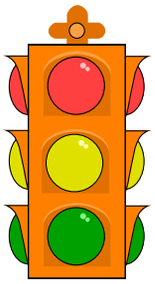


WORK STUDY TO REVIEW THE SIGNAL STAFF STRENGTH IN SSE/SIG/AWY– TRIVANDRUM DIVISION

SOUTHERN RAILWAY

PLANNING BRANCH

G.275/WSSR-521920/2019-20

WORK STUDY TO REVIEW THE SIGNAL STAFF STRENGTH IN SSE/SIG/AWY – TRIVANDRUM DIVISION

STUDIED BY

WORK STUDY TEAM
OF
PLANNING BRANCH

SEPTEMBER 2019

(i)

INDEX

(i)

ACKNOWLEDGEMENT

The study team conveys its gratitude to DRM/TVC, ADRM/TVC, Sr.DSTE/TVC, DSTE/TVC, ADSTE/ERS, SSE/SIG/HQ/TVC, SSE/SIG/AWY, other supervisors and staff of S&T Branch/Trivandrum Division for their valuable guidance and co-operation for completion of the study in time.

(ii)

AUTHORITY

Annual Programme of work studies approved by SDGM for the year 2019-20.

(iii)

TERMS OF REFERENCE

Work study to review the signal staff strength at SSE/SIG/AWY in Trivandrum Division.

(iv)

METHODOLOGY

The following methodology has been adopted while conducting the study.

1. Collection of data.
2. Discussion and interaction with Officers and Unit officials.
3. Field Unit observation.
4. Working out the requirement on application of benchmark ratio and need basis duly taking into account of the salient features of new advanced technologies.

ꕥꕥ.

SUMMARY OF RECOMMENDATIONS:

The following vacant posts mentioned below in respect of SSE/SIG/AWY section is found excess to the requirement, the same may be surrendered and credited to the vacancy Bank.

(Total – 04 Posts)

Category	Grade Pay (Rs.)	No. of posts	Total
HELPERS	1800/-	4	4
TOTAL			**04**

SUMMARY OF RECOMMENDATIONS(REVISED)

The following vacant posts mentioned below in respect of SSE/SIG/AWY section is found excess to the requirement, the same may be surrendered and credited to the vacancy Bank.

(Total – 02 Posts)

Category	Grade Pay (Rs.)	No. of posts	Total
HELPERS	1800/-	2	2
TOTAL			**02**

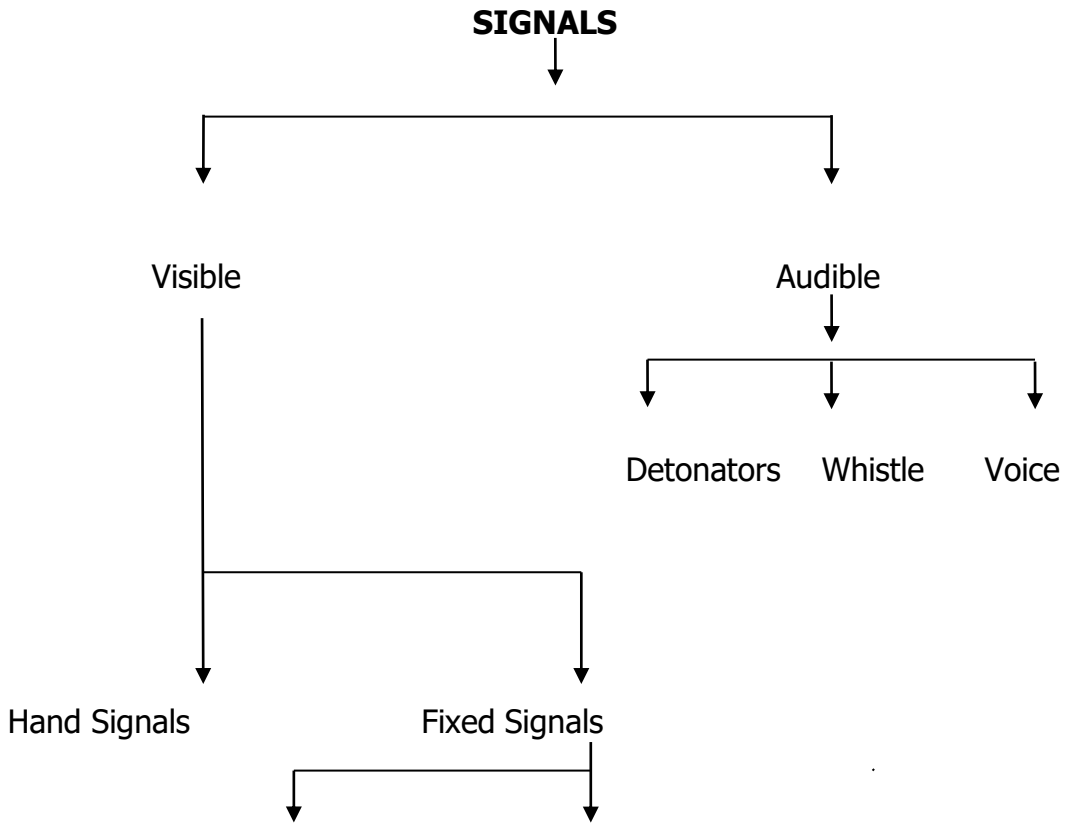
ppp.

