G.275/WSSR- 421920 /2019-20

WOR THE

1

WORK STUDY TO REVIEW

THE STAFF STRENGTH

AT

SSE/C&W/TEN UNIT

MDU - DIVISION

#### **SOUTHERN RAILWAY**

#### **PLANNING BRANCH**

G.275/WSSR- 421920 /2019-20

WORK STUDY TO REVIEW

THE STAFF STRENGTH

AT

SSE/C&W/TEN UNIT

MDU - DIVISION

STUDIED BY

WORK STUDY TEAM

OF

PLANNING BRANCH

May 2020

ARAR

3

# (i)

# **INDEX**

CHAPTER NUMBER	CONTENTS	PAGE NUMBER
(i)	ACKNOWLEDGEMENT	
(ii)	AUTHORITY	1
(iii)	TERMS OF REFERENCE	1
(iv)	METHODOLOGY	
(v)	SUMMARY OF RECOMMENDATION	2
I	INTRODUCTION	3 - 4
II	PRESENT SCENARIO	5 - 23
III	CRITICAL ANALYSIS	24 - 30
IV	PLANNING BRANCH REMARKS ON CO-ORDINATING OFFICER'S VIEWS	31 - 32
V	FINANCIAL SAVINGS	33
	ANNEXURES	
I	'SAVE' STATEMENT FROM SSE/C&W/TEN	34
II	'SAVE' STATEMENT FROM SSE/C&W/TEN	35
III	REVISED YARDSTICK LETTER	36 - 40
IV	CO-ORDINATING OFFICER'S VIEWS	41

# SKSK

#### **ACKNOWLEDGEMENT**

1

The Work Study Team gratefully acknowledges the valuable assistance given by Sr.DME/MDU, DME/MDU, CDO/TEN (Coordinating Officer), SSE/C&W/TEN (Coordinating Supervisor), Supervisors and other staff for completing this study.

### (ii) <u>AUTHORITY</u>

Annual Programme of work studies for the year 2019-20

#### (iii) TERMS OF REFERENCE

Work study to review the staff strength at SSE/C&W/TEN unit of MDU - Division

#### (iv) METHODOLOGY

The following methodology has been adopted while conducting the Study:

- 1. Collection of data.
- 2. Observation of present system of working.
- 3. Interaction with Officers, Supervisors and staff of C&W/TEN unit of MDU Division.
- 4. Analyses the data collected and assessed the manpower requirement for C&W/TEN unit /MDU Division.
- 5. Applying Yardstick and Need basis

AKAK

2

(v)

# **SUMMARY OF RECOMMENDATION**

#### Recommendation

4 vacant posts of Technician Gr-I in GP Rs.2800 and 6 vacant posts of Helper in GP Rs.1800, is found excess to the requirement in SSE/C&W/TEN which may be surrendered and credited to the vacancy bank.

(10 Posts)

#### CHAPTER - I

#### 1.0 **INTRODUCTION**

- Southern Railway the Mechanical branch operates Diesel-Electric Locos, Coaches, Wagons, DEMUs, EMUs and MEMUs in various sections. These assets are being maintained in good fettle by the Mechanical Branch to provide safe and reliable transportation of passengers and goods. In order to maintain these locomotives, coaches and wagons, Southern Railway has 3 major workshops, 4 Diesel Sheds, 18 Coach Maintenance Depots (BG-17 & MG-1), 9 Wagon Maintenance Depots, 3 EMU Sheds/ Shops.
- 1.2 **Madurai Division** formed in 1856 and has a route length of 1356 Km. it serves 12 district of Tamil Nadu and one district of Kerala (Kollam). Its first railway line launched in 1857 between Madurai and Trichirappalli

#### 1.3 **Mechanical department**

Among the important branches in Indian Railways, the Mechanical branch functions under the overall control of PCME at Zonal level and Sr.DME at Divisional level, the basic functions are,

- > The maintenance and operation of Locomotives and Rolling stock
- Standardization of designs of Rolling stock and its components through continuous absorption of latest technology in the fields of maintenance and operation.
- Production of locomotives and coaches with in the Railways and wagons from the Railway related industry.
- Maintenance and operation of breakdown cranes and restoration of traffic in case accidents by removing the infringing rolling stock.
- Management of workshops dealing with overhaul and rehabilitation of rolling stock and their components.

- 1.4 A lot of technical advancements are introduced in C&W stocks, in the recent past, in a rapid manner and the long experience, the examination pattern; policies are made drastic changes in C&W maintenance activities.
- 1.5 **Tirunelveli** junction is one of the oldest, most popular and the busiest stationin the Indian Railway network. It was built in 1893 (127 years ago) comes under MDU division, 44 daily trains (21 Express & 23 Passenger trains), 89 non-weekly trains are dealt in SSE/C&W/TEN

Train	Express/S	Passenger	Suvidha	Special	Total
Frequency	uper fast	Trains	Exp	Trains	Total
Daily	21	23	-	-	44
4 days a day	2	-	-	-	2
Tri-Weekly	6	-	-	-	6
Bi-Weekly	10	-	1	-	11
Weekly	42	-	19	9	70

- 1.6 12631/32 Nellai Exp rake No.1 primarily maintained at SSE/C&W/TEN depot has been adjudged as best rake in Southern Railway for the year 2016. Class-B ART special is located at this depot
- 1.7 This work study is initiated to review the staff strength at SSE/C&W/TEN. In this study the present work load, the working system, the activities that are out sourced and the revised yardstick are taken in to consideration and to right seizing of the man power requirement is calculated.

akak

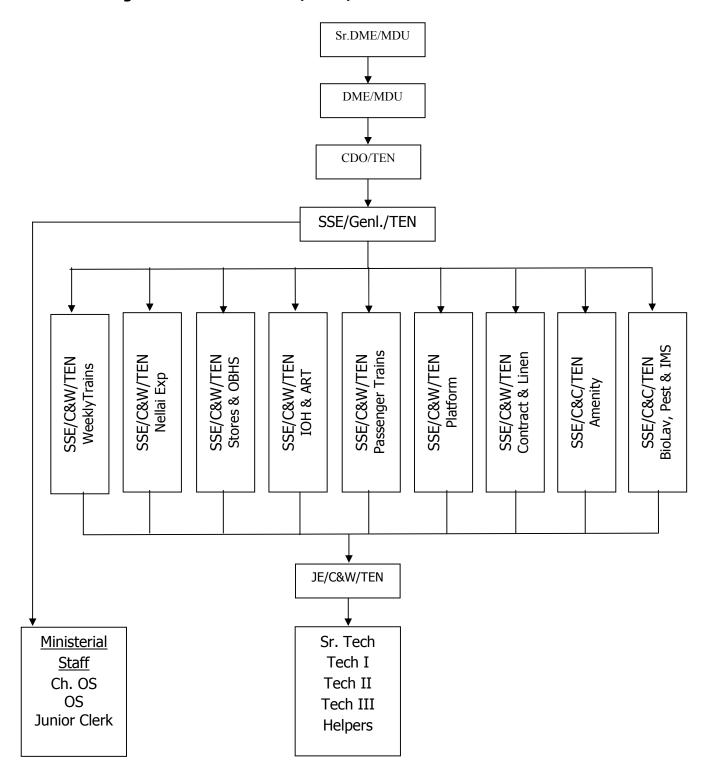
# **CHAPTER - II**

# 2.0 **PRESENT SCENARIO**

2.1 The Sanction, Actual, Vacancy and Excess Statement of SSE/C&W/TEN unit (Sanction as on 09.10.2018 & Actual as on 17.01.2020) - **Annexure I** 

