Chennai with the participation of Intelligence Officers, NCB/Chennai and RPF Officers from all Divisions at Conference Hall, CSC's Office/MMC, Chennai. In the session, classification / identification of various kinds of drugs, its origin, Modus Operandi adopted by the criminals in smuggling the drugs through Rail mode, its ill effects to human body, procedure to be adopted while seizing the drugs, etc. were explained to the RPF Officers.
- **Awareness Programme for RPF on Narcotic items** was organized in coordination with Narcotic Control Bureau/Chennai and explained about the drugs, its origin, classification/ identification of various kinds of drugs, various Modus Operandi adopted by the criminals in smuggling the drugs through Railways.
- **Standard Operating Procedure for Crisis Management:** Sr.DSC/ Chennai devised a Standard Operating Procedure (SOP) for Crisis Management in the event of any Bomb Blast / Terrorists attack especially for Chennai Central and Chennai Egmore Stations defining role of each department and circulated to all concerned for implementing the same
- **Workshop on Handling of Modern Security Gadgets** was conducted to educate staff in handling of Modern Security Gadgets.
- **Behavioral training** to RPF personnel is being imparted to improve their behavior, effectiveness and sensitivity in public interface.
- Sr.DSC/ Chennai devised a Standard Operating Procedure (SOP) for **Crisis Management** in the event of any Bomb Blast / Terrorists attack especially for Chennai Central and Chennai Egmore Stations defining the role of each department and circulated to all concerned for implementing the same.

- **Security Mock drills** were organized to gauge the level of preparedness of various security agencies including RPF in case of any emergency and the response was swift and sustaining.
- A basic training programme on drills to be carried out in the event of detection of bomb, IED etc., to RPF officers and staff was organized by Sr.DSC/MAS. 93 Officers/staff attended and were benefitted.

IX.SAFETY DRIVES:

- Safety drives were organized at **612 manned / 342 unmanned** Level crossings in co-ordination with GRP, Safety Branch and civil authorities in order to avoid loss of human lives and damage to railway property.
- **25000** safety pamphlets and **5000** safety stickers were issued/ pasted on the road vehicles. Nukkad dramas were staged at strategic locations sensitizing the road users. Ambush checks were conducted at UMLC and defaulters were dealt under the provisions of Railways Act for negligently crossing UMLC and violation of Traffic rules.
- **Special drive against carrying of inflammable articles and fire crackers in trains:** A special drive against carrying of inflammable articles and fire crackers in trains / stations was launched in all Divisions during Diwali season. Besides that innovative awareness programmes were also conducted displaying banners containing awareness tips to passengers. Checks at Parcel Office and in trains were conducted against booking of two wheelers with Petrol in tank and other explosive materials.
- Intensive campaign on 'Public safety on Railway track': RPF/ Chennai Division has been launching awareness campaigns on 'Public safety on Railway tracks' through visual media, Skit/ Forum Drama, Music shows, social media, etc, to prevent untoward incidents of falling down from running trains, trespassing of railway track, etc. which leading to loss of lives or limb.
- **Observance of "Level Crossing Awareness Week" and "International Level Crossing Awareness Day - 2016":** As desired by Railway Board, a 05 days long Safety drive was launched by RPF in co-ordination with Safety Branch, GRP and Civil Authorities from 06.06.16 to 10.06.16 in all divisions of this Railway at Unmanned / Manned Level Crossings towards observance of "International Level Crossing Awareness Day 2016
- **Special Awareness Campaigns** were conducted in Schools located near Rly. track for creating awareness among the School Children **"not to Trespass or play on the railway track, Placing of stones, coins, etc on the track, Pelt stones on trains".** Also Awareness Campaigns were conducted at Level Crossing Gates educating the public to exercise care and caution while crossing the track and vehicle owners to observe the Motor Vehicle Rules, etc.
- **Conduct of special safety awareness drive to reduce deaths & injuries due to Untoward Incidents:** As desired, a large scale of public awareness campaigns, counseling sessions, etc to educate Rail/ Road users have been focusedly launched in all Divisions of this Railway from 01.01.2017 to 31.01.2017 in co-ordination with Safety Branch and GRP in order to avoid loss of human lives due to trespassing of Railway tracks. **3515** pamphlets explaining the lurking dangers of crossing of Railway track, human fatalities, the safety of using FOBs, RUBs, ROBs, etc were distributed. **8612** vehicle drivers were counseled and stickers containing 'safety tips' pasted on their vehicles. During the drive period, Ambush checks were conducted at UMLCs against vehicle drivers who violating the safety rules, **25** erring drivers were apprehended and prosecuted under relevant provisions of Railways Act realizing a fine of **Rs. 16,500/-.**
- **Awareness programme against stone pelting towards trains:** During February 2017, RPF/ Trivandrum conducted an awareness programme at Govt. High school, Kazhakkuttam in which about 250 students attended. They were briefed about the consequences of stone pelting toward trains. Similar campaign is being conducted over other divisions as well.
- **Track patrolling in vulnerable sections:** Considering the vulnerability, armed track patrolling round the clock has been introduced in Korukkupet-Basin Bridge-Washermanpet section. One SIPF/ASIPF with 2 staff were deployed during night hours with Arms and Ammunition in Katpadi – Latteri section.

a. **Ambush Checks at Unmanned Level Crossings:**

Ambush checks are conducted by RPF at unmanned LCs and the defaulters are prosecuted u/s 161 Railways Act for violating safety Rules and negligently crossing unmanned LCs.

b. **Action against smoking in trains / premises:**

Regular drives are being organized by RPF/S.Rly against smoking in trains / premises and the defaulters are prosecuted u/s 167 RA. During the year 2016-17, **6875** cases were booked and realization of fine amount to the tune of **Rs.7,02,750/-**

c. **Awareness campaign against lighting of camphor sticks by Ayyappa devotees in trains / stations:**

In view of lighting of camphor sticks by Ayyappa Devotees in worshipping "Irumudi" of Lord Ayyappa in Trains/Railway stations, an awareness campaign was conducted by all divisions in coordination with GRP and Safety branch highlighting the serious fire hazards which camphor lighting inside the coaches may cause.

X. DRIVE AGAINST UNAUTHORIZED ALARM CHAIN PULLING AFFECTING PUNCTUALITY OF TRAINS:

During the year 2016-17, **2614** instances of Alarm Chain Pulling were reported. Of which, **711** instances were justified as commercial/ operational /mechanical / electrical reasons and other genuine reasons. In**1903** unauthorized instances, **1313** defaulters were nabbed and prosecuted u/s 141 RA, realizing a fine of **Rs.8,21,730/-** from them. The remaining **590** instances were reported in mid-section where no RPF/GRP are available. However, ambush checks are being conducted by RPF in section prone for ICC pulling, to contain the menace.

XI. DAMAGE CAUSED TO LC GATES BY ROAD VEHICLES:

During the year 2016-17, **538** instances of damage to the LC gates due to rash and negligent driving of road vehicles were reported over this Railway. In all the incidents, the vehicle drivers were apprehended by RPF, prosecuted u/s 154 & 160 RA and a sum of **Rs.7,50,200/-** was realized as fine. This apart **Rs.13,77,417/-** was also realized from the owners of the vehicles towards the cost of damage to the L.C. Gate components, etc.

XII. ACTION AGAINST DEFAULTERS INDULGING IN TRAIN HOLD UPS DURING RAIL ROKO BY POLITICAL PARTIES, TRADE UNIONS, ETC:

RPF/Southern Railway is taking stern action against the persons indulging in train hold ups during Rail Roko by political parties, trade unions, etc., to maintain the punctuality of trains and the defaulters are prosecuted u/s 174 (a) of Railways Act duly obtaining complaints from Railway Depot officials. During the year 2016-17, **163** cases were registered u/s 174 (a) Railways Act against the defaulters.

XIII. IMPLEMENTATION OF 'INDIAN RAILWAYS (PENALTIES FOR ACTIVITIES AFFECTING CLEANLINESS AT RAILWAY PREMISES) RULES-2012'

During the year 2016-17, **6687** persons were dealt for littering on railway premises and fined to the tune of **Rs.12,37,566/-** which was collected through money receipt and remitted to Railway exchequer.

XIV. ACTION AGAINST THE MENACE OF BEGGING IN TRAINS BY EUNUCHS:

Following complaints against the menace of begging by eunuchs in trains and Railway premises, special drives were organized over this Railway to eradicate the nuisance created by the eunuchs to the travellingpublic in trains. During the year 2016-17, **2162** eunuchs who indulged in begging in trains were apprehended and prosecuted under relevant section of Railways Act and a fine of **Rs.5,26,550/-** was realized from them.

XV. ACTION AGAINST UNAUTHORIZED TRAVELLING IN COMPARTMENTS EARMARKED FOR DIFFERENTLY ABLED PERSONS :

Regular drives were organized against unauthorized travelling in compartments earmarked for differently abled persons. During the year 2016-17, **4684** defaulters were apprehended and prosecuted under relevant sections of RA realizing a fine of **Rs.10,80,250/-**

XVI. Bomb threat :

Division	No. of incidents registered	No. of cases reported
MAS	04	04
TPJ	-	-
MDU	-	-
TVC	01	-
PGT	03	03
SA	-	-
Total	08	07

XVII. SABOTAGE :

Division	No. of cases registered	No. of cases closed	No. of cases under Investigation/Trial
MAS	-	-	-
TPJ	-	-	-
MDU	-	-	-
TVC	01	01	-
PGT	03	02	01
SA	02	-	02
Total	06	03	03

XVIII. Sports:-

REPORT/PERFORMANCE OF SPORTS EVENTS FOR THE YEAR 2016-17

Sl.No	Event	Allotted to Division	Date of conduct IDT	IRT	Performance
1	Dog Squad	SA	09.5.16	Conducted by N.Rly/DLI. From 17.5.16 to 19.5.16	Dog Shadow GOC/TPJ – 1st prize
2	Boxing & Weightlifting	TPJ	Not conducted. Team formed calling for volunteers	Attended at CR/Mumbai from 26.5.16 to 28.5.16	Winner shield
3.	Anti sabotage	MAS	-	Attended 15.6.16 to 17.6.16 at Guwahati/NFR	-
3	Football	PGT	24.5.16 to 27.5.16	Attended E.Rly/Calcutta from 18.6.16 to 25.6.16	Runner
4	Hockey	TPJ	30.06.16 to 02.07.16	Kharagpur/SER from 8.11.16 to 11.11.16	Winner
5	Kabaddi	MAS	7.6.16 & 8.6.16	IRT to be held from 26.7.16 to 28.7.16 @ Chennai	Winner- IRTand All India Kabaddi championship at Patna from 27.1.17 to 31.1.17- Attended.
6	Shooting	TC/KG/TPJ	23.6.16 to 24.6.16	6.09.16 & 7.9.16 at Jhansi	-
7	Athletics	MDU	28.6.16 to 30.6.16	Conducted by Dhanbad from 25.8.16 to 28.8.16	Winner
8	Basketball	ICF	5.7.16 & 6.7.16	Gorkhpur/NER	
9	Volley Ball	TVC	14.7.16 to 16.7.16	Secunderabad/SER from 25.10.16 to 28.10.16	Winner

XXI. WELFARE:

(a) Handicraft centre with sufficient number of sewing machines and membership strength of 16 RPF Spouse/wards is functioning at Perambur.