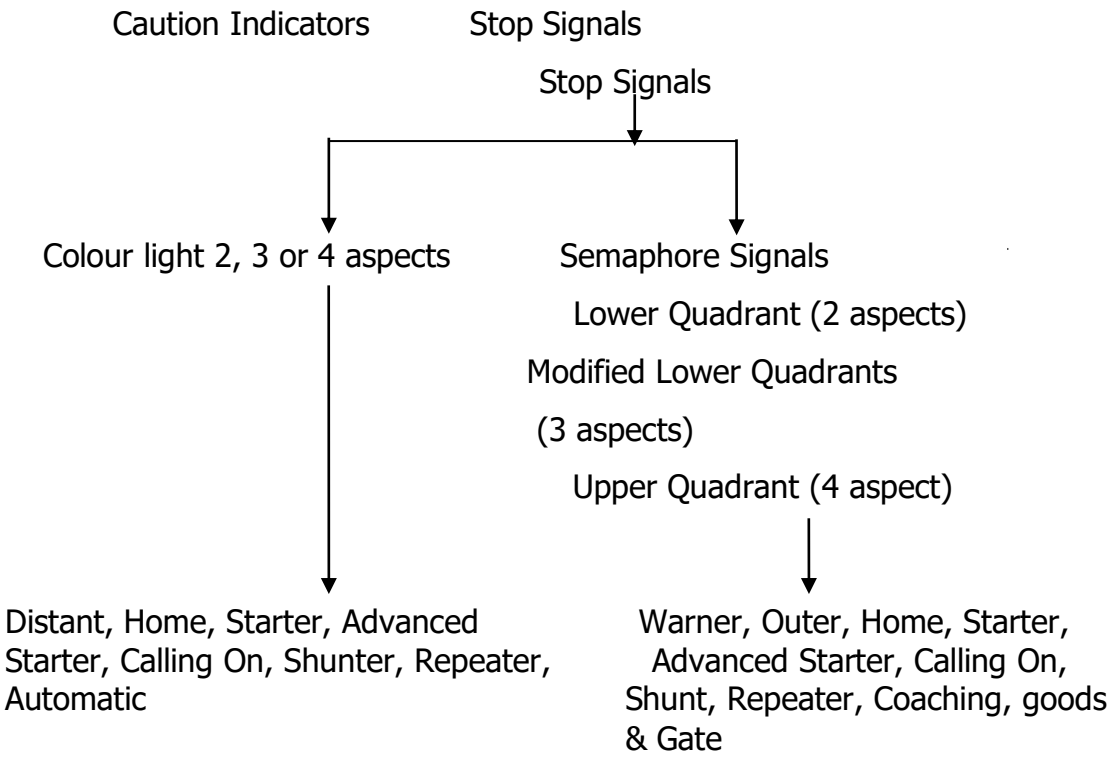
CHAPTER – I

1.0 INTRODUCTION

1.1 Indian Railway is an Organization having Welfare and Social obligation to the Nation for Safety, Security & Punctuality in train running operation. Capital and labour being the basic factors which contributed towards infrastructure and production. The Organization is also to be viewed as financially viable to make use of its machinery and manpower to achieve maximum utilization.