S. No	Category	Sanction	Actual	Vacancy	Excess
1	SSE (In charge)	1	1	0	-
2	SSE/CW	10	10	0	-
3	JE/CW	3	1	2	-
4	Sr.Tech/CW	15	15	0	-
5	Tech-I/CW	59	18	41	-
6	Tech-II /CW	8	16	-	8
7	Tech-III/CW	12	23	-	11
8	C&W/Helper-I	50	31	19	-
9	Carpenter Gr I	4	0	4	-
10	Carpenter Gr III	1	1	0	-
11	Trimmer Gr I	1	0	1	-
12	Trimmer Gr III	1	0	1	-
13	Painter Gr I	2	0	2	-
14	Painter Gr III	0	2	-	2
15	Sr.Tech/ Welder	1	1	0	-
16	Welder Gr I	1	1	0	-
17	Welder Gr III	1	1	0	-
18	Ch.OS	1	1	0	-
19	OS	2	1	1	-
20	Junior Clerk	1	1	0	-
	Tota	l 174	124	71	21

# 2.2 Organization Chart of SSE/C&W/TEN



#### 2.2 Activities performed by the staff of C&W/TEN

- 2.2.1 Primary maintenance including under gear examination, schedule attention, carpentry & plumbing attention, painting attention, provision of amenity facilities including window shutter, climbing ladder, seat rexine, panel board, etc.
- 2.2.2 **Secondary maintenance** including under gear examination, carpentry & plumbing attention, provision of amenity facilities including window shutter, climbing ladder, seat rexine, panel board, etc.
- 2.2.3 **PFTR Attention** including carpentry & plumbing attention.
- 2.2.4 IOH/SICK Activities including IOH/SS1 schedule attention with bogie change, wheel change, return date extension with special lifting of coaches, mechanical and electrical sick attention, including painting attention wherever required.
- 2.2.5 **BD/ART Activities** including re-railing of trains, ensuring working condition of machines of ART special, pit-line attention of the same.

#### 2.2.6 **CONTRACT MANAGEMENT**

The following contract activities are being carried out at TEN Depot.

- (a) Supply of linen to AC passengers
- (b) Pest & rodent control activities of coaches
- (c) Coach cleaning, toilet cleaning, exterior washing, carriage watering of primary, secondary maintenance & PFTR trains
- (d) Annual maintenance and operation contract of Bio toilets
- (e) On board housekeeping
- (f) Curtain cloth washing
- (g) Fire Extinguisher operation

2.2.7 **Special Train Attention** including under gear examination, carpentry & plumbing attention, provision of amenity facilities including window shutter, climbing ladder, seat rexine, panel board, etc.

# 2.2.8 Maintenance of Machines & Plants in the Depot

#### 2.3 **Distribution of work force for various activities.**

1	Primary maintenance
2	Secondary maintenance & Spl Trains
3	PF activities (OEA, PFTR, Spl Trains)
4	Watering of coaches at PF/TEN
5	Sick line activities (IOH, POH - Extn, Sick coach attention) & EL repairs
6	Carpentry, Pipe line fittings, Welding, Painting, Trimming
7	Statistical work
8	Material storage & Accounting
9	Ministerial work
10	Supervisory
11	BD/ART/MFD schedule
12	Outsource management
13	Out station work /Line attention
14	Maintenance of M&P, T&P items
15	Train escorting
16	Waste disposal
17	Security & Locking
18	Staff Training
19	IMS & Auditing

#### 2.4 Infrastructure:

Pit-line No.	Commenced	Length (mts)	Capacity
I	27.09.2008	600	26 coaches
II	11.07.2012	600	26 coaches
III	11.07.2012	600	26 coaches

#### 2.5 **IOH Shed Capacity and Details**

Inaugurated	11-03-2011
IOH Shed Length	120 M
Lines	02
Capacity	05 coaches in each line
Lifting Point	01 in each line

#### 2.6 **Pit line Activity**

The Primary, Secondary maintenance and Sick line attention of coaches are carried out in pit line of CAMTECH Design with cat walk facility to a length of 600 Meters and capacity of 26 coaches. The pit line is provided with all facilities like Tower lights, Cat walk lights on both sides, inside pit lights for both sides, watering hydrant valves, carriage washing hydrants, hot & cold High Pressure jet cleaning machine, welding, gas cutting equipments and all other 230V & 440V Machineries and Plants.

Some of the normal activities carried out during pit line Maintenance are; Job writing, Under gear attention, Brake gear attention with air testing, Rolling gear attention, Suspension checking, Coupler checking, Schedule A&B, Intensive cleaning / moping of coaches, Cleaning of lavatory and wash basins, Watering and washing, Checking of water pipes, flush pipes etc to ensure free flow of water, Thorough distinction of all compartments, Draw gear attention, buffer attention, Coach sweeping, Inside panel cleaning etc

# 2.6.1 **Primary Maintenance**

S.No	Train No	No. of rakes	No. Of coaches	Туре	Frequency	Coaches per Day
01	12631/32	04	23		Daily $(23x7 = 161/7 = 23)$	23.00
02	22619/20	01	22	LHB	Weekly $(22x1 = 22/7 = 3.14)$	3.14
03	22629/30	01	15		Weekly $(15x1 = 15/7 = 2.14)$	2.14
04	16790/87	02	07		Bi-Weekly $(7x2 = 14/7 = 2)$	2.00
05	16791/92	02	14		4 days a week $(14x4 = 56/7 = 8)$	8.00
06	56766/61	04	13	ICF	Daily $(13x7 = 91/7 = 13)$	13.00
07	56717/18	02	10		4 days a week $(10x4 = 40/7 = 5.71)$	5.71
08	56741/42	01	05		Bi-Weekly $(5x2 = 10/7 = 1.43)$	1.43
			Total Pr	imary I	maintained Coaches per day	58.42

# 2.6.2 **Secondary Maintenance**

S.No	Train No	No. of rakes	No. Of coaches	Туре	Frequency	Coaches per Day
01	19578/77	02	22		Bi-Weekly $(22x2 = 44/7 = 6.29)$	6.29
02	19424/23	01	19	ICF	Weekly $(19x1 = 19/7 = 2.71)$	2.71
03	01704/03	01	15		Weekly $(15x1 = 15/7 = 2.14)$	2.14
			Total Pr	rimary	maintained Coaches per day	11.14

# 2.6.3 **Pit Occupation Chart**

# 2.6.3.1 Pit line 1 (Primary Maintenance)

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6
SUN																	_	(5()	161	0 =	<b>7</b> 1	7/16	0		
MON																	3	6/66	/61 &	& 50	<b>b/I</b>	//18	8 (Pa	ass)	
TUE							NI	ELL#	I E	хр							5	6766	/61 &	& 50	674	1/42	2 (Pa	ass)	
WED							1	263	1/3	2							_	(7()	161	0 =	(71	7/16	0		
THU							•	203	_, _	_							3	0/00	/61 &	X 30	0/1	//1	5 (Pa	ass)	
FRI																			5676	66/6	1 (F	Pass	)		
SAT																	5	6766	61 8	& 50	674	1/42	2 (Pa	ass)	

# 2.6.3.2 Pit line 2 (Primary Maintenance)

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6
SUN		1	L67	91,	/92 (	Pala	ruvi E	xp)																	
MON		16791/92 & 16790/87(Exp)					)																		
TUE																		22	629	/30	<b>(</b> D	ada	r Exp	p)	
WED																									
THU		1	679	91/	92	((Pala	aruvi	Exp)																	
FRI		16791/92 & 16790/87(Exp)						)																	
SAT		22619/20 (BS						(BSF	Exp)	)	•														