(b) Various welfare measures for RPF staff like HIV Awareness, blood donation camps, Eye donation camp were organized by all divisions.

(c) Various seminars like Stress Management, attitudinal changes on good habit and drug abusive were organized to sensitize RPF Post.

(d) A seminar on superannuation, benefits was also arranged for the benefits of RPF staff those are due for superannuation in this year.

(e) 169 wards of Security Branch staff who are pursuing Professional Degree courses are granted with scholarship of Rs.7,500/-.

(f) 04 wards of security branch staff and one staff were granted financial assistance towards Training for development of occupational skills for Physically/ medically challenged wards. Medical assistance from CSBF for 01 case and from SBF 08 cases has been considered and granted. Merit scholarship have been arranged to 76 wards of RPF/Ministerial staff of this branch from SBF.

(g) Compassionate ground appointment were arranged for 15 wards of RPF/RPSF staff.

(h) Alternative appointment for medically decategorized were arranged for 65 RPF staff.

RAIL SURAKSHA KALYAN NIDHI

S. No.	Type of payment	No.of cases	Amount in Rs.
1.	Ex-gratia lumpsum grant	18	18,00,000
2.	Funeral assistance to the family of deceased employee	07	75,000
3.	Settlement on Retirement	184	11,04,000

XXIII. Special Bandobust to VVIPs/VIPs :

During the year 2016-17, on **59** occasions during the travel/visit of VVIPs/VIPs like Governors, Hon'ble Chief Minister, Union Ministers, MOSRs, Parliamentary Committee, etc., on the Railways, RPF/Southern Railway provided elaborate bandobust arrangements in co-ordination with GRP/Local Police.

XXV. GRANT OF CASH REWARD:

S. No.	Details	Amount in Rs.
1.	Sanctioned by Rly.Board	96,000/-
2.	Sanctioned by GM/AGM/ADGM/S.Rly	1,65,000/-
3.	Sanctioned by CSC/Addl.CSC/ SC.HQ/ SO to CSC & ASC.	2,74,000/-
4.	Sanctioned by Sr.DSC/DSCs.	2,65,000/-
	Total	8,00,000/-

XXVI. TRAINING

RPF Southern Railway/ Training Centre/Trichy caters to the need of ICF and SW.Rly also. The normal capacity of the Training Centre is 300 trainees. The following staff of different ranks from Constable to IPF were trained during the year 2016-17 and various courses.

Institution/ Location	Rank	No. of persons trained
RPF/TC/KG/TPJ	Constable to SIPF	5247
JR/RPF Academy/LKO	IPF	24

RPF is marching towards a more tech centric future to track criminals and anti social elements and purge them from trains and railway premises. Day by day RPF is strengthening and streamlining its various units to rendered dedicated service to ensure the safety and security of passengers travelling in Southern Railway.

सड़सठ वर्ष का सार

SIXTY SEVEN YEARS OF SUMMARY

SOUTHERN RAILWAY

सड़सठ वर्ष का सार

Details	1950–51	1951–52	1952–53	1953–54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60	1960–61	1961–62
Assets—(As on 31st March)												
Capital-at-charge (` in crores)	115.28	115.65	113.05	118.50	124.81	133.02	145.15	160.10	172.60	181.30	189.40	211.20
Total Investment (` in crores)	..	..	..	130.00	139.65	152.57	169.26	190.14	209.60	224.62	239.00	262.85
Route Kilometres –Electrified	..	29.19	29.19	29.19	29.19	29.19	29.19	29.19	29.19	29.19	29.19	29.19
36.08												
Total	9,656.02	9.681.41	9,695.32	9,750.40	9,841.97	9,757.15	9,817.05	9,912.53	9,914.89	9,916.71	9,921.50	**9,944.25**
Running track Kilometres Electrified	58.39	58.39	58.39	58.39	58.39	58.39	58.39	58.39	58.39	58.39	58.39	65.28
Total	9,811.15	9,836.54	9,850.96	9,905.54	9,997.10	9,912.48	9,989.57	10,085.03	10,130.27	10,196.78	10,295.23	**10,463.52**
Number of Stations	1,234	1,237	1,238	1,243	1,255	1,252	1,262	1,286	1,308	1,305	1,315	1,337
Rolling Stock—												
Locomotives — Steam	1,410	1,412	1,430	1,395	1,420	1,419	1,501	1,580	1,614	1,662	1,644	1,714
Locomotives — Diesel	..	..	..	..	..	..	..	..	..	..	..	..
Locomotives — Electric	4	4	4	4	4	4	4	4	4	4	4	4
Coaching stock — Passenger carriages	3,020	3,041	3,066	3,219	3,260	3,227	3,403	3,425	3,457	3,657	3,724	3,840
Coaching stock — Electric Multiple Unit Coaches.	72	72	72	96	96	96	96	96	96	96	96	96
Coaching stock — Rail cars	9	9	8	8	18	18	17	29	30	30	30	30
Coaching stock — Other coaching vehicles	997	1,011	1,022	1,033	1,108	1,101	1,178	1,185	1,212	1,217	1,212	1,381
Wagons	24,074	24,429	26,839	28,080	28,895	29,054	31,902	33,470	35,143	36,165	36,024	37,089
Staff—												
No. of employees (in 1000s)	139.4	145.0	147.5	152.3	153.5	158.4	158.5	161.0	165.8	163.7	161.6	161.7
Cost of staff (in crores of Rs.)	17.24	18.88	19.00	20.25	20.91	22.87	22.76	25.22	27.02	27.14	29.58	30.46
Average cost per employee (in Rs.)	1,240	1,376	1,345	1,351	1,367	1,467	1,436	1,578	1,639	1,662	1,823	1,888
For the year—												
Transportation Out-put—Train-kilometres excluding Departmental (in millions)— Passenger and proportion of mixed	36.65	37.31	37.38	37.94	39.06	39.42	36.62	39.55	39.49	39.04	38.85	39.36
EMU	..	..	..	..	..	..	..	..	..	..	..	..
MEMU	..	..	..	..	..	..	..	..	..	..	..	..
DEMU	..	..	..	..	..	..	..	..	..	..	..	..
Goods and proportion of mixed	18.64	18.56	18.48	17.96	18.60	19.77	20.52	20.67	21.19	22.61	22.87	23.72
Vehicle and wagon kilometres (excluding departmental and brake-vans) (in millions)—												
Vehicle kilometres	568	581	581	576	591	597	610	609	616	618	631	644
EMU	..	..	..	..	..	..	..	..	..	..	..	..
MEMU	..	..	..	..	..	..	..	..	..	..	..	..
DEMU	..	..	..	..	..	..	..	..	..	..	..	..
Wagon kilometres	617	617	618	616	644	686	731	762	789	873	888	925
Volume of Traffic—												
Passenger Traffic—												
No. of passengers originating (in millions)	272	226	216	205	211	217	225	223	228	237	252	256
Passenger kilometres (in millions)	12,151	11,742	10,887	10,032	11,073	10,696	11,191	11,052	10,651	10,862	11,719	12,105
Passenger earnings (in crores of Rs.)	18.25	21.10	18.63	17.44	17.68	18.83	20.11	19.84	19.69	20.35	22.06	25.54
Average lead (in kilometres)	44.1	50.1	50.3	48.5	52.2	48.0	49.5	48.9	46.2	45.5	46.1	46.8
Average rate per passenger kilometres (in paise).	1.50	1.80	1.71	1.74	1.60	1.76	1.80	1.79	1.85	1.87	1.88	2.11
Goods Traffic—												
Tonnes originating (in millions)—												
Revenue earning Traffic	10.9	10.6	8.8	8.8	9.0	9.2	9.4	10.2	10.3	10.7	11.8	12.1
Total traffic	11.9	11.3	10.9	11.1	11.4	12.4	13.1	14.6	15.0	15.8	16.6	16.1
Net tonne kilometres (in millions)—												
Revenue Earning Traffic	4,840	4,676	4,884	5,003	5,370	5,966	6,204	6,636	6,929	7,386	7,755	8,411
Total Traffic	5,313	5,243	5,433	5,530	5,879	6,519	6,956	7,509	7,715	8,309	8,733	9,379
Earnings from goods carried excluding wharfage and demurrage charges (in crores of Rs.)	20.7	21.2	19.0	19.6	20.6	23.5	24.9	27.1	29.1	31.9	34.0	35.8
Average lead (in kilometres) (Revenue)	343.6	363.7	384.5	389.0	396.1	405.1	396.5	385.5	387.5	391.0	400.5	427.1
Average rate per tonne kilometre (in paise)	4.27	4.54	3.89	3.92	3.84	3.94	4.02	4.08	4.19	4.32	4.38	4.26
Quantity of fuel consumed by locomotives—												
Coal (in thousand tonnes)	1,378	1,436	1,461	1,461	1,562	1,664	1,839	1,964	2,001	2,127	2,187	2,348
Diesel oil (in kilometres)	..	..	..	..	..	..	..	403	689	822	888	925
Stores purchases (in crores of Rs.)—												
Indigenous	9.22	7.89	8.79	7.27	8.94	9.29	13.78	20.88	12.17	11.64	11.04	21.99
Total	12.05	11.93	13.13	11.13	16.57	13.35	23.46	29.17	23.22	18.50	20.56	**23.75**
Operating revenue and expenditure (in crores of Rs.).—												
Revenue—Gross receipts	44.25	46.82	N. A.	N. A.	43.25	47.93	49.98	52.53	55.03	58.68	62.82	68.57
Working expenses including depreciation etc. and miscellaneous expenses.	34.54	35.03	N. A.	N. A.	39.19	42.86	45.43	52.23	51.31	53.58	56.43	60.48
Net revenue receipts	9.71	11.79	N. A.	N. A.	4.06	5.07	4.55	0.30	3.72	5.10	6.39	8.09
Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.	8.43	10.20	N. A.	N. A.	3.25	3.82	3.13	0.19	2.15	2.81	3.37	3.83
Operating ratio (per cent)	78.65	74.35	N. A.	N. A.	80.53	90.15	88.20	96.34	92.77	89.05	88.77	85.47
Dividend to General Revenues	4.54	4.57	N. A.	N. A.	4.83	4.99	5.04	5.97	6.65	7.00	7.31	8.29
Payments to States in lieu of tax on Passenger fares.	..	..	..	..	..	..	..	..	..	..	..	2.12
Surplus (+)/Deficit (–)	(+) 5.17	(+) 7.12	N. A.	N. A.	(—) 0.77	(+) 0.08	(–) 0.49	(–) 5.67	(–) 2.93	(–) 1.99	(–) 0.92	(–) 2.32