Signal is a medium to convey particular pre-determined meanings in non verbal form. Various methods are used to convey the meaning by "Signals" in a non-verbal form as used by Scouts, Policemen, Road Signals, Navy and Air traffic Control, etc. which convey definite information. The chart below gives the various forms that could be adopted in Indian Railways.





1.2 The efficient upkeep of Signal & Telecommunication assets of the Railways is the responsibility of the open line organization of the Signal & Telecommunication Engineering Department. In Indian Railways, Signal & Telecommunication Department plays a vital role in the operation of train with speed, safety and punctuality. The Signal Branch is responsible for the signal network of entire Indian Railways, which is committed to provide safe and efficient transportation system. Signalling systems promotes safety, enhance line capacity and improve flexibility of the operation.

1.3 Signals are the Salient sentinel providing Safety in train operations. Procedures and practices in maintenance and operation are vital to provide the Safety. The Signaling System is being continuously updated to meet the growing needs of traffic and hence new procedures are being evolved and implemented by Supplementary instructions, corrections and modifications to the Signal Engineering.

The signal department is headed by PCSTE in the Zonal level. The Signal Manual, General Rules, Block Working Manual etc. are the governing rules and many joint inspections with Operating, Engineering and Electrical

Departments and maintenance works are to be carried out in liaison with these departments.

Signaling system has undergone a drastic advancement in technology such as MACL Signals, centralized RRI/SSI, automatic block system, data logger, BPAC, Audio frequency Track circuiting, Intermediate Block Signals, Train Actuated Warning System, Anti-collision Device, etc. This is going to be a continuous process in future also.

The most important terms in the terminology of S&T is interlocking between signals, points, Track Block Instruments, Level Crossing Gates which will facilitate their operation in a prescribed sequence to ensure safety.

1.4 Keeping the above objectives in view, an analysis is made to study the present system of functioning in SSE/SIG/AWY Unit of Trivandrum Division through Benchmarking and need basis as a means of reducing cost and improving productivity. It is the process of comparing the performance with the most successful competitor who is managing with optimum productivity level. With the increased DESUS and further scope of growing technology, the workload Vs requirement of the manpower is critically examined in the subsequent chapters.

ꕥꕥ.

CHAPTER-II

2.0 PRESENT SCENARIO

Southern Railway has six Divisions namely MAS, MDU, TPJ, PGT, TVC & SA. Signalling Department plays a vital part in the Railway working system by handling passenger traffic and freight movements and keeping the aim of Railways - Safety, Security and Punctuality. Among the six Divisions, Trivandrum Division comes under the category of holding less than 1, 20,000 (DISTUs) Divisional Integrated Signalling & Telecom Units.

2.1 The Signal Department of TVC Division is functioning under the overall control of Sr.DSTE who is assisted by DSTE, ADSTEs, SSEs and Supervisors in extending Co-operation for smooth and efficient functioning of the Department with sub units/sections.

2.2 This study is pertaining to SSE/SIG/AWY and the existing system of manning this depot comprises location, jurisdiction, scale check, deployment, activities and authority of control.

2.2.1 Location

Office of the SSE/SIG/AWY is situated in the Alwaye station premises at the end of the PF-1 towards Trissur.

2.2.2 Jurisdiction

The jurisdiction covered by this Unit is from IJK to VPDM. The entire signal maintenance pertaining to all these stations, yards, level crossing gates are coming under the control of SSE/SIG/AWY.