# 2.6.3.3 **Pit line 3** (Secondary Maintenance)

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6
SUN		L	0	rak	e of	f 22	629	/30										1957	78/7	77 (	'lam	man	ar F	vn)	
MON																			, 0, .	, ,	Jun	mag	,u	^P)	
TUE																									
WED										194	24,	/23	(GIM	1-TEN	-GIM	Exp)	)								
THU		L	0	rak	e of	f 22	619	/20																	
FRI																									
SAT					0	170	)4/(	03 (	TEN-	JBP E	xp)	•													

# 2.6.4 **COACH HOLDINGS OF SSE/C&W/TEN**

# 2.6.4.1 **LHB COACHES**

Train NO.	No. of Rakes	LWACCW	LWACCN	LWSCN	LS/LWS	LWLRRM/ LDSLRA	TOTAL
		1	6	11	3	2	23
12631/31	4	1	6	11	3	2	23
12031/31	7	1	6	11	3	2	23
		1	6	11	3	2	23
22620/19	2	1	3	10	6	2	22
22020/13	2	1	2	7	3	2	15
	TOTAL	6	29	61	21	12	129

# 2.6.4.2 **ICF COACHES**

Train NO.	No. of Rakes	ACCW	CN	GS	GSLRD	TOTAL
16787/90	2	1	4	1	1	7
10/0//30		1	4	1	1	7
16791/92	2	-	4	8	2	14
107 517 52		-	4	8	2	14
		-	-	11	2	13
56761/66	4	-	-	11	2	13
30701700	Т	-	-	11	2	13
		-	-	11	2	13
56718/17	2	-	-	8	2	10
30710/17	2	-	-	8	2	10
56742/41	1	-	-	4	1	5
	TOTAL	2	16	82	19	119

TOTAL COACH HOLDINGS at SSE/C&W/TEN Depot: 129 LHB + 119 ICF = 248

# 2.7 No. of Passing Trains With Frequency Thereof (Exp/Pass)

S.No	Name of the Train	Train No.	No. of coaches	No. of service in week	Total coaches in 7 days	Average per day
1	MS - TVC	16723	23	07	161	23.0
2	TVC - MS	16724	23	07	161	23.0
3	SBC - NCJ	17235	21	07	147	21.0
4	NCJ - SBC	17236	21	07	147	21.0
5	MS - CAPE	12633	21	07	147	21.0
6	CAPE - MS	12634	21	07	147	21.0
7	TPJ - TVC	22627	19	07	133	19.0
8	TVC - TPJ	22628	19	07	133	19.0
9	TBM - NCJ	16191	19	07	133	19.0
10	NCJ - TBM	16192	19	07	133	19.0
11	PUU - MDU	56701	18	07	126	18.0
12	MDU - PUU	56700	18	07	126	18.0
13	MS - TCN	16105	18	07	126	18.0
14	TCN - MS	16106	18	07	126	18.0
15	GUV -MS	16128	18	07	126	18.0
16	MS - GUV	16127	18	07	126	18.0
17	CBE - NCJ	22668	17	07	119	17.0
18	NCJ - CBE	22667	17	07	119	17.0
19	NCJ - CBE	56319	16	07	112	16.0
20	CBE - NCJ	56320	16	07	112	16.0
21	TN - TCN	56767	13	07	91	13.0
22	TCN - TN	56768	13	07	91	13.0
23	TCN - PLNI	56770	13	07	91	13.0
24	PLNI - TLN	56769	13	07	91	13.0
25	CSTM - NCJ	16339	22	04	88	12.6

26	NCJ - CSTM	16340	22	04	88	12.6
27	CAPE - RMM	22622	22	03	66	9.4
28	RMM - CAPE	22621	22	03	66	9.4
29	CSTM - NCJ	16351	22	02	44	6.3
30	NCJ - CSTM	16352	22	02	44	6.3
31	NZM - CAPE	12642	21	02	42	6.0
32	CAPE - NZM	12641	21	02	42	6.0
33	MS - NCJ	12667	24	01	24	3.4
34	NCJ - MS	12668	24	01	24	3.4
35	HWH - CAPE	12665	23	01	23	3.3
36	CAPE - HWH	12666	23	01	23	3.3
37	NCJ - KCG	16354	20	01	20	2.9
38	KCG - NCJ	16353	20	01	20	2.9
39	PDY - CAPE	16861	17	01	17	2.4
40	CAPE - PDY	16862	17	01	17	2.4
41	Mas - NCJ	12689	17	01	17	2.4
42	NCJ - MAS	12690	17	01	17	2.4
	Total		808		3706	529.4

# 2.8 Activities related to goods trains and average no. of goods train for past 12 months.

Goods trains rolling-in and rolling-out examinations are being carried out. Axle box temperature reading is being measured. Minor defects including brake binding is being attended.

(1277 goods trains per year are maintained at TEN Depot and an average of 3.49 goods trains per day.)

# 2.9 **PLATFORM TURN ROUND (PFTR) ATTENTION**

PF activities are classified as (i) PFTR, (ii) Originating Trains (iii) Terminating Trains (iv) Passing Through rains i.e.

- > Train checking Rolling in and Rolling out Exam.
- > Attention to brake binding
- > Releasing of brakes,
- Power changing,
- DVR Locker, BPC issuing / receiving
- Application of thermo hunter
- Goods release & dispatch
- Coach watering
- Cleaning of coaches and Lavatory
- > Destination Board changing

#### 2.9.1 **PF STAFF DUTY HOURS:**

07.00 - 11.00 hrs (I shift)

11.00 – 21.00 hrs. (II shift)

21.00 - 00.00 - 07.00 hrs ((III shift)

#### 2.9.2 WORK LOAD AT PLATFORM:

Average trains	Super	Daccongor	Suvidha/Special	Total Average
Per day	fast/Express	Passenger	Suvidha/Special	Trains
Originating	6	7	2	15
Terminating	6	7	2	15
Passing thro'	32	9	8	49
	44	23	12	79

# 2.9.3 NORMAL DISTRIBUTION OF STAFF FOR PLATFORM ACTIVITIES:-

- 1 Train checking / rolling Exam / releasing (MDU End) 2 per shift
- 2 Train checking / Rolling Exam / releasing (CAPE End) 2 per shift
- 3 Carriage watering, sweeping & lavatory cleaning Contract staff available

# 2.9.4 **PFTR ATTENTION COACHES**

S.No	Train No	From - To	Frequency	No. of coaches/day
1	56035/36	TCN-TEN-TCN	Daily	(18 X 7 = 126/7) 18.0
2	56796/97	SCT-TEN-SCT	Daily	(15 X 7 = 105/7) 15.0
3	56728/27	SCT-TEN-SCT	Daily	(15 X 7 = 105/7) 15.0
4	56764/65	TCN-TEN-TCN	Daily	(13 X 7 = 91/7) 13.0
5	56762/63	TCN-TEN-TCN	Daily	(13 X 7 = 91/7) 13.0
6	56800/03	SCT-TEN-SCT	Daily	(12 X 7 = 84/7) 12.0
7	56825/01	ED/MV-TEN-SCT	Daily	(12 X 7 = 84/7) 12.0
8	56802/26	SCT-TEN-ED/MV	Daily	(12 X 7 = 84/7) 12.0
9	56822/21	TEN-MV-TEN	Daily	( 9 X 7 = 63/7) 9.0
10	56741/42	TN-TEN-TN	5 Days/week	( 5 X 5 = 5/7) 3.5
11	16791/92	TEN-PGT-TEN	Tri – weekly	$(14 \times 3 = 42/7)$ 6.0
12	56717/18	CAPE-TEN-NCJ	Tri – weekly	(10  X  3 = 30/7) 4.3
13	11021/22	DR-TEN-DR	Tri – weekly	(17 X 3 = 51/7) 7.3
		Total no. of co	aches per day	140.1