SIXTY SEVEN YEARS OF SUMMARY

1962–63	1963–64	1964–65	1965–66	1966–67	1967–68	1968–69	1969–70	1970–71	1971–72	1972–73	Details
235.60	271.25	312.85	348.57	286.44	295.07	299.50	310.45	322.91	338.23	363.18	Capital-at-charge (Rs. in crores)
296.34	342.11	391.26	433.99	349.98	362.58	370.93	387.40	404.11	424.01	452.90	Total Investment (Rs. in crores)
36.08	36.08	163.13	163.13	163.13	166.44	166.44	166.44	166.44	166.44	166.44	Route Kilometres Electrified
9,985.58	10,067.08	10,153.14	10,200.98	7,216.45	7,283.85	7,444.98	7,444.98	7,444.98	7,445.62	7,452.32	Total
65.27	65.27	217.35	217.35	217.35	220.66	220.66	220.66	220.66	220.66	220.66	Running track Kilometres Electrified
10,662.29	10,922.04	11,081.72	11,209.34	7,761.82	7,875.60	8,090.39	8,090.39	8,118.63	8,119.27	8,218.86	Total
1,346	1,362	1,368	1,373	1,022	1,023	1,031	1,029	1,025	1,021	1,016	Number of Stations.
											Rolling Stock—
1,783	1,827	1,780	1,786	1,228	1,218	1,193	1,143	1,128	1,105	999	Steam
..	26	69	98	114	128	161	210	223	244	242	Diesel — Locomotives
4	4	4	22	20	20	20	20	20	20	20	Electric — Locomotives
..											
3,865	3,801	3,984	4,111	4,187	3,526	3,596	3,600	3,608	3,604	3,753	Passenger carriages — Coaching stock
96	96	96	96	96	152	172	172	172	174	174	Electric Multiple Unit Coaches. — Coaching stock
30	30	30	27	27	15	15	15	18	18	18	Rail cars — Coaching stock
1,424	1,398	1,391	1,442	1,492	1,282	1,249	1,213	1,123	1,075	1,065	Other coaching vehicles
38,331	40,750	41,987	44,795	47,083	47,489	35,141	34,591	34,197	33,916	34,120	Wagons
											Staff—
168.6	173.6	176.7	177.8	135.2	134.5	133.5	132.0	133.0	132.0	134.0	No. of employees (in 1000s)
32.92	34.99	39.50	43.70	41.60	39.60	42.80	45.40	49.36	51.36	52.58	Cost of staff (in crores of Rs.)
1,959	2,020	2,243	2,468	2,715	2,958	3,214	3,440	3,719	3,898	3,951	Average cost per employee (in Rs.)
											For the year—
											Transportation Out-put—Train-kilometres excluding Departmental (in millions)—
39.95	40.45	41.63	44.24	40.64	35.03	35.04	35.57	36.24	36.80	34.38	Passenger and proportion of mixed
..	..	..	..	..	..	..	..	..	..	..	EMU
..	..	..	..	..	..	..	..	..	..	..	MEMU
..	..	..	..	..	..	..	..	..	..	..	DEMU
23.82	25.78	24.38	25.52	20.66	16.35	17.51	18.02	17.81	18.80	16.89	Goods and proportion of mixed
											Vehicle and wagon kilometres (excluding departmental and brake-vans) (in millions)—
654	663	679	743	673	574	563	605	635	647	627	Vehicle kilometres
..	..	..	..	..	..	..	..	..	..	..	EMU
..	..	..	..	..	..	..	..	..	..	..	MEMU
..	..	..	..	..	..	..	..	..	..	..	DEMU
934	1,006	948	1,053	870	692	774	816	828	865	804	Wagon kilometres
											Volume of Traffic—
											Passenger Traffic—
251	260	269	283	276	237	207	222	237	257	258	No. of passengers originating (in millions)
11,848	12,239	12,578	13,461	13,158	11,185	9,476	9,701	10,417	10,980	11,259	Passenger kilometres (in millions)
26.87	28.93	30.27	34.04	31.5	29.1	27.2	28.2	30.6	33.1	34.8	Passenger earnings (in crores of Rs.)
46.9	46.8	46.3	47.2	47.4	46.8	45.5	43.5	43.6	42.1	43.3	Average lead (in kilometres)
2.26	2.36	2.41	2.53	2.39	2.60	2.87	2.91	2.94	3.02	3.09 (in Paise)	Average rate per passenger kilometres
											Goods Traffic—
											Tonnes originating (in millions)—
12.8	13.8	14.4	16.0	14.6	12.3	12.1	11.8	12.2	13.0	12.5	Revenue earning Traffic
17.1	17.3	17.5	18.5	16.4	13.5	13.2	13.2	13.1	14.3	13.6	Total Traffic
											Net tonne kilometres (in millions)—
8,823	9,504	9,282	10,475	9,437	7,234	7,595	7,707	8,085	8,675	8,486	Revenue earning traffic
9,758	10,417	10,155	11,326	10,088	7,820	8,294	8,250	8,797	9,428	9,179	Total traffic
38.5	43.9	45.0	51.2	48.0	38.7	41.8	42.7	47.4	52.7	52.0	Earnings from goods carried excluding and wharfage demurrage charges (in crores of Rs.).
422.0	429.8	431.0	447.0	442.0	419.0	430.0	422.0	422.0	429.0	483.0	Average lead (in kilometres) (Revenue)
4.37	4.62	4.85	4.89	5.08	5.34	5.51	5.54	5.87	6.08	6.15	Average rate per tonne kilometre (in paise)
											Quantity of fuel consumed by locomotives—
2,476	2,666	2,563	2,508	2,027	1,600	1,603	1,629	1,574	1,584	1,388	Coal (in thousand tonnes)
723	3,251	21,544	39,923	54,279	65,794	79,050	94,658	111,146	120,766	130,482	Diesel oil (in kilometres)
											Stores purchases (in crores of Rs.)—
24.25	37.02	42.20	39.29	2.70	20.23	20.65	32.07	35.43	29.96	37.04	Indigenous
27.55	44.04	49.84	43.03	6.47	24.38	27.31	33.59	40.24	32.57	45.38	Total
											Operating revenue and expenditure (in crores of Rs.).—
73.39	81.98	84.06	94.89	73.02	76.62	78.96	81.44	90.12	100.23	100.30	Revenue—Gross receipts
66.16	71.38	77.89	84.42	69.65	75.90	79.83	84.20	90.23	95.97	99.05	Working expenses including depreciation etc. and miscellaneous expenses.
7.23	10.60	6.17	10.47	3.37	0.72	(–)0.87	(–)2.76	(–)0.11	4.26	1.25	Net revenue receipts
3.06	3.76	2.00	3.00	1.17	0.24	(–)0.29	(–)0.88	(–)0.04	1.26	0.34	Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.
86.62	82.94	90.00	86.96	92.15	98.70	99.69	101.54	98.44	94.75	97.89	Operating ratio (percent)
9.13	11.32	13.22	15.02	14.54	15.16	15.11	15.61	16.44	15.91	16.93	Dividend to General Revenues
1.99	1.95	1.90	1.94	..	..	..	..	..	..	..	Payments to States in lieu of tax on Passenger fares.
(–) 3.89	(–) 2.67	(–) 8.95	(–) 6.49	(–) 11.17	(–) 14.44	(–) 15.98	(–) 18.37	(–) 16.55	(–) 11.65	(–) 15.68	Surplus (+)/Deficit (–)