2.3 The following are the stations and LC gates in the jurisdiction of SSE/Sig/AWY:

SL NO	STATION	LC GATES	IBS
1	IJK	LC NO 34	CKI-KUC
2	CKI	LC NO 35	AFK-AWY
3	KUC	LC NO 36	
4	AFK	LC NO 44	
5	AWY	LC NO 46	
6	KLMR	LC NO 53	
7	IPL	LC NO 56	
8	VPDM	LC NO 57	
9		LC NO 58A	
10		LC NO 59A	
11		LC NO 61	
12		LC NO 64	
13		LC NO 64A	
14		LC NO 64B	
15		LC NO 64C	

2.4 Types of signaling and system of working:

Stn	Type of signaling	No of routes	No of roads	No of track circuits	No of pts	No of main signals	No of calling on signals	No of shunt signals	Power supply arrangements
IPL	MACLS RRI system II	113	7	45	27	20	14	15	IPS conventional
KLMR	MACLS PI	35	5+4	37	23+8	13	2	13	IPS
AWY	MACLS PI	33	4+5	32	16+8	19	2	11	IPS
AFK	MACLS EI	84	4+5	43	25+6	16	6	14	IPS (2 NOS)
KUC	MACLS PI	4	2	12	0	8	0	0	IPS
CKI	MACLS PI	29	4+3	22	13+4	15	2	6	IPS
IJK	MACLS PI	25	3+1	19	8+2	23	2	4	IPS
VPDM	MACLS RRI system I	32	4	15	6	7	1	11	IPS
KRAN IBS	IBS signaling			4		4			CONVENTIONAL
CWR IBS	IBS signaling			4		4			CONVENTIONAL

2.5 **Duty hours of staff**

08.00-13.00 hrs

14.00-17.00 hrs for day duty

18.00 hrs to 06.00 hrs for call duty at AWY only.

2.6 **Block Instruments:**

All the double line stations are provided with SGE type lock and Block instruments and FM block instrument.

DETAILS OF LC GATES: = 15

- No of traffic LC's = 4
- No of Engg LC's = 11

2.7 The actual staff strength of this Depot is 24 as per division and 22 as per the section as against the sanctioned strength of 32. The scale check statement is placed as **Annexure-I**. The assets details are placed in **Annexure-II(a)**. This unit is responsible for efficient upkeep of Signaling assets. SSE/SIG/AWY is responsible for the maintenance and functioning of the installations under his charge and co-ordination with ADSTE/ERS for all technical matters. In addition he has to carry out testing overhauling, carrying out alterations to the existing signals and interlocking installation in accordance with appropriate plans and instructions.

On critical examination of the scale check of SSE/SIG/AWY it could be seen that the total sanction strength and actual strength in category wise is as follows:

Sl. No	Category	Pay Band + GP	Sanction	Actual	VAC
1	Senior Section Engineer	9300-34800 + 4600	2	2	0
2	Junior Engineer	9300-34800 + 4200	2	1	1 (APPRENTICE JE)
3	Sr.Technician	9300-34800 + 4200	6	5	1
4	Technician Gr. I	5200-20200 + 2800	10	5	5
5	Technician Gr. II	5200-20200 + 2400	4	3	1
6	Technician Gr. III	5200-20200 + 1900	1	6	-5
7	Helper	5200-20200 + 1800	7	2	5
TOTAL			**32**	**24**	**8**

2.8 **The present staff deployment is detailed as below**:

STN	Details of staff deployment							
	SSE	JE	Sr. Tech	Tech- I	Tech-II	Tech-III	Helpers	Total
IJK	-	-	1	-	1	1	-	3
CKI	1	-	1	-	-	-	1	3
KUC	-	-	-	-	1	-	-	1
AFK	-	-	1	-	1	-	-	2
AWY	1	-	1	1	-	3	1	7
KLMR	-	-	1	-	-	1	-	2
IPL	-	1	-	2	-	1	-	4
VPDM	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
TOTAL	**2**	**1**	**5**	**3**	**3**	**6**	**2**	**22**

Note: 1. One employee is transferred to electrical department on passing GDCE.