# 2.10 **PERFORMANCE REPORT OF SSE/C&W/TEN DEPOT**

# 2.10.1 From April - 2018 to March - 2019 (ICF Coaches)

MONTH/SICK	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	FEB 2019	MAR 2019	TOTAL
Axle Box	-	-	-	-	-	1	-	-	-	-	-	-	1
Axle Guide Spring	ı	-	-	1	ı	ı	-	1	1	2	-	-	3
Bolster Spring	ı	-	-	1	2	1	-	1	ı	-	-	-	3
Buffer Defect	2	-	1	1	1	1	-	1	1	2	2	3	14
Wheel Defect	3	1	-	1	1	ı	3	1	1	-	-	2	13
Brake Defect	1	1	1	ı	ı	1	-	ı	1	-	-	-	4
Dashpot Crack	1	ı	-	ı	ı	1	-	ı	ı	-	ı	ı	-
Guide Cap	1	1	3	1	1	1	-	1	2	-	1	1	7
DV Replacement	ı	-	1	1	1	ı	-	1	ı	-	-	-	1
Oscillation	ı	-	-	1	1	ı	-	1	ı	-	-	-	1
Bogie Crack	1	1	-	1	1	1	-	1	1	-	1	1	2
Water Tank	2		3	1	1	-	-	1	1	-	-	1	6
Plumbing Repair	1	-	-	ı	ı	ı	-	ı	ı	-	1	1	1
Welding Repair	-	1	-	1	1	1	-	1	1	1	-	1	5
Equalizing Stay Broken	-	-	-	-	-	-	-	-	-	-	-	-	-
Side Bearer Defect	1	-	-	ı	ı	1	-	ı	ı	-	-	ı	-
Shock Absorber	1	-	-	1	1	1	-	1	1	-	-	-	1
Berth Attention	-	-	-	1	-	-	-	1	-	-	-	-	-
Wooden Packing Ring	1	-	-	-	1	1	-	-	-	-	-	-	-
Corrosion	-	-	-	-	-	-	-	-	-	-	-	1	1
Total	8	3	9	5	6	7	3	4	4	5	3	6	63

# 2.10.2 From April - 2019 to January - 2020 (ICF Coaches)

MONTH/SICK	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	FEB 2019	MAR 2019	TOTAL
Axle Box	-	-	-	-	-	-	-	-	-	-	-	-	-
Axle Guide Spring	-	1	1	1	1	-	ı	1	-	-	1	-	1
Bolster Spring	ı	1	1	1	ı	ı	1	1	1	1	1	ı	-
Buffer Defect	-	1	1	1	1	1	1	1	1	-	1	-	6
Wheel Defect	2	1	1	ı	2	1	1	1	1	1	1	-	8
Brake Defect	-	ı	ı	ı	ı	-	ı	ı	-	-	ı	-	-
Dashpot Crack	1	1	1	1	1	2	1	-	1	1	-	1	4
Guide Cap	-	-	-	-	-	-	1	-	-	-	-	-	1
DV Replacement	-	1	1	1	1	-	1	1	-	-	1	-	1
Oscillation	-	1	1	1	1	-	1	1	-	-	1	-	-
Bogie Crack	-	ı	ı	ı	1	-	1	ı	1	-	ı	-	-
Water Tank	-	1	1	1	1	-	1	1	1	1	1	-	2
Plumbing Repair	-	ı	1	ı	1	-	1	ı	1	-	ı	-	-
Welding Repair	1	ı	1	1	1	1	1	ı	ı	1	ı	1	3
Equalizing Stay Broken	-	1	ı	ı	1	-	1	ı	1	-	ı	-	1
Side Bearer Defect	1	ı	1	ı	1	1	1	ı	ı	1	ı	1	2
Shock Absorber	-	ı	1	ı	1	-	1	ı	1	-	1	-	-
Berth Attention	-	1	1	ı	1	1	1	1	-	-	1	-	1
Wooden Packing Ring	-	-	-	-	1	-	-	-	-	-	-	-	1
Corrosion	-	-	1	-	1	-	-	-	-	-	-	-	-
Total	4	2	3	3	4	5	2	1	4	3	-	-	31

# 2.10.3 From April - 2018 to March - 2019 (LHB Coaches)

MONTH/SICK	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	FEB 2019	MAR 2019	TOTAL
Wheel Shelling	-	-	-	-	1	2	2	-	1	-	-	1	7
Primary Inner Spring	-	-	-	-	-	-	-	-	-	-	2	-	2
Secondary Out Spring	-	-	-	-	-	-	-	-	1	-	-	-	1
Brake Panel	-	-	-	-	-	-	1	-	-	-	-	-	1
Control Arm	-	-	-	-	-	-	-	2	-	-	-	-	2
Earth Equipment	-	-	-	-	-	-	-	1	1	2	-	1	3
Axle Box Cover	-	-	-	-	-	-	-	-	-	1	-	-	1
Sensor Cable	-	-	-	-	-	-	-	-	-	-	-	1	1
Derailed Coach	-	-	-	-	1	-	-	-	-	-	-	-	1
TotaL	-	-	-	-	2	2	3	3	2	3	2	2	19

# 2.10.4 From April - 2019 to January - 2020 (LHB Coaches)

MONTH/SICK	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	FEB 2019	MAR 2019	TOTAL
Wheel Shelling	4	2	1	3	2	2	1	4	7	2	-	-	28
Primary Inner Spring	1	1	2	4	2	-	-	1	-	1	-	-	11
Primary Outer Spring	-	-	1	1	2	2	1	1	1	-	-	-	9
Secondary Out Spring		-	-	-	1	-	-	1	-	-	-	-	-
Secondary Inner Spring	-	-	1	1	1	1	2	4	1	1	-	-	8
Brake Panel	-	-	-	-	-	1	-	-	-	-	-	-	-
Control Arm	-	-	-	-	1	1	-	1	-	-	-	-	2
Control Arm Lug Clearance	-	-	1	-	1	1	-	3	2	2	-	-	7
CTRB Failure	-	1	-	1	1	1	1	1	-	-	-	-	3
Minor Pad	-	-	-	1	1	1	1	-	-	-	-	-	3

Roof Leakage	-	-	-	1	-	-	-	-	-	-	-	-	1
Bogie Shifted	-	-	-	-	7	4	6	3	-	2	-	1	22
CBC Wedge Lock	-	-	-	-	-	-	-	1	-	-	-	-	1
DV Replacement	-	-	-	-	-	1	-	-	-	-	-	-	1
Water Tank Leakage	-	-	-	-	-	1	-	-	-	-	-	-	1
Earth Equipment	-	-	-	-	-	-	-	1	-	-	-	-	1
Axle Box Cover	-	-	-	-	-	-	1	-	-	-	-	1	1
Sensor Cable	-	-	-	-	-	-	-	-	-	-	-	-	-
Brake Accelerator	1	-	-	-	-	-	-	-	-	-	-	-	1
Heat Check	-	-	-	-	-	-	-	-	-	1	-	-	1
BUFFER Heat adjustment	-	-	-	-	-	-	-	-	-	1	-	-	1
Total	6	4	4	11	15	10	13	18	11	10	-	-	102

# 2.10.5 Mechanical Sick (ICF/LHB) & Electrical Sick a SSE/C&W/TEN

Month	Sick	k for the year	2018	Sick for the year 2019				
MOHUI	IOH	SS1	Electrical	IOH	SS1	Electrical		
Jan	10	-	03	02	01	06		
Feb	16		13	08	01	05		
Mar	13		12	04	00	10		
Apr	12		15	05	00	05		
May	11		09	05	03	08		
Jun	11		16	08	07	07		
Jul	18		10	05	09	02		
Aug	11		08	07	09	04		
Sep	04		01	10	09	07		
Oct	05	01	02	04	04	05		
Nov	05	01	03	06	07	14		
Dec	06		06	09	08	04		
Total	122	02	98	73	58	77		