SOUTHERN RAILWAY

सड़सठ वर्ष का सार

Details	1973–74	1974–75	1975–76	1976–77	1977–78	1978–79	1979–80	1980–81	1981–82	1982–83	1983–84	1984–85	1985–86	1986–87	1987–88
Assets— (As on 31st March)															
Capital-at-charge (Rs. in crores)	390.82	431.99	474.61	502.58	517.97	530.77	555.32	596.61	635.89	680.58	719.41	784.82	848.08	921.29	983.90
Total Investment (Rs. in crores)	485.02	529.45	577.37	611.21	625.15	647.40	677.82	728.10	777.77	835.42	890.88	974.29	1,055.15	1,157.41	1,257.41
Route Kilometres Electrified	166.44	166.44	166.44	166.44	166.44	166.44	255.18	335.18	343.96	385.26	385.26	529.01	598.39	598.39	598.39
Total ..	7,452.32	7,452.32	7,448.73	7,578.73	6,488.76	6,488.76	6,629.24	6,702.53	6,702.53	6,700.80	6,710.36	6,722.30	6,728.66	6,711.76	6,756.36
Running track Kilometres Electrified	220.66	220.66	220.66	220.66	220.66	220.66	406.08	567.08	572.56	672.82	672.82	960.29	1,102.77	1,137.65	1,138.65
Total ..	8,262.59	8,276.74	8,297.96	8,443.62	7,375.25	7,387.73	7,537.76	7,537.76	7,629.45	7,660.75	7,725.09	7,756.18	7,772.47	7,790.45	7,836.05
Number of Stations ..	1,017	1,016	1,000	1,002	883	881	887	884	882	868	876	868	861	862	852
Rolling Stock—															
Locomotives — Steam ..	943	934	911	916	799	792	761	702	592	382	370	364	358	336	229
Locomotives — Diesel ..	244	267	278	278	191	205	213	228	266	280	286	308	316	317	325
Locomotives — Electric ..	20	20	20	20	20	20	20	20	20	20	20	20	27	41	51
Coaching stock — Passenger carriages	3,777	3,856	3,820	3,727	3,899	3,880	3,879	3,834	3,727	3,669	3,756	3,766	3,811	3,812	3,793
Coaching stock — Electric Multiple Unit Coaches.	171	171	171	171	171	192	272	348	358	354	353	353	371	371	371
Coaching stock — Rail cars ..	18	18	18	13	11	11	14	11	7	7	7	7	10	10	10
Coaching stock — Other coaching vehicles	1,066	1,049	1,029	988	943	928	902	893	845	824	817	809	793	768	746
Wagons ..	34,173	33,863	35,104	30,029	31,723	31,062	31,005	30,032	29,588	28,582	27,547	265,803	26,325	25,885	24,886
Staff—															
No. of employees (in 1000s) ..	135.0	136.0	137.7	138.6	124.9	129.5	135.2	136.3	137.6	137.0	140.9	139.7	141.3	142.2	142.5
Cost of staff (in crores of Rs.) ..	57.96	73.75	88.40	92.30	91.42	87.99	110.75	128.46	147.84	180.28	208.67	241.01	264.11	325.55	402.1
Average cost per employee (in Rs.) ..	4,314	5,450	6,419	6,668	6,528	7,613	8,443	9,515	10,784	13,214	14,885	17,342	18,686	23,021	28,216
For the year—															
Transportation Out-put—Train-kilometres excluding Departmental (in millions)— Passenger and proportion of mixed	30.06	25.20	33.82	35.54	35.59	32.25	32.43	33.72	33.23	35.67	37.35	33.38	38.02	38.57	39.35
EMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MEMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DEMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goods and proportion of mixed ..	16.28	16.24	17.40	18.40	16.15	13.03	12.48	..	13.49	13.00	13.48	14.12	144..99	15.65	15.58
Vehicle and wagon kilometres (excluding departmental and brake-vans) (in millions)—															
Vehicle kilometres ..	579	529	642	697	679	631	642	661	689	715	743	763	769	800	856
EMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MEMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DEMU	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wagon kilometres ..	805	802	865	913	808	655	646	628	747	709	766	817	817	945	962
Volume of Traffic—															
Passenger Traffic—															
No. of passengers originating (in millions)	253	218	267	298	310	331	302	333	346	344	276	279	283	296	307
Passenger kilometres (in millions)	11,415	10,700	3,217	14,420	15,448	16,278	16,135	18,128	19,294	20,344	18,590	19,898	20,821	20,952	21,904
Passenger earnings (in crores of Rs.)	38.4	41.5	49.2	55.4	60.3	62.2	67.2	78.1	96.5	116.2	125.7	141.0	161.61	180.81	194.89
Average lead (in kilometres) ..	44.7	48.29	48.80	47.70	49.20	48.5	52.5	53.6	54.9	58.2	65.8	69.7	71.8		69.1
Average rate per passenger kilometres (in paise).	3.36	3.88	3.58	3.82	3.88	3.82	4.16	4.31	5.00	6.00	6.76	7.09	7.76	8.63	8.90
Goods Traffic—															
Tonnes originating (in millions)— Revenue earning Traffic ..	12.9	13.0	13.4	14.2	13.0	11.0	10.9	10.9	12.9	12.2	11.4	13.2	133.9	13.9	14.2
Total Traffic ..	13.7	13.8	14.6	15.5	14.0	11.9	11.8	11.8	13.9	13.7	12.7	14.4	15.2	15.3	15.9
Net tonne kilometres (In millions)—															
Revenue earning traffic ..	8,726	9,052	9,643	10,237	9,101	7,996	7,761	7,686	9,575	9,093	10,104	11,041	11,829	11,724	11,638
Total traffic ..	9,324	9,664	10,323	10,855	9,647	8,386	8,190	8,067	9,846	9,374	10,367	11,327	12,129	11,944	11,932
Earnings from goods carried excluding wharfage and demurrage charges (in crores of Rs.).	55.1	67.7	84.7	90.78	83.94	72.46	79.90	84.92	133.72	155.03	187.89	208.66	240.01	257.36	291.50
Average lead (in kilometres) (Revenue)	433.0	434.0	437.0	428.0	374.0	350.0	342.0	333.0	358.0	376.0	406	390	377	362	341
Average rate per tonne kilometre (in paise)	6.31	7.47	8.52	8.87	8.70	8.64	9.76	10.53	13.58	16.54	18.60	18.90	20.29	21.95	25.05
Quantity of fuel consumed by locomotives—															
Coal (in thousand tonnes) ..	1,128	1,023	1,214	1,200	1,120	934	892	868	635	474	446	426	390	340	262
Diesel oil (in kilolitres) ..	131,524	133,660	140,010	148,840	125,039	97,747	102,627	106,091	117,688	127,035	129,864	138.033	144,817	144,996	153,677
Stores purchased (in crores of Rs.)—															
Indigenous ..	40.0	53.75	70.45	69.15	52.40	49.78	82.14	118.33	136.01	147.51	148.38	162.27	179.97	204.46	230.93
Total	44.9	62.60	76.11	74.63	53.40	51.28	86.51	124.37	145.98	158.88	161.42	173.23	199.17	222.61	*247.77
Operating revenue and expenditure (in crores of Rs.).—															
Revenue—Gross receipts ..	106.67	122.67	151.34	165.55	149.15	155.44	172.11	192.03	263.34	310.36	354.95	394.14	464.97	506.18	554.09
Working expenses including depreciation etc. and miscellaneous expenses.	109.58	131.39	160.66	180.49	168.26	176.70	207.81	236.57	305.13	368.16	437.13	490.14	556.06	646.84	716.16
Net revenue receipts ..	(–) 2.91	(–) 8.72	(–) 9.32	(–) 14.94	(–) 19.11	(–) 21.26	(–) 35.70	(–) 44.54	(–) 41.79	(–) 59.22	(–) 83.85	(–)96.00	(–)91.09	(–)123.69	(–)149.22
Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.	(–) 0.56	(–) 2.0	(–) 2.0	(–) 3.2	(–) 3.7	(–) 4.13	(–) 6.53	(–) 7.44	(–) 6.84	(–) 8.70	(–) 11.42	(–)12.40	(–)11.06	(–)13.42	(–) 14.99
Operating ratio (per cent) ..	102.05	106.04	105.7	109.70	112.8	113.7	120.74	123.19	115.87	118.62	123.15	124.36	119.59	130.08	129.50
Dividend to General Revenues ..	17.99	20.20	21.26	22.34	22.60	22.91	22.25	33.57	36.16	41.89	42.42	46.35	50.90	55.67	61.42
Payments to States in lieu of tax on Passenger fares.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surplus (+)/Deficit (—) ..	(–)20.90	(–)28.92	(–)30.58	(–)37.28	(–)41.71	(–)44.86	(–)58.51	(–)78.11	(–)71.15	(–)90.39	(–)116.17	(–)132.81	(–)135.12	(–)179.06	(–)210.64