2. One employee is long absent.

2.9 **OUTSOURCING:**

Many activities can be outsourced in the unit of SSE/Sig/AWY as being done in other divisions of Southern Railway. Some of such activities recommended by Railway Board are listed below and it seems that no such activities are outsourced as on date.

- Trenching and laying/renewal of cables
- Loading/unloading
- Solar panel maintenance
- Related works with tracks, points & crossings
- Repair& Return Contract (RCC) for charger, Inverter, IPS, Data logger, Digital Axle counter, SSI etc
- Truck/pick up van on hiring basis

As on date, no activities are outsourced as per the instructions received from SSE/SIG/AWY.

AMC DETAILS OF EQUIPMENTS:

1. UPS (2 Nos)
2. Data Logger (8 Nos)
3. GG tronics BPAC (28 Nos)

Supervisory Duties:

- SSE/Sig/AWY is responsible for the maintenance as well as smooth/ correct functioning of the installations under their charge and they are directly reporting to ADSTE / ERS for all the technical staff matters.
- In addition they have to carry out day to-day works / attend complaints and special works in emergency.
- They have to carry out testing, overhauling and carrying out alterations to the existing signals and interlocking installation in accordance with appropriate plans and instructions.
- Monthly inspections,

- Quarterly inspections,
- Joint inspection with P. Way and O.H.E
- Footplate inspection
- Annual cable meggering
- Accompanying with officer for Inspection with tools, plans and manuals.
- In addition to the above technical works, they are responsible for Preparation of PCDO statement, Estimates schedules for periodical inspection of cable installations, earth resistance etc. Co-ordinating with Divisional / HQ officers, maintenance of Stores, T&P items, material planning and preparation of Indents, controlling of staff and welfare and establishment matters.

2.10 **Duties of Technicians :**

- Periodical maintenance of signals, block instruments, Interlocking gears
- Panels, RRIs, track circuits both preventive and repairs.
- Replacement of spare parts, equipment's etc.
- Attendance of failures
- Restoration of works during accidents and unusual occurrences.
- Cleaning, lubricating, Testing etc. of equipments.
- Assisting Engineers, Electrical staff wherever S&T items are involved.
- Disconnection works.
- Maintenance of records.
- Collection of store items and T&P etc.

2.11 **MAINTENANCE SCHEDULE:**

Maintenance of Signaling gears by Technicians	-	Fortnightly
Inspection by JE	-	Monthly
Inspection by SSE	-	Quarterly
Footplate Inspection	-	Monthly
Joint Footplate Inspection	-	Quarterly

- Joint Inspection of Points & Crossings - Quarterly
- Joint Inspection of Track Circuits - Quarterly
- Joint Inspection with TRD - Yearly

As per SSE/SIG/AWY, all signaling gears are maintained once in fifteen days.

2.12 Signalling Assets at the unit of SSE/SIG/AWY (As on 31.03.2019)

Ref. No.	Description	Unit value	No. of units	**Total units**	Total value (signaling Asset)
9	Panel indication each	1	965	**965**	965
10	Colour light signal 2 Aspect	5	92	**92**	460
11	Colour light signal Multiple Aspect	6	42	**42**	252
12	Route indicator per route	5	34	**34**	170
13	Colour/position light shunt signal and shunt permit indicator	4	78	**78**	312
14	Calling on signal in colour light area	0.5	18	**18**	9
15	Illuminated A,AG signs and guards repeater signals	0.5	3	**3**	1.5
17	IBS signal/mid-section LC gates stop signal	10	19	**19**	190
18	Slot or control for signal, point, sliding, crank-handle, level crossing gate mechanical or electrical	2	393	**393**	786
19	Single rail DC track circuits	4	239	**239**	956
22	Axle counter complete /including multui entry	20	9	**9**	180
24	Key locked point	3	24	**24**	72
26	Rod worked facing point without lock/lock retaining bars	2	2	**2**	4

29	Electrically operated point and lock	6	117	**117**	702
31	L C gate telephone only within station limit	2	5	**5**	10
34	L C gate lifting barrier winch operated within station limit	4	5	**5**	20
37	L C gate lifting barrier winch operated outside station