2.10.6 Summary of IOH/SS1/Sick

Year	No.of IOH coaches	No.of SS1 coaches	No.of Electrical sick coaches
2018	122	*2	98
2019	73	58	77
Total	195	58	175
Avg. per year	(195÷2) = 97.5	$(58 \div 1) = 58$	$(175 \div 2) = 87.5$
Avg. per Month	(97.5÷12) = 8.13	$(58 \div 12) = 4.83$	(87.5÷2) = 7.29
Avg. per Day	$(8.13 \div 30) = 0.27$	$(4.83 \div 30) = 0.16$	$(195 \div 2) = 0.24$

LHB introduced at SSE/C&W/TEN depot on 02.06.2018
 As a trail measures one coach each SS1 is done in these months of Oct'18 & Nov'18 hence it has not taken into in to the calculation

#### 2.11 **BD & MRV PARTICULARS**

# 2.11.1 **ART MOVEMENT FROM JUNE – 2018 TO JUNE – 2019**

Month & Year	Date of Movement	From-To	Distance covered	Reason for Movement
August 2018	17.08.2018	TEN-TEN YARD-TEN	500 Mts.	To attend re-railing of derailed LWLRRM 178742.
November 2019	25.11.2019	TEN-TN-TEN	98 KM	Trail run up to Tuticorin harbor

#### 2.11.2 **Officers Inspection Details**

Supervisor's monthly inspection done: 05.01.2020, Next due: 05.02.2020.
 Quarterly Divisional Officers done : 04.10.2019, Next Due: 04.01.2020.
 Hd.Qtrs .Officers Inspection done : 12.04.2017 by Dy. CME/Chg/MAS.
 Last trail run : 25.11.2019 (TEN – TNHP – TEN)

5. Last pit line attention : 20.11.19

# 2.11.3 ART/SPL/TEN is 'B' Class type ART/SPL

No.	Coach/ Wagon No.	Last POH station	Last POH date	R/D	Year Built	Remarks
1	SR SLR 88724	PWP	16.06.16	01/20	1988	Electrical tool van inducted on 09.07.16.
2	SR CN 90255	PWL	28.10.16	06/20	1990	Inducted on 09.11.16 Kitchen & staff van
3	SR ART 90916	PWP	03.08.16	03/20	1990	Inducted on 06.09.16. HRE & HRD
4	SR ART 92446	PWP	08.11.16	06/20	1992	Inducted on 06.12.16. Mechanical Tool van
5	SR GS 84425	GOC	14.09.16	04/20	1984	Tele communication van inducted on 28.09.16
6	SR BCNAHSM1 31069754023	PWP	06.01.17	02/23	1997	Inducted o n 07.03.17 Engineering materials
7	SE BRNAHS 111027	PWP	25.11.2013	06/18 Extd 08/19	1999	Rail Loaded Wagon
8	SR GSLR 97701	PWP	12.11.2019	06/23	1997	Engineering tool van

# 2.12 Out-sourcing activities at SSE/C&W/TEN

S.No	Name of the work	Contractor	Contract period				
1	Pest & Rodent Control	M/s. Hughes & Hughes Chem Ltd	27.12.2016 - 26.12.2019				
2	Washing contract /AC coach linens	M/s Tharu & Sons	02.11.2018 - 01.11.2019 Extd upto 31.01.2020				
_	weekly trains - Train No. 22620 TEN - BSP & Train No. 22630 TEN - DR						
	Washing contract / AC coach linens	M/s Premier Garment Processing	01.07.2017 - 30.06.2019 Extd upto 30.09.19 *				
3	(Daily trains Train No. 12632/12662 TEN – MS link) (Boot laundry commissioning under process) *Included under the extended contract of M/s Tharu & Sons Ltd. Up to 31.01.2020						
4	Cleaning, washing & watering contract	M/s Faizal Traders Pvt Ltd	21.12.2018 - 20.12.2022				
7	(Interior & exterior) water maintenance & PFTR train		pit cleaning of Primary				
5	Annual Maintenance and Operation Contract (AMOC)	M/s. Hughes & Hughes Chem Ltd	28.11.2019 - 27.11.2023				
	Comprehensive maintenance of Bio-Toilets (DRDE type) providing POH attention to the Bio – toilets for a period of one year						
	On Board Housekeeping	M/a C D Enterprises	19.11.2017 - 18.11.2020 BSP				
6	Service (OBHS)	M/s S.R Enterprises	01.07.2017 - 30.06.2020 SVDK				
	16787 – JAMMU EXP & 22619/20 BSP EXP						
7	On Board Housekeeping M/s Faizal Traders Pvt Service (OBHS) Ltd, Room		04.02.2019 - 20.12.2022				
	Dadar Exp-22629/30						
8	AMC For ELGI Air compressor	M/s Anuswarya Enterprises	11.01.2018 - 10.01.2021				

ARAR

#### CHAPTER - III

#### 3.0 CRITICAL ANALYSIS

3.1 The actual staff strength of SSE/C&W/TEN unit is 124 including 12 supervisory and 3 ministerial staff against the sanction strength of 174

Indian Railway is the biggest transportation service industry owned by the Government of India and the operation ratio is not sufficient to take up expansion works to meet the growing demand. In order to maintain the financial viability of the Railway organization, it is to be ensured that its existing resources especially its man power is to be utilized at optimum level

Since, the man power is the biggest and the most important prime tool of the expenditure of Indian railways. The rightsizing of man power is the best way to reduce the unit cost which is an effective way to maximize the productivity/efficiency as well as the 'economy in operation' of Indian Railways

To optimize the utilization of man power the study team has taken the staff requirement for the present workload for maintenance activities are arrived, based on Revised yardstick prescribed by Joint Director E(MPP) Railway Board dated 30.09.2019. (The copy of the revised yardstick is placed as an Annexure-II) and on Need Basis

Keeping these objectives in view, the work study team has assessed the requirement of man power vis-à-vis. The actual work load at SSE/C&W/TEN and the same is analyzed as follows

- 3.2 These C&W activities are sub grouped for arriving work force requirement in SSE/C&W/TEN as appended below
  - 1. Primary maintenance coaches
  - 2. Secondary maintenance coaches

- 3. IOH coaches / Sick line / ART special maintenance and operational movements
- 4. PFTR / OEA / Platform / Passing through trains
- 5. Contract management (Pest control, OBHS management, Bio-Toilet, Linen management, Garbage management etc)
- 6. Allied activities (stores, material collection, M&P, Inspection, ICMS complaints, staff training, statistical work, record maintenance etc)

#### 3.3 Primary Maintained Coaches

Train No	No. of rakes	No. Of coaches	Туре	Frequency	Coaches per Day
12631/32	04	23		(23x7 = 161/7 = 23)	23.00
22619/20	01	22	LHB	(22x1 = 22/7 = 3.14)	3.14
22629/30	01	15		(15x1 = 15/7 = 2.14)	2.14
16790/87	02	07		(7x2 = 14/7 = 2)	2.00
16791/92	02	14		(14x4 = 56/7 = 8)	8.00
56766/61	04	13	ICF	(13x7 = 91/7 = 13)	13.00
56717/18	02	10		(10x4 = 40/7 = 5.71)	5.71
56741/42	01	05		(5x2 = 10/7 = 1.43)	1.43
Total Primary maintained Coaches per day					

#### 3.3.1 Secondary Maintained Coaches

Train No	No. of rakes	No. Of coaches	Туре	Frequency	Coaches per Day
19578/77	02	22		(22x2 = 44/7 = 6.29)	6.29
19424/23	01	19	ICF	(19x1 = 19/7 = 2.71)	2.71
01704/03	01	15		(15x1 = 15/7 = 2.14)	2.14
Total Primary maintained Coaches per day					