SIXTY SEVEN YEARS OF SUMMARY

1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999-2000	2000–01	2001-02	2002–03	Details
															Assets— (As on 31st March)
1,075.55	1,195.87	1,320.46	1,423.42	1,796.23	1,844.87	*1,869.20	1,831.59	1,780.38	2177.34	2,555.48	2,965.63	3,375.13	3,773.92	4,142.37	Capital-at-charge (Rs. in crores)
1,399.56	1,559.58	1,741.93	1,892.06	2,330.42	2,641.17	2,912.38	3,309.55	3,819.04	4630.81	5,331.98	5,927.01	* 6,534.54	7,187.95	7,900.54	Total investment (Rs. in crores)
598.39	649.60	775.56	959.09	959.09	972.56	1,001.7	1,115.80	1,227.74	1259.29	1,316.04	1,352.05	1,352.05	1,483.91	1,556.56	Route Kilometres Electrified
6,757.76	6,924.04	6,924.04	6,928.26	7,009.00	7,020.55	7,050.97	7,049.47	7,040.49	7009.51	7,145.88	7,144.03	7,164.83	7,197.13	7,192.88	Total
1,149.01	1,273.77	1,509.34	1,797.23	1,797.23	1,827.42	1,854.62	2,049.76	2,257.61	2339.12	2,468.35	2,538.23	2,538.23	2,671.63	2,748.92	Running track Kilometres Electrified
7,849.89	8,049.4	8,059.52	8,062.06	8,142.80	8,171.53	8,211.20	8,212.99	8,223.87	8244.86	8,427.7	8,494.40	8,593.64	8,658.94	8,689.71	Total
845	845	832	831	821	813	802	786	774	772	769 *	757	757	754	752	Number of stations.
															Rolling Stock—
171	168	138	117	75	41	10	10	10	10	10	10	10	10	10	Steam ..
346	364	374	388	373	398	421	434	436	487	516	512	527	559	538	Diesel
73	102	107	112	127	145	149	150	155	171	184	215	223	212	224	Electric .. } Locomotives
3,919	3,958	4,068	4,233	4,452	4,574	4,559	4,632	4,863	5,012	4,869	*4,962	5,152	5,264	5,495	Passenger carriages
*371	378	389	392	415	418	449	477	512	537	592	595	603	627	603	Electric MultipleUnit coaches.
4	4	4	4	4	4	4	4	2	..	2 *	2	2	2	2	Rail cars .. } Coaching stock
696	641	610	573	535	523	505	519	531	544	517 *	* 281	271	273	270	Other coaching vehicles
24,334	23,903	24,693	24,402	23,536	21,016	17,956	16,280	15,311	15,629	16,475	15,888	14,732	13,558	13,031	Wagons
															Staff—
144.2	146.6	147.0	150.0	149.4	145.8	1,42.937	1,40.366	139.300	136.654	136 585	136.463	133.587	130.579	**126.992	No. of employees (in 1000s)
463.5	513.5	560.1	611.5	684.1	795.39	880.62	993.57 **	1,114.70	1425.99	1,587.35	1,653.20	1,816.72	1,822.43	1,893.43	Cost of staff (in crores of Rs.)
32,148	35,079	38,150	40,826	45,886	550,97	616,17	70,784 **	80,075	1,04,435	1,16,397	1,21,214	1,360.72	1,39,636	1,49,003	Average cost per employee (in Rs.)
															For the year—
															Transportation Out-put—Train kilometres excluding depot. mental (in millions)—
40.13	40.77	41.09	41.10	41.92	42.00	45.42	48.19	48.64	50.18	50.34	51.60	52.50	53.80	55.41	Passenger and proportion of mixed
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	EMU
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	MEMU
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	DEMU
16.25	16.04	16.86	16.61	17.30	15.63	14.35	14.52	14.97	14.90	14.85	14 99	14.31	13.89		Goods and proportion of mixed
															Vehicle and wagon K.Ms. (excluding dpt. mental and brake-vans) (inmillions)-
876	890	902	913	944	954	1,022	1,065	1,073 *	1,133	1,170 *	1,210	1,296	1,373	1,435	Vehicle kilometres
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	EMU
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	MEMU
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	DEMU
1,007	1,018	1,107	1,103	1,146	1,090	1,044	1,077	1,185	1,190	1,132 *	1,250	1,326	1,280	1,289	Wagon kilometres
															Volume of Traffic—
															Passenger Traffic—
282	295	318	332	317	318	349	365	381	417	402	* 423	465	492	466	No.of passengers originating (in millions)
22.097	23,637	25,044	27,021	25,017	24,115	27,224	29,880	31,998	35,328	37,298	40,458	44,968	46,725	46,867	Passenger kilometres (in millions)
236.31	244.93	292.84	337.12	387.68	446.96	520.96	595.75	651.28	765.76	843.20	945.15	1,057.15	1,152.47	1,344.63	Passer. earnings (in crores ofRs)
69.5	76.0	77.8	76.2	78.7	76.6	70.31	*75.83	79.5 **	81.4	82.73	92.05	93.24	87.28	96.14	Average lead (in kilometres)
10.69	10.36	11.69	12.48	15.50	18.53	*19.14	19.94	20.35	21.68	22.61	23.36	23.51	24.67	28.69	Average rate per passer. K.M. (in paise)
															Goods Traffic—
															Tonnes originating (in millions)-
16.8	17.3	18.6	19.6	20.7	19.0	19.27	21.02	23.41	27.53	29.34	29.51	30.09	24.88	24.08	Revenue earning traffic
18.4	18.8	20.0	20.98	21.97	20.1	20.39	22.20	24.55	29.00	30.95	30.94	32.11	27.27	24.86	Total traffic
															Net tonne K. M. (in millions)—
11,906	11,998	13,200	13,201	13,622	129,91	12,931	13,864	15,018	15,251	14,629	15,788	16,623	15,506	15.924	Revenue earning traffic
12,200	12,282	13,467	13,467	13,857	131.58	13,091	14,026	15,141	15,407	14,763	15,921	16,791	15,725	16,118	Total traffic
316.50	374.12	439.32	472.16	524.31	602.65	670.69	779.38	884.33	1065.44	1,068.34	1,159.72	1,287.76	1,210.66	1,256.59	Earnings from goods carried excluding surcharge and demurrage charges (in crores of Rs.)
346	351	342	353	350	349	331	330	304	303	311	311	312	331	331	Average lead (in kilometres)
26.58	31.18	33.28	35.77	38.49	46.39	51.87	56.22	58.89	69.86	73.03	73.46	77.47	78.07	78.91	Average rate per tonne-kilometre (in paise)
															Quantity of fuel consumed by locomotives—
212	205	177	168	128	40	15.46	2.34	2.19	2.10	2.18	2.16	2.59	1.90	1.74	Coal (in thousand tonnes)
162,219	171,611	179,309	177,546	179,265	161,865	170.530 *	178.816 *	178.665 *	181125	1,97,668	2,17,566	2,19,143	2,26,870	2,32,602	Diesel oil (in kilolitres)
															Stores purchased (in crores of Rs.)—
307.55	347.46	427.42	457.63	587.05	480.06	456.31	498.43	696.56	1024.92	920.15	766.61	992.02	*934.29	1,246.79	Indigenous
324.63	391.39	454.57	476.18	617.49	505.13	493.35	507.23	719.08	1040.55	972.00	*779.59	1.019.24	*958.58	1,260.63	Total
															Operating revenue and expenditure (in crores of Rs.).—
632.70	710.24	822.58	918.02	1,007.91	1,193.62	1,327.35	1,546.09	1,699.87	2022.29	2,104.80	2,336.43	2,603.34	2,607.15	2,854.45	Revenue—Gross receipts
766.79	879.77	976.21	1,081.45	1,220.57	1,313.76	*1,447.90	1,627.72	1,821.09	2241.30	2,423.34	*2,679.55	3.140.57	3,251.10	3,398.97	working expenses including depreciation etc. and miscellaneous expenses.
(–)118.22	(–)150.00	(–)125.60	(–)127.78	(–)169.05	(–)66.31	*(–) 63.93	(—)31.24	(—)70.47	(—)161.45	(–)243.00	*(–)249.87	(–)437.06	*(–)630.86	(–)485.51	Net revenue receipts
(–) 10.99	(–) 12.54	(–) 9.51	(–) 8.98	(–) 9.41	(–) 3.27	*(–) 2.81	(—)1.20	(—)2.39	(—)4.54	(–)5.99	(–)5.51	(–)8.81	*(–)11.77	(–)8.47	Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.
122.04	124.02	118.63	117.81	117.96	110.60	109.47	105.62	106.98	111.81	114.29	114.74	120.80	124.98	119.15	Operating ratio (per cent)
66.85	71.40	84.50	93.69	113.15	139.66	*145.15	146.31	143.62	142.90	185.71	217.23	248.25	259.83	289.15	Dividend to General Revenues
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Payments to States in lieu of tax on Passenger fares.
(–) 185.07	(–) 221.41	210.11	(–)221.17	(–)282.20	(–)205.97	*(–) 209.08	(–) 177.55	(–) 214.09	(–) 304.39	(–) 428.71	*(–) 467.10	(–) 685.31	*(–) 890.69	(–)774.66	Surplus (+)/Deficit (–)

* Revised.

Details	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
Assets—(As on 31st March)														
Capital-at-charge (Rs. in crores)	3,532.81	3,715.46	4,056.06	4154.34	4333.30	4647.65	5656.53	6807.94	8004.45	9158.53	10425.08	12120.91	13880.76	14528.83
Total Investment (Rs. in crores)	6,854.27	7,516.98	8,433.90	9564.02	11069.18	12985.77	14871.47*	16846.30	18519.30	20413.60	22413.99	25338.31	29435.40	31162.06
Route Kilometres Electrified	1,501.88	1,477.02	1,729.23	1600.22	1722.90	1816.36	1975.31	2197.90	2460.15	2470.85	2557.02	2557.05	2745.40	2835.07
Total ..	5,234.48	5,209.62	5,209.62	5159.85	5169.42	5145.61	5098.07	5102.12	4993.90	5078.71	5078.71	5078.74	5074.45	5079.51
Running track Kilometres Electrified	2,578.01	2,595.20	2,952.73	2823.72	2957.41	3064.91	3332.08	3580.26	3875.86	3917.22	4098.42	4204.04	4573.89	4949.01
Total ..	6,628.99	6,678.34	6,717.96	6686.96	6707.54	6718.68	6759.53	6789.17	6714.30	6835.10	6843.96	6949.58	7003.39	7193.92
Number of Stations ..	601	599	597	536	545	552*	566	*597	590	*598	597	608	614	619
Rolling Stock—														
Locomotives — Steam ..	10	10	10	10	10	10	10	11	10	11	11	8	8	8
Locomotives — Diesel ..	421	421	426	416	393	373	393	384	404	384	416	399	397	401
Locomotives — Electric ..	243	223	241	265	279	290	306	333	371	384	421	435	450	447
Coaching stock — Passenger carriages	4,283	4,518	4,699	4897	5507*	5562	5656	4964	5182	5492	5815	6065	6268	6181
Coaching stock — Electric Multiple Unit Coaches.	607	704	618	676	669	677	614	714	719	739	767	811	822	885
Coaching stock — Rail cars ..	2	2	2	0	0	0	0	0	0	0	0	0	0	0
Coaching stock — Other coaching vehicles	206	387	464	499	282*	281	385	454	321	341	341	364	357	360
Wagons ..	12,405	11,813	11,530	11064	11224*	10653	10548	10258	10078	9957	9856	9734	9626	9552
Staff—														
No. of employees (in 1000s) ..	106.844	106.258	104.865	105.177	104.680	102.472	99.329	95741	94492	93805	92758	91810	94.085	93.452
Cost of staff (in crores of Rs.) ..	1,835.52	2,055.00	2,147.91	*2250.82	2415.74	4374.27	5283.43*	*4647.59	4993.43	5592.94	6214.11	6871.49	7475.75	9390.61
Average cost per employee (in Rs.) ..	1,71,7081	1,93,645	2,04,896	*214787	230624	430712	500882*	*485434	528450	596231	6699.28	748447	7945.74	1004860
For the year—														
Transportation Out-put—Train-kilometres excluding Departmental (in millions)—														
Passenger and proportion of mixed	46.99	46.28	47.22	38.42	38.90	39.79	41.64	44.17	45.96	47.51	50.44	52.74	52.52	53.23
EMU	..	..	..	..	..	..	..	8.50	8.68	8.79	8.74	8.79	9.18	9.10
MEMU	..	..	..	..	..	..	..	1.82	1.98	2.36	2.64	2.62	2.69	2.74
DEMU	..	..	..	..	..	..	..	0.61	0.56	0.73	0.73	0.75	1.33	1.37
Goods and proportion of mixed ..	11.71	11.58	11.93	12.23	12.25	12.69	11.97	11.53	11.84	10.79	10.78	11.29	10.11	9.65
Vehicle and wagon kilometres (excluding departmental and brake-vans) (in millions)—														
Vehicle kilometres ..	1,208	1,225	1,280	1253	1345	1404	1483	1590	1690	1771	1880	1963	1995	2040
EMU	..	..	..	..	..	..	..	79.30	81.43	82.69	84.67	86.35	90.71	91.63
MEMU	..	..	..	..	..	..	..	15.67	17.03	20.08	22.39	22.85	23.36	23.84
DEMU	..	..	..	..	..	..	..	4.52	3.70	5.18	4.88	5.44	10.53	10.89
Wagon kilometres ..	1,134	1,128	1159	1226	1285	566	528	520	542	500	508	531	483	447
Volume of Traffic—														
Passenger Traffic—														
No. of passengers originating (in millions)	418	460	496	565	621	687	690	734	801	831	831	807	798	799
Passenger kilometres (in millions)	*38,970	43,069	46,609	55092	57327	69391	70216	74664	82512	84062	82481	83730	85396	85033
Passenger earnings (in crores of Rs.)	1,58.66	1,238.82	1,332.56	1510.77	1805.86	2094.09	2154.61	2317.69	2565.97	2823.61	3290.64	3719.99	3858.67	4011.83
Average lead (in kilometres) ..	88.58	87.61	89.17	93.97	87.89	93.89	95.15	94.70	95.93	96.29	96.21	95.68	99.92	106.42
Average rate per passenger kilometres (in paise).	29.73	28.76	28.59	27.42	31.50	30.18	30.69	31.04	31.10	33.59	39.90	44.43	45.19	47.18
Goods Traffic—														
Tonnes originating (in millions)—														
Revenue earning Traffic	23.58	22.71	26.94	*31.52	30.03*	33.75	35.73	35.11	39.40	37.97	42.40	39.14	33.48	32.36
Total Traffic ..	24.24	23.19	27.27	*31.31	30.26*	34.32	36.20	35.50	39.73	38.14	42.64	39.37	33.59	32.51
Net tonne kilometres (in millions)—														
Revenue earning traffic ..	13,341	13,931	14,736	14968	15116	16234	16644	15748	17354	17465	18006	18406	15583	14369
Total traffic ..	13,596	14,058	14,825	15008	15140	16272	16673	15775	17380	17479	18032	18429	15583	14379
Earnings from goods carried excluding wharfage and demurrage charges (in crores of Rs.).	1,036.42	1,083.04	1,288.45	1471.88	1617.61	1840.80	1818.03	1869.51	2140.29	2431.09	2696.99	2694.94	2756.03	2560.85
Average lead (in kilometres) (Revenue)	283	280	263	234	225	236	362	*254	270	264	251	262	269	263
Average rate per tonne kilometre (in paise)	77.69	77.74	87.44	98.34	107.01	267.90	109.23	118.72	123.33	139.20	149.78	161.09	176.86	178.06
Quantity of fuel consumed by locomotives—														
Coal (in thousand tonnes) ..	1.86	1.97	1.85	1.74	1.90	1.46	1.51	0.58	0.45	0.10	0.02	0.03	0.01	0.004
Diesel oil (in kilolitres) ..	1,80,078	1,79,191	1,85,225	186260	182379	1805.77	1789.53	1810.60	1892.51	1852.46	1881.29	1940.18	1948.69	1903.85
Stores purchased (in crores of Rs.)—														
Indigenous ..	974.15	1,260.84	1,638.44	1790.10	1901.84	3003.37	2872.53*	2467.66	2522.92	2565.62	4075.39	2910.81	2022.89	2422.61
Total	1,015.49	1,283.20	1,699.65	1800.81	2308.19	3050.84	2890.88	2469.21	2535.74	2610.11	4225.49	3434.22	2494.51	2431.88
Operating revenue and expenditure (in crores of Rs.).—														
Revenue—Gross receipts ..	2,419.39	2,579.34	2,913.06	3330.81	3772.04*	4324.05	4456.90	4790.27	5608.08	6028.75	6845.55	7592.34	7605.93	7510.29
Working expenses including depreciation etc. and miscellaneous expenses.	2,879.45	3,123.99	3,334.34	3522.94	3968.17*	5451.02	6139.53	6467.85	6896.68	7827.83	8977.63	9799.98	10214.82	11175.01
Net revenue receipts ..	(–) 400.25	(–) 501.80	(–) 551.27	(–) 244.85	(–) 191.13	(–)1126.97	(–)1689.53*	-1670.60	-1297.62	-1808.10	-2149.09	-2201.99	-2587.76	-3664.36
Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.	(–) 8.97	(–) 10.80	(–) 11.06	(–) 4.82	(–) 3.67	(–)24.25*	(–)19.05*	-16.30	11.22	-14.21	-15.36	-13.68	-14.13	-19.02
Operating ratio (per cent) ..	118.55	120.79	114.46	105.85	105.07	126.06	137.47	135.55	122.58	130.59	132.18	128.98	134.89	147.83
Dividend to General Revenues ..	248.13	231.17	249.47	264.30	294.87	311.54	357.86	321.32	369.12	342.90	488.69	562.34	519.65	0.00
Payments to States in lieu of tax on Passenger fares.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surplus (+)/Deficit (—) ..	(–)648.38	(–)732.97	(–)800.74	(–)509.15	(–)491.20	(–)1447.62	(–)2047.39	-1991.92	(–)1666.74	-2151.00	-2503.87	-2590.62	-2952.50	-3664.36

* Revised

No.of Staff (Figures in Thousands)

As on March 2017
Open line : 92.03
Construction : 1.42
Total : 93.45

SIXTY SEVEN YEARS OF SUMMARY—concld.

Details
Assets—(As on 31st March)
Capital-at-charge (Rs. in crores)
Total investment (Rs. in crores)
Route Kilometres Electrified
Total
Running track Kilometres Electrified
Total
Number of stations.
Rolling Stock—
Steam .. } Locomotives
Diesel } Locomotives
Electric .. } Locomotives
Passenger carrieges } Coaching stock
Electric Multiple Unit coaches. } Coaching stock
Rail cars .. } Coaching stock
Other coaching vehicles } Coaching stock
Wagons
Staff—
No. of employees (in 1000s)
Cost of staff (in crores of Rs.)
Average cost per employee (in Rs.)
For the year—
Transportation Out-put—Train kilometres excluding depot. marital (in millions)—
Passenger and proportion of mixed
EMU
MEMU
DEMU
Goods and proportion of mixed
Vehicle and wagon K.Ms. (excluding dpt. marital and brake-vans) (inmillions)—
Vehicle kilometres
EMU
MEMU
DEMU
Wagon kilometres
Volume of Traffic—
Passenger Traffic—
No.of passengers originating (in millions)
Passenger kilometres (in millions)
Passer. earnings (in crores ofRs.)
Average lead (in kilometres)
Average rate per passer. K.M. (in paise)
Goods Traffic—
Tonnes originating (in millions)—
Revenue earning traffic
Total traffic
Net tonne K. M. (in millions)—
Revenue earning traffic
Total traffic
Earnings from goods caried excluding wharfage and demurrage charges (in crores of Rs.).
Average lead (in kilometres)
Average rate per tonne kilometre (in paise)
Quantity of fuel consumed by locomotives—
Coal (in thousand tonnes)
Diesel oil (in kilolitres)
Stores purchased (in crores of Rs.)—
Indigenous
Total
Operating revenue and expenditure (in crores of Rs.)—
Revenue—Gross receipts
working expenses including depreciation etc. and miscellaneous expenses.
Net revenue receipts
Percentage of net revenue receipts to the capital-at-charge and investment from capital fund.
Operating ratio (per cent)
Dividend to General Revenues
Payments to States in lieu of tax on Passenger fares.
Surplus (+)/Deficit (—)

दक्षिण रेलवे/SOUTHERN RAILWAY

सघनता विवरणिका 2016–2017 (बड़ी लाइन)/DENSITY STATEMENT FOR THE YEAR 2016–2017—BROAD GAUGE