#### 3.3.2 Man power required for Primary & Secondary Maintenance Coaches

For Primary Maintained Coaches (LHB/ICF)  $(58.42 \times 0.85) = 49.66$ For Secondary Maintained Coaches (LHB/ICF)  $(11.14 \times 0.30) = 3.34$ 53.00

LR 12.5% for 53  $(53 \times 12.5 \div 100) = 6.63$ 

59.63 Say **60** 

# 3.4 No. of LHB coach Holdings

Train NO.	No. of Rakes	LWACCW	LWACCN	LWSCN	LS/LWS	LWLRRM/ LDSLRA	TOTAL
		1	6	11	3	2	23
12631/31	4	1	6	11	3	2	23
12031/31	4	1	6	11	3	2	23
		1	6	11	3	2	23
22620/19	2	1	3	10	6	2	22
22020/19		1	2	7	3	2	15
	TOTAL	6	29	61	21	12	129

# 3.4.1 No. of LHB coach Holdings

Train	Rakes	ACCW	CN	GS	GSLRD	TOTAL
16707/00	2	1	4	1	1	7
16787/90	2	1	4	1	1	7
16701/02	2	ı	4	8	2	14
16791/92	2	ı	4	8	2	14
		ı	ı	11	2	13
56761/66	1	ı	ı	11	2	13
30/01/00	56761/66 4	-	-	11	2	13
		ı	ı	11	2	13
E6710/17	2	ı	ı	8	2	10
56718/17	Z	-	-	8	2	10
56742/41	1	ı	ı	4	1	5
	TOTAL	2	16	82	19	119

# 3.4.2 IOH/SS1/Electrical Sick

Year	No. of IOH coaches	No. of SS1 coaches	No. of Electrical sick coaches
2018	122	-	98
2019	73	58	77
Total	195	58	175
Avg. per year	$(195 \div 2) = 97.5$	$(58 \div 1) = 58$	$(175 \div 2) = 87.5$
Avg. per Month	$(97.5 \div 12) = 8.13$	$(58 \div 12) = 4.83$	$(87.5 \div 2) = 7.29$
Avg. per Day	(8.13÷30) = 0.27	$(4.83 \div 30) = 0.16$	$(195 \div 2) = 0.24$

IOH/SS1/Electrical Sick (0.27 + 0.16 + 0.24) = 0.67 **approximately 1 coach/Day** but the study team has taken the coach holdings as datum in this unit

# 3.4.3 Man power required for IOH/ SS1/Sick/ART

Revised Yardstick for Sick line activities = 0.2\_per Coach

No. of LHB coach Holdings = 129

No. of ICF coach Holdings = 119

= 248

 $(248 \times 0.12 \div 100) = 29.76 \text{ Say } 30$ 

(Inclusive of ART, RG & LR)

#### 3.5 Trains at TEN Junction

Average trains	Super	Passenger	Suvidha/Special	Total Average
Per day	fast/Express	Trains	Trains	Trains
Originating	6	7	2	15
Terminating	6	7	2	15
Passing thro'	32	9	8	49
	44	23	12	79

# 3.5.1 PFTR/OEA/Platform/Passing through trains

Train No	From - To	Frequency	No. of coaches/day
56035/36	TCN-TEN-TCN	Daily	(18 X 7 = 126/7) 18.0
56796/97	SCT-TEN-SCT	Daily	(15 X 7 = 105/7) 15.0
56728/27	SCT-TEN-SCT	Daily	(15 X 7 = 105/7) 15.0
56764/65	TCN-TEN-TCN	Daily	(13 X 7 = 91/7) 13.0
56762/63	TCN-TEN-TCN	Daily	(13 X 7 = 91/7) 13.0
56800/03	SCT-TEN-SCT	Daily	(12 X 7 = 84/7) 12.0
56825/01	ED/MV-TEN-SCT	Daily	(12 X 7 = 84/7) 12.0
56802/26	SCT-TEN-ED/MV	Daily	(12 X 7 = 84/7) 12.0
56822/21	TEN-MV-TEN	Daily	(9 X 7 = 63/7) 9.0
56741/42	TN-TEN-TN	5 Days/week	(5 X 5 = 5/7) 3.5
16791/92	TEN-PGT-TEN	Tri – weekly	$(14 \times 3 = 42/7)$ 6.0
56717/18	CAPE-TEN-NCJ	Tri – weekly	(10  X  3 = 30/7) 4.3
11021/22	DR-TEN-DR	Tri – weekly	(17  X  3 = 51/7) 7.3
	Total no. of co	aches per day	140.1

#### 3.5.2 Man power required for PFTR/OEA/Platform/Passing through trains

Total No. of PFTR coaches = 140.1

Revised Yardstick for PFTR activities = 0.2 per Coach

Inclusive of RG & LR (140.1 X 0.2) = 28.02 Say **28** 

#### 3.6 Man power required for Out-sourced Activities Management

Pest control	
Bio-Toilet attention	
OBHS /Platform cleaning/watering	4
AC Curtain / Linen management	
Washing contract / AC coach linens	

# 3.7 Man power required for other allied works

Store & material collection	8
Statistical & Record maintenance	2
M & P attention	2
Coach cleaning (Not covered under contract)	5
Drivers	2
Amenity & cleaning in Pit line	5
Total	24

# 3.8 Man power required for Ministerial staff

SSE/C&W Depot		1
Office management in general shift		1
Staff matters		1
stores		1
	Total	4

# 3.9 **Supervisory requirement**

Over all In-charge (Coaching Depot)	1
Train maintenance	4
Platform activities	3
Stores & OBHS	1
IOH/ART	1
Sick line In-charge	1
Pit line activities	1
Contract/IMS	1
RCD/LR (RCD/TEN handed over to SSE/C&W/TEN on 01.02.2020)	1
Total	14

# 3.10 Total Man power requirement at SSE/C&W/TEN

Ref	Activity Description	Man power
No.	Activity Description	Requirement
3.3.2	Primary & Secondary Maintenance Coaches	60
3.4.3	IOH/ SS1/Sick/ART	30
3.5.2	PFTR/OEA/Platform/Passing through trains	28
3.6	Out-sourced Activities Management	4
3.7	Other allied works	24
3.8	Ministerial staff	4
3.9	Supervisory	14
Tota	I Man power requirement at SSE/C&W/TEN	164

# 3.11 **SANCTION VS REQUIREMENT**

Sanction	Actual	Requirement	Surplus
174	124	164	10

# SANCTION VS REQUIREMENT OF STAFF AT SSE/C&W/TEN

S. No	Category	Sanction	Actual	Requirement	Surplus
1	SSE (In charge)	1	1	1	0
2	SSE/CW	10	10	10	0
3	JE/CW	3	1	3	0
4	Sr.Tech/CW	15	15	15	0
5	Tech-I/CW	59	18	55	4
6	Tech-II /CW	8	16	8	0
7	Tech-III/CW	12	23	12	0
8	C&W/Helper-I	50	31	44	6
9	Carpenter Gr I	4	0	4	0
10	Carpenter Gr III	1	1	1	0
11	Trimmer Gr I	1	0	1	0
12	Trimmer Gr III	1	0	1	0
13	Painter Gr I	_			_
14	Painter Gr III	2	2	2	0
15	Sr.Tech/ Welder	1	1	1	0
16	Welder Gr I	1	1	1	0
17	Welder Gr III	1	1	1	0
18	Ch.OS	1	1	1	0
19	OS	2	1	2	0
20	Junior Clerk	1	1	1	0
	Total	174	124	164	10

### **SUMMARY OF RECOMMENDATION**

#### Recommendation

4 vacant posts of Technician Gr-I in GP Rs.2800 and 6 vacant posts of Helper in GP Rs.1800, is found excess to the requirement in SSE/C&W/TEN which may be surrendered and credited to the vacancy bank. (10 Posts)

#### **CHAPTER - IV**

# 4.0 PLANNING BRANCH'S REMARKS ON CO-ORDINATING OFFICER'S VIEWS:

4.1 The views of CDO/TEN & the Co-ordination Officer were received vide letter number U/M/staff, Dt.: 16.03.2020 for the works Study and the same is placed as Annexure VII. The remarks of Planning Branch based on the Views of Co-ordination Officer are appended below

#### 4.1.1 Co-ordination Officer's view-1

RCD/TEN was handed over to SSE/TEN on 01.02.2020, at present due to shortage of staff the fueling work is managed with two 12 hours roster with 3staff each. In the interest of safety it is to be changed to 8 hours roster. Staff requirement for the same to be taken in to account

Planning Branch Remarks: Not agreed to

From table 2.12 S.No.4 (Interior & exterior) watering, garbage disposal and pit cleaning of Primary maintenance & PFTR trains' coaches are done by contract staff.

As per table 3.7 for Amenity & cleaning Pit line the study team has allowed 5 staff. Hence 3 out of 5 staff can be utilized for the above RCD/TEN

#### 4.1.2 Co-ordination Officer's view-2

Staff requirement for running special trains and new trains which may be introduced in future to be considered Maintenance of IRCTC Bharat Dharshan special trains started in the depot on 04.03.2020

Planning Branch Remarks: Not agreed to

The study team has observed from the records maintained by SSE/Platform and also during the field study that the complaints attended by the staff of PFTR/OEA/Platform/Passing through trains are less than 10 per day

Moreover from table 2.12 S.No.4 watering & cleaning of coaches done by contracts staff, hence the allowed 28 staff as per table 3.5.2 may manage the above work load

#### 4.1.3 **Co-ordination Officer's view-3**

There is no dedicated gang for ART special/TEN staff working in IOH/SL is utilized for ART work

Planning Branch Remarks: Not agreed to

As per table 3.4.2 the IOH/SS1/Electrical Sick (0.27 + 0.16 + 0.24) = 0.67 **approximately 1 coach/Day** but the study team has already allowed 30 staff inclusive of ART Maintenance.

The study team comes to a conclusion that the recommendation made in the draft reports stands good.

#### 4.1.4 Co-ordination Officer's view-4

The recommendation is provisionally accepted. The above factors may be taken into consideration and necessary provision for meeting the man power requirement arising out of the same may be made at appropriate time

Planning Branch Remarks: Agreed to

The division may create additional posts based on the requirement of manpower to the workload prevailing at the depot in future,6 considering the yardstick from Railway Board

#### 4.2 **SANCTION VS REQUIREMENT**

Sanction	Actual	Requirement	Surplus
174	124	164	10

#### **SUMMARY OF RECOMMENDATION**

#### Recommendation

4 vacant posts of Technician Gr-I in GP Rs.2800 and 6 vacant posts of Helper in GP Rs.1800, is found excess to the requirement in SSE/C&W/TEN which may be surrendered and credited to the vacancy bank. (10 Posts)

# **CHAPTER-V**

# 5.0 FINANCIAL SAVINGS

5.1 If the recommendations made in the study report are implemented, the annual recurring financial savings will be as under:

SI. No.	Category	Grade pay (Rs.)	No.of post	Mean Pay (Rs.)	Annual savings (Rs.)
1	Tech I	2800	4	71078	34,11,744
2.	Helper	1800	6	43817	31,54,824
		Total	10		65,66,568

SKSK

Sub: - Staff position of C&W Depot @ TEN as on 17.01.2020

S. No	Category	sanction as on 09.10.2018	Actual	Vacancy	Remarks
1.	SSE (In charge)	01	01	••	
2.	SSE/CW	10	10	1000	
3.	JE / CW	03	01	02	
4.	Sr. Techn./CW	15	15	00	
5.	Techn .I/CW	59	18	41	
6.	Techn. II /CW	08	16	- 08	
7.	Techn.III/CW	12	23	- 11	
8.	C&W/Helper/I ✓				
9.	C&W/Helper/II ✓	50	31	19	
10.	Sr.Techn/Carpenter	00		00	
11.	Carpenter Gr I	04		04	
12.	Carpenter Gr II	00		00	
13.	Carpenter Gr III	01	01	00	
14.	Sr.Techn/Trimmer	00			
15.	Trimmer Gr I	01		01	
16.	Trimmer Gr II	00		00	
17.	Trimmer Gr III	01		01	
18.	Sr.Techn/ Painter	00		00	
19.	Painter Gr I	02		02	
20.	Painter Gr II	00			
21.	Painter Gr III	00	02	- 02	
22.	Sr.Techn/ Welder	01	01		
23.	Welder Gr I	01	01		
24.	Welder Gr II	00		1000	
25.	Welder Gr III			00	
		01	01	00	
26.	Ch.OS	01	01	00	
27.	08	02	01	01	
28.	Junior Clerk	01	01	00	
29.	C&W cleaners [SNP]			••	1 SNP
30.	Sub. Helper*				Available
(1000000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 <del>4 4</del> 10		20 Sub KH Available
31.	Medical Safaiwalas				01
	Total	174	124	50	22

<sup>\*</sup> One App. Techn joined at TEN for training w.e.f 24.04.18.

<sup>✓</sup> Helpers - 03 Nos working @ CRC/RCD \*Sub Helpers - 06 Nos working @ GOC/CWC/CRC/RCD/N \* Six Techns. working under RCD/TEN & MDU.



# दक्षिण रेलवे Southern Railway

丑 No: U/P 721/IV/C&W/MISC

मंडल कार्याल य / Divisional Office कार्मिक शाखा / Personnel Branch मदुरै / Madurai – 625016. दि. /Dt.05.07.2019

# Dy. Chief Planning Officer/HQ/MAS

SUB: Work study to review the staff strength at SSE/C&W/TEN-MDU Dn.

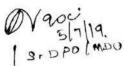
Ref: Sr.Dy.G.M/MAS letter no.G275/WSSR-421920/2019-20 dated: 02.07.19.

&&&&& With reference to the above, the following details are furnished below.

		TEN		
SI.No	Designation	San	Act	Vac
	Sr.Tech/C&W	15	13	02
01	Sr. Technoavv	59	18	41
02	Tech-I/C&W	08	17	+09
03	Tech-II/C&W	12	24	+12
04	Tech-III/C&W	50	41	09
05	Helper/C&W	144	113	31
	Total	0.614 106	115 POLY 100	

List of employees in Mechanical /SSE/JE& CW, Loco Artizans & ancillary in TEN

ilbiolee		San	Act	Vac
SI.No	Designation		11	0
1	SSE/C&W	11	2	1
2	JE/C&W	3	1	0
3	Sr.Tech/Welder	1	0	1
4	Tech I/Welder	1	0	1
5	Tech III/Welder	1	1	1
6	Tech/1/Painter	2	-	4
7	Tech I/Carpenter	4	1	0
8	Tech/III/Carpenter	1	3	+2
9	Tech/II/SPA/DSL	1	2	+2
10	Sr Tech/Loco fitter	0	1	0
11	Tech III/Loco fitter	1	0	1
12	Tech I/Trimmer	1	0	1
13	Tech III/Trimmer	1		



# GOVERNMENT OF INDIA MINISTRY OF RAILWAYS RAILWAY BOARD

No. E(MPP)2019/1/12.

New Delhi, Dated. 30/09/2019

The General Managers,
All Indian Railways, including Production Units and
Others

Sub: Revision of Yardsticks.

An action plan was formulated by Board for Manpower Management, wherein, it was decided that yardsticks of O&M activities of various departments be revised taking into account technology Upgradation, Outsourcing experience and Benchmarking standards set by different Railways.

- Accordingly, the yardsticks of certain activities have been revised and enclosed as an Annexure.
- 3. Henceforth, the requirement of Manpower for the said activities should be calculated based on the revised Yardsticks. The Manpower strength for the existing assets should be reviewed, based on the revised Yardsticks and excess posts be surrendered.
- 4. All the clarifications/queries/references, if any, regarding revised yardsticks are to be made to respective Directorates.
- 5. This issues with the concurrence of Finance Directorate of the Ministry of Railways.
- 6. This supersedes all earlier instructions on the Yardsticks of the respective activities, specified in the annexure enclosed.
- Please acknowledge receipt.

30 119 Alay Jha Joint Director E(MPP) Rallway Board

Annexure to Board's letter no. E(MPP)2019/1/12 dated. 30/09/2019

 Yardstick for TRD activity of Electrical Department for Non-Suburban Area is fixed as 0.22/Track Kilometer, with the following activities to be additionally outsourced.

OHE non-power block	Remarks
OHE other works	These activities to be outsourced. Only minimum
PSI Maintenance PSI Operation & Manning	Supervisory agency and related work to be in house.  All PSI activities to be outsourced. Only minimum supervisory and supporting staff required to monitor.
Centralized Activities	Activities excluding TPC manning, drawing and technical staff including clerical staff and Helpers at home.

The revised staff Yardsticks for Electric Loco Maintenance (TRS) in loco sheds for different types of locomotives are decided as under,

Type of Locomotives	Revised Yardstick
Conventional Loco(freight) with DC drive with Hitachl TM(WAG5) and NAG7	3 staff / loco
Other conventional locos with DC drive including coaching locos	3.5 staff / loco
3-phase locomotive (WAG9, WAP7)	2.5 staff / loco.

with activities for outsourcing noted hereunder:

Already a number of activities are mandated to be outsourced and are being outsourced in various loco sheds. In addition the following activities to be additionally outsourced:

Conventional Locomotives - DC TM overhauling; overhauling of contractors by OEMs; Overhauling of auxiliary motor.

Three Phase Locomotives – Compressor overhauling; TM overhauling; Overhauling of Auxiliary motors

Further, activities to be outsourced can be identified by respective loco sheds and followed accordingly with the approval of respective PCEE on local need basis and local conditions.

3. Crew Review - Freight Services

After review of various methods followed by different Zonal Railways, it was decided to uniformly adopt on all Zonal Railways, the following method for requirement of freight crew:

 the method of progressive crew hours based on peak six monthly review, i.e. 12 fortnights for the preceding year, should be followed for calculating the bare crew requirement, and

Ine additional requirement Leave Reserve, Rest Giver atc shall be governed by extantifules

4. Coach Maintenance - Electrical: Maintenance & escorting staff for AC coaches as well as maintenance staff for TL coaches.

Revised yardstick for Coaching stock (Electrical) for maintenance for AC coaches, TL coaches, power cars, escorting staff & train passing staff in the Coaching depot is as under:

Activity	Revised yardsticks	
(a) TL COACHES:		
(a) Primary maintenance: SG TL/LHB TL coaches	0.24 staff per coach holding for primary maintenance (ICF).	
(b) Secondary maintenance: SG TL/LHB TL coaches	0.15 staff per coach handled for secondary maintenance.	
(c) Train passing for TL/AC coaches	0.05 staff per coach holding	
(d) Sick line attention	0.05 per coach holding.	
(ii) AC COACHES:	- sopposed including.	
(a) Primary maintenance :		
ICF & LHB SGAC coach with RMPU	1.10 staff/coach holding for primary maintenance	
ICF & LHB EOG AC coach with RMPU	0.8 staff/coach holding for primary maintenance	
. (b) Secondary maintenance:		
ICF & LHB SGAC coach with RMPU	0.46 staff/coach holding for Secondary maintenance	
ICF & LHB EOG AC coach with RMPU	0.36 staff/coach holding for Secondary	
(c) Sick line attention	0.20 staff per coach	



# 5. Coach Maintenance - Mechanical

Primary Maintenance	STOCK	0.85/Coach (ICF&LHB) with Interior amenity attention to be outsourced
Terminal attention under RPC-4	ICF/LHB STOCK	0.3 Man/Ceach
PF return trains nominated for Rolling In Examination + Clean Train Station etc.	ICF/LHB STOCK	0.2 Man/Coach
: Sick Line		0.12 Man /Coach
Inspection Carriages	Per IC holding	1.76 Man/IC holding
Staff training (Requirement of trainer)		As per training norms
<ul> <li>ART &amp; Accident tellel;</li> <li>Mill Wright,</li> <li>Welfare measure,</li> <li>Ancillary staff</li> </ul>		Existing norms for ART & Accident relief     Balance activities to be on need basis.
Linen Management	Per AC coach holding	18/AC Coach holding*     Zenal Railways to consider cutsourcing this activity.

#### Note:

- Leave reserve Sirest givers may be provided as applicable in addition to above yarostick
- 2. The norm does not cover Ministerial staff and Divisional Control staff,

#### Activities to be outsourced:

- All ocach cleaning and watering activities including en-route watering (Already identified for outsourcing).
- Coach amenity attention including carpentry, welding, trimming, plumbing/pipe fitting and provision of items like window glass, mirror, bottle holder, snack table, taps and faucet etc.
- 3. Attention to fire extinguishers (Already outsourced).
- Linen washing and distribution (Already outsourced on most of the depots)
- New amenity/security activities like PA/PIS, CCTV & infotainment etc.

No. E(MPP)2019/1/12.

Dated. 30/09/2019

Copy forwarded for information to:

1. PFAs, All Indian Railways and Production Units, DG/RDSO,DG/NAIR,Dir/CTIs.

 The Dy. Comptroller & Auditor General of India (Railways), Room No.224, Rail Bhawan, New Delhi. (with 40 spares).

For Finance Commissioner/Railways

#### Annexure - IV

#### SOUTHERN RAILWAY

No . U/M/ Staff

Office of the Coaching Depot Officer Coaching Depot, Tirunelveli Date: 16.03.2020

#### Dy.Chief Planning Officer Planning Branch./S.Rly

Sub: Views/Comments on work study report on staff strength at TEN Depot-Reg. Ref: Works study report No.G.275/WSR-421920/2019-20 dt.27.02.2020

As per the work study report, 4 vacant posts of Technician-I in GP-2800 and 6 vacant posts of Helper in GP-1800 are recommended to be surrendered and credited to the vacancy bank. In connection with the above, the following views are furnished.

- RCD/TEN was handed over to SSE/C&W/TEN on 01.02.2020. at present due to shortage of staff, the fueling work is managed with two 12 hours roster with 3 staff each. In the interest of safety, it is to be changed to 8 hours roster. Staff requirement for the same to be taken into account.
- Staff requirement for running special trains and new trains which may be introduced in future to be considered. Maintenance of IRCTC Bharat Dharshan Special train started in the depot on 04.03.2020.
- There is no dedicated gang for ART special/TEN. Staff working in IOH/SL is utilised for ART work.

The recommendation is provisionally accepted. The above factors may be taken into consideration and necessary provision for meeting the manpower requirement arising out of the same may be made at appropriate time.

Copy to:Sr.DME/MDU for kind information please.

कोचिंग डिपो अधिकारी (के व वै) Coaching Depot Officer (Carriage & Wagon) दक्षिण रेलवे / Southern Railway

तिञ्जेलवेली / Tirunelveli