Serial No.	Name of the Section	Route No of the Section	Whether the Section is Single/Double/Triple	Whether the Section is Electrified	Average Daily No. of Coaching trains run on the Section		Average total Daily No. of Vehicles (in terms of 4-wheelers) run on the Section		Average Daily No. of Goods trains run on the Section		Average Daily total No. of wagons (in terms of 4-wheelers) run on the Section		Net tonnes Kms. per route km per day		Total (14 + 15)	Gross tonne kilometres (including weight of engine and Departmental) for goods including proportion of mixed per route kilometre per day		Gross tonne kilometres (including weight of engine and Departmental) for Coaching including proportion of mixed per route kilometre per day		Gross tonne kilometres (including weight of engine and Departmental) for Coaching and Goods services combined per route kilometres per day		Average net load per Goods train	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
					Up.	Dn.	Up.	Dn.	Up.	Dn.	Up.	Dn.	Up.	Dn.		Up.	Dn.	Up.	Dn.	Up.	Dn.	Up.	Dn.
	CHENNAI DIVISION	679																					
1	MAS–GDR	136	D	E	70.958	70.958	1400.464	1400.464	5.260	5.799	240.391	263.375	12239	7113	19351	19468	14904	48711	48711	68179	63615	2327	1227
2	MAS–AJJ	69	D	E	185.474	185.474	2871.878	2871.878	13.993	13.294	721.376	687.651	20342	33485	53827	40507	52695	108667	108667	149174	161362	1454	2519
3	AJJ–JTJ	144	D	E	42.525	42.525	1678.007	1678.007	19.064	18.070	937.904	879.765	20342	44610	65042	46755	69652	48976	48976	95731	118628	1072	2469
4	AJJ–RU	72	D	E	17.774	17.774	498.126	498.126	14.497	16.052	686.912	767.597	19963	38397	58360	39608	60359	15192	15192	54800	75551	1377	2392
5	MSB–CGL(Including In	59	S	E	77.620	77.619	927.469	927.469	0.000	0.000	0.000	0.000	0	0	0	0	0	44465	44466	44465	44466	0	0
6	MSB–VLCY EMU	20	D	E	59.550	59.550	535.944	535.944	0.000	0.000	0.000	0.000	0	0	0	0	0	25706	25706	25706	25706	0	0
7	VM–KOK	169	S	E	26.268	26.268	1021.613	1021.613	2.011	2.167	86.101	96.367	2891	5389	8281	5454	8225	29738	29738	35192	37963	1438	2487
8	CGL–AJJ	63	S	E	10.734	10.734	161.711	161.711	0.023	0.032	0.827	1.020	31	18	48	64	55	6336	6336	6400	6391	1329	553
9	RPT–WJR	6	S	D	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0	0	0	2	2	0	2	2	0
	PALAKKAD DIVISION	547																					
1	PTJ–PGT	49	D	E	30.805	30.805	1160.155	1160.155	5.498	6.447	236.745	262.956	8403	9485	17888	3275	17903	33887	33887	37162	51791	1528	1471
2	PGT–SRR	44	D	E	31.027	31.027	1188.047	1188.047	5.247	6.762	217.633	270.011	8062	9083	17144	15081	17655	34593	34593	49674	52248	1536	1343
3	SRR–CLT	86	D	NE	27.582	27.582	1070.794	1070.794	2.466	4.050	101.902	156.494	3147	4881	8027	6563	9928	31015	31015	37578	40942	1276	1205
4	CLT–CAN	89	D	NE	26.542	26.642	1046.611	1046.611	2.090	4.009	78.523	150.026	3763	2214	5977	6541	7122	30299	30299	36841	37422	1800	552
5	CAN–MAQ	131	S	NE	23.149	23.149	905.201	905.201	2.330	4.137	92.516	162.974	4705	1577	6282	7911	6860	26404	26404	34315	33264	2019	381
6	PGT–PGTN	4	S	NE	3.691	3.691	65.762	65.762	0.019	0.020	0.685	0.854	35	49	85	59	79	2155	2155	2214	2234	1867	2452
7	SRR–NIL	66	S	NE	7.000	7.000	163.688	163.688	0.018	0.067	0.380	1.595	10	41	51	29	99	4878	4878	4907	4976	551	619
8	MAQ–PNMB	24	S	NE	8.170	8.170	280.770	280.770	0.861	1.587	35.848	65.205	1037	222	1259	2273	2343	8416	8416	10689	10759	1205	140
9	POY–PGTN	54	S	NE	7.907	7.907	105.526	105.526	0.049	0.096	1.893	3.836	103	192	294	173	323	3150	3150	3323	3472	2099	1996
	TRIVANDRUM DIVISION	620																					
1	SRR–CHTS	115	D	E	39.679	39.679	1556.911	1556.911	4.494	4.564	191.204	189.044	7290	5568	12858	13414	11592	44699	44699	58113	56291	1622	1220
2	ERS–QLN	156	S	E	25.467	25.467	989.453	989.453	0.845	1.006	34.129	39.903	294	1828	2122	1431	3160	28599	28599	30030	31759	348	1817
3	QLN–TVC	65	D	E	33.123	33.123	1253.409	1253.409	0.421	0.508	18.828	22.280	240	826	1066	838	1538	36454	36454	37292	37992	569	1626
4	NCJ–TEN	73	S	NE	10.826	10.826	402.036	402.036	0.445	0.544	20.134	24.417	415	751	1167	1047	1520	11608	11608	12655	13128	933	1381
5	CAPE–TVC	87	S	NE	12.949	12.949	432.872	432.872	0.335	0.398	15.305	18.048	249	615	864	730	1186	13007	13007	13738	14194	742	1546
6	ERS–ALLP	57	S	E	17.018	17.018	668.216	668.216	0.191	0.307	8.344	13.447	33	725	758	301	1154	19200	19200	19501	20354	170	2363
7	ALLP–KYJ	44	S	E	14.308	14.308	548.537	548.537	0.181	0.317	7.825	13.473	28	704	731	294	1146	15784	15784	16078	16930	152	2220
8	TCR–GUV	23	S	E	7.001	7.001	228.778	228.778	0.000	0.000	0.000	0.000	0	0	0	0	0	6536	6536	6536	6536	0	0

	SALEM DIVISION	794																					
1	JTJ–SA	120	D	E	30.958	30.958	1254.577	1254.577	11.696	12.798	581.200	638.864	6654	35643	42297	23673	54419	36427	36427	60100	90845	569	2785
2	SA–ED	59	D	E	36.998	36.998	1480.221	1480.221	5.821	7.461	249.658	325.032	5490	14867	20357	25540	25173	43397	43397	68938	68571	943	1993
3	ED–PTJ	107	D	E	37.260	37.260	1442.398	1442.398	5.450	6.676	224.618	275.653	5997	11365	17362	13329	20196	42243	42243	55572	62439	1100	1702
4	ED–TP	137	S	NE	12.857	12.857	399.069	399.069	1.863	1.767	88.831	84.568	556	4944	5501	3150	7399	12164	12164	15314	19562	299	2798
5	SA–MTDM	40	S	E	4.510	4.510	129.917	129.917	6.077	5.996	354.468	349.377	4027	20342	24369	14020	30359	3972	3972	17992	34331	663	3393
6	VRI–SA	139	S	NE	4.511	4.511	100.421	100.421	0.204	0.122	7.543	4.652	357	37	394	597	216	3827	3827	4424	4043	1751	300
7	DG–KRR	74	S	NE	8.169	8.169	307.378	307.308	1.072	0.810	42.325	33.031	2243	625	2868	3561	1681	3907	8907	12468	10588	2093	772
8	CBE–MTP	33	S	NE	5.326	5.326	123.207	123.207	0.006	0.015	0.162	0.041	0	1	1	69	33	3769	3769	3838	3803	50	59
9	KRR–SA	85	S	NE	5.641	5.641	142.965	142.965	2.447	1.746	120.984	91.675	6680	943	7624	10185	3585	4410	4410	14595	7995	2730	540
	MADURAI DIVISION	1177																					
1	DG–MDU	64	D	NE	23.321	23.321	900.640	900.640	1.528	1.261	64.251	51.458	2967	1678	4644	4942	3315	26131	26131	31073	29446	1942	1330
2	MEJ–MDU	128	S	NE	18.534	18.534	729.601	729.601	1.583	1.457	65.019	57.467	3051	1428	4480	5134	3253	20948	20948	26082	24201	1928	980
3	MEJ–TN	31	S	NE	5.098	5.098	117.699	117.699	1.402	1.349	55.173	50.879	2729	608	3337	4581	2285	3584	3584	8166	5869	1946	450
4	MEJ–TEN	29	S	NE	17.302	17.302	612.959	612.959	0.696	0.500	26.540	18.345	151	966	1117	1070	1667	17756	17756	18827	19424	217	1933
5	TEN–TCN	61	S	NE	6.967	6.967	194.250	194.250	0.000	0.002	0.000	0.052	0	0	0	5	6	5682	5682	5687	5688	0	0
6	VPT–SCT	130	S	NE	4.234	4.234	149.296	149.296	0.020	0.018	0.452	0.441	0	22	22	37	60	4398	4398	4435	4458	2	1210
7	RMM–MNM	113	S	NE	7.519	7.519	232.340	232.340	0.040	0.049	1.634	1.946	11	97	108	67	163	6796	6796	6863	6959	268	1986
8	RMM–MDU	48	S	NE	4.185	4.185	115.406	115.406	0.033	0.099	1.134	3.607	51	20	71	150	199	3390	3390	3540	3589	1547	197
9	DG–TPJ	94	S	NE	15.869	15.869	613.101	613.101	0.697	0.808	29.881	33.277	737	1820	2557	1617	2837	17779	17779	19395	20615	1057	2253
10	MNM–TPJ	151	S	NE	6.756	6.756	178.934	178.934	0.592	0.516	23.270	19.883	802	918	1720	1531	1540	4746	4746	6278	6286	1355	1779
11	QLN–EDN	68	S	NE	4.633	4.633	137.477	137.477	0.000	0.000	0.000	0.000	0	0	0	3	3	3976	3976	3979	3979	0	0
12	TSI–TEN	72	S	NE	3.996	3.996	106.365	106.365	0.008	0.003	0.132	0.049	3	0	3	11	6	3125	3125	3136	3131	343	0
13	DG–POY	121	S	NE	2.998	2.998	84.687	84.687	0.043	0.092	1.623	3.611	75	147	222	141	280	2517	2517	2659	2797	1738	1596
14	VPT–MNM	67	S	NE	1.189	1.189	15.589	15.589	0.469	0.442	17.837	15.598	683	579	1262	1279	1105	311	311	1590	1415	1456	1311
	TIRUCHCHIRAPPALLI DIVISION	839																					
1	TP–TPGY	4	S	NE	11.079	11.079	313.518	313.518	2.436	2.501	128.307	132.981	487	7891	8378	4053	11588	10139	10139	14192	21728	200	3155
2	TPJ–MV	120	S	NE	17.906	17.906	458.315	458.315	1.429	1.404	70.454	68.659	328	3592	3920	2371	5548	12549	12549	14920	18097	230	2558
3	VRI–CUPJ	57	S	NE	0.999	0.999	31.625	31.625	0.427	0.458	18.749	20.160	114	761	874	670	1355	906	906	1576	2261	266	1661
4	PDY–VM	38	S	E	8.114	8.114	183.535	183.535	0.029	0.039	1.247	1.756	21	89	109	64	145	1145	1145	1208	1290	710	2273
5	VM–MV	122	S	NE	11.486	11.486	377.325	377.325	1.490	1.337	75.350	68.652	3739	769	4508	5853	2753	11172	11172	17025	13925	2509	575
6	TPJ–VM	178	S	E	16.592	16.592	698.378	698.378	2.121	1.843	86.233	79.369	2852	4065	6917	5494	6465	889	889	6383	7354	1345	2206
7	TJ–TVR	54	S	NE	7.407	7.407	158.095	158.095	2.646	2.509	139.370	132.203	240	7431	7671	4086	11094	6097	6097	10182	17190	91	2962
8	VM–KPD	163	S	E	6.064	6.064	132.029	132.029	0.501	0.183	20.706	7.607	483	298	781	1106	536	571	571	1677	1107	964	1627
9	TVR–NCR	30	S	NE	7.998	7.998	176.256	176.256	4.328	4.097	243.407	230.591	13812	293	14104	20499	6664	6915	6915	27414	13580	3191	71
10	NCR–KIK	11	S	NE	6.137	6.137	147.863	147.863	0.123	0.041	6.575	2.214	13	100	113	202	169	5257	5257	5459	5426	104	2441
11	MQ–MNJ	14	S	NE	4.161	4.161	128.921	128.921	0.000	0.000	0.000	0.000	0	0	0	0	0	3929	3929	3929	3929	0	0
12	VLKN–NGT	10	S	NE	3.482	3.482	38.440	38.440	0.000	0.000	0.000	0.000	0	00	0	0	0	2226	2226	2226	2226	0	0
13	TVR–MV	38	S	NE	5.695	5.695	172.489	172.489	2.362	2.165	127.266	118.403	6840	355	7196	10410	3731	5068	5068	15478	8800	2896	164
		4658																					

Note : Route Kilometre as per Annual statistical Statement No. 8 for B. G. 4700.00

Route Kilometre as per Density Statement for B. G. 4656.00

The Difference is due to Non-Inclusion of Villivakkam (VLK) AnnaNagar(ANNG) in any section (The Traffic has been included in Chennai (MAS). Arakkonam(AJJ) Section, Panamburu Yard, Cochin Harbour Yard, Tiruchchirappalli Yard, Chennai Local Kilometres like Basinbridge (BBQ) To Washermenpet (WST) link, Vyasarpadi (VPY) to Korukkupet (KOK) link etc. and rounding OFF.

दक्षिण रेलवे/SOUTHERN RAILWAY

NTMKs AND ARTERIAL ROUTES AND OTHER ROUTES FOR THE YEAR—2016-2017

BROAD GAUGE	NTKMs		GTKMs					
			Goods		Coaching		Combined	
	Up	Down	Up	Down	Up	Down	Up	Down
CHENNAI DIVISION								
1. MAS–GDR	607527700	353072100	966379700	739828400	1792486417	1792486417	2758866117	2532314817
2. MAS–ALU	512325700	843313800	1020176950	1327135550	2036658943	2036658942	3056835893	3363794492
3. AJJ–JTJ	1073884400	2426110100	2457444700	3787879300	2574190689	2574190689	5031635389	6362069989
4. AJJ–RU	524637600	1009072400	1040905850	1586230050	399249204	399249203	1440155054	1985479253
5. VM–KOK	178356000	332447000	336435450	507363150	1828515022	1828515022	2164950472	2335878172
TOTAL ARTERIAL	2896731400	4964015400	5821342650	7948436450	8631100275	8631100273	14452442925	16679636723
TOTAL DIVISION	2897434500	4964422300	5822814100	7949715400	9921269883	9921269882	15744083983	17870986282
OTHER ROUTES	703100	406900	1471450	1278950	1290169608	1290169609	1291641058	1291448559
PALAKKAD DIVISION								
1 ED-PGT	156290600	174143200	62327400	328510700	626337772	626337774	688665175	954848474
2 PGT-SRR	129470400	145868400	242202700	283543600	555565158	555565158	797767858	839108758
3 SRR-CLT	96780700	153202400	206022700	311627000	973550500	973550500	1179673200	1285177500
4 CLT-CAN	122242300	71916800	212498100	231366100	984276550	984276550	1196774650	12156442660
5 CAN-MAQ	224961000	75399100	378266600	308008600	1262520000	1262520000	1640786600	1590628600
TOTAL ARTERIAL	731745000	620529900	1101317500	1483066000	4402249983	4402249982	5503667483	5886306982
TOTAL DIVISION	743149800	627317400	1125429100	1512438400	4658705339	4658705339	5784134439	6171143739
OTHER ROUTES	11404800	6787500	24111600	29382400	256455356	256455357	260566956	285837757
TRIVANDRUM DIVISION								
1 SRR-CHY	306005100	233718200	563067500	486573900	1876228258	1876228258	2439295758	2362802158
2 ERS-QLN	16729300	104087200	81496300	179934200	1628612685	1628612685	1710107986	1808546886
3 QLN-TVC	5687100	19593800	19878800	36492000	864867156	864867155	884745966	901359156
4 NCJ-TEN	11062200	20022800	27894200	40506700	309301250	309301250	337195450	349807950
5 TVC-CAPE	7893700	19536200	23185900	37668500	413050782	413050782	436236682	450719282
TOTAL ARTERIAL ROUTES ..	347377400	396958200	715521700	781175300	5092060131	5092060130	8807581831	5873236430
TOTAL DIVISION	348496300	423350700	726606300	823648600	57998668231	5799868230	6526374531	6623616830
OTHER ROUTES	1118900	26392500	10984600	42473300	707808100	707808100	718792700	750281400

BROAD GAUGE	NTKMs		GTKMs					
			Goods		Coaching		Combined	
	Up	Down	Up	Down	Up	Down	Up	Down
SALEM DIVISION								
1. JTJ–SA	292262300	1565433100	1039733200	2390075800	1599851931	1599851931	2639686131	3969927731
2. SA–ED	124216700	341243900	581314200	578291200	992715301	992715300	1574029501	1571006500
3. ED–PTJ	234210400	443845500	520557100	788748700	1649797339	1649797338	2170354439	2438546038
4. ED–TP	27810800	247244400	157504300	369962500	608252072	608252072	766756372	978214572
5. SA–MTDM	58790100	296996300	204690300	443246800	57987000	57987000	262677300	501233800
6. KRR–DG	60593400	16879600	96192700	45408000	240570900	240570900	336763600	285978900
TOTAL ARTERIAL ROUTES. ..	797883700	2911642800	2599991800	4615733000	5149174543	5149174541	7749166343	9764907541
TOTAL DIVISION	1023264500	2942783200	2676615600	473839800	5525560272	5525560272	8202175772	10263900072
OTHER ROUTES	225380800	31140400	76623700	122606800	376385729	376385731	453009429	458992531
MADURAI DIVISION								
1 DG–MDU	71468900	40411400	919043400	79848700	629503600	629603600	748647000	709362300
2 MDU–MEJ	142660500	66734600	239850600	151978700	978692200	978692200	1218542800	1130670900
3 MEJ–TN	30877700	6875400	51816500	25863600	40558550	40558550	92395050	66412150
4 MEJ–TEN	1597100	10229700	11301000	17647800	187951800	187961800	98282800	205599600
TOTAL ARTERIAL	246504200	124251300	422061500	275328800	1836706150	1836706150	2258767650	2112034960
TOTAL DIVISION	337408900	263344600	607067600	510342400	3763284518	3763284517	43700362118	4273626917
OTHER ROUTES	90904700	139093300	185006100	235013600	1926578368	1926578367	2111584468	2161591967
TIRUCHCHIRAPPALLI DIVISION								
1 TP–TPGY	710500	11520900	5817100	16919100	14803604	14803604	20720704	31722707
2 TPJ–MV	14367600	157309000	103863200	243001400	549640950	549640950	663494150	792642350
3 VRI–CUPJ	2365300	15823400	13929400	26190600	18854750	18854750	32784150	47045250
4 TPJ–VM	185288900	264119400	356928800	420040700	57745750	57745750	414674550	477786450
TOTAL ARTERIAL ROUTES ..	202732300	448772700	480628500	708151700	641045054	641045054	1121673664	1349196754
TOTAL DIVISION	649128500	656957600	1258113900	1208675300	1503886484	1503886483	2762000384	2712561783
OTHER ROUTES	446396200	208184900	777485400	500523600	862841430	862841429	1640326830	1363366029
ZONE								
TOTAL ARTERIAL ROUTES ..	5222974000	9466170300	11140863650	15811881250	25752336136	25752336130	36893199786	41564217380
TOTAL DIVISION	5996882500	9878175800	12216546600	1674159900	31172574727	31172574723	43389121227	47915734623
OTHER ROUTES	775908500	412005500	1075682850	931278660	5420238591	5420238593	6495921441	6361517243
(IN 000s) BROAD GAUGE								
TOTAL ARTERIAL ROUTES ..	5222974	9466170	11140864	15811881	25752336	25752336	36893200	41564217
TOTAL DIVISION	5998883	9878176	12216547	16743160	31172575	31172575	43389122	46915736
OTHER ROUTES	775909	412006	1075683	931279	5420239	5420239	6495922	6351518

METRE GAUGE	NTKMs		GTKMs					
			Goods		Coaching		Combined	
	Up	Down	Up	Down	Up	Down	Up	Down
SALEM DIVISION								
TOTAL ARTERIAL ROUTES. ..	0	0	0	0	0	0	0	0
TOTAL DIVISION	0	0	171500	171500	5394200	5394200	5565700	5565700
OTHER ROUTES	0	0	171500	171500	5394200	5394200	5565700	5565700
ZONE								
TOTAL ARTERIAL ROUTES ..	0	0	0	0	0	0	0	0
TOTAL DIVISION	0	0	171500	171500	5394200	5394200	5565700	5565700
OTHER ROUTES	0	0	171500	171500	5394200	5394200	5565700	5565700
(IN 000s) METRE GAUGE								
TOTAL ARTERIAL ROUTES ..	0	0	0	0	0	0	0	0
TOTAL DIVISION	0	0	172	172	5394	5394	5566	5566
OTHER ROUTES	0	0	172	172	5394	5394	5566	5566

दक्षिण रेलवे/SOUTHERN RAILWAY

वर्ष 2016-2017 के लिए प्रमुख मार्ग एवं अन्य सडकों का धनत्व विवरण

DENSITY STATEMENT FOR ARTERIAL ROUTES AND OTHER ROUTES FOR THE YEAR—2016-2017

Routes	NTKM		GTKM					
			Goods		Coaching		Combined	
	Up	Down	Up	Down	Up	Down	Up	Down
BROAD GAUGE								
Arterial	52,22,974	94,66,170	1,11,40,864	1,58,11,881	2,57,52,336	2,57,52,336	3,68,93,200	4,15,64,217
Others	7,75,909	4,12,006	10,75,683	9,31,279	54,20,239	54,20,239	64,95,922	63,51,518
Total	59,98,883	98,78,176	1,22,16,547	1,67,43,160	3,11,72,575	3,11,72,575	4,33,89,122	4,79,15,735
METRE GAUGE								
Arterial	0	0	0	0	0	0	0	0
Others	0	0	172	172	5394	5394	5566	5566
Total	0	0	172	172	5394	5394	5566	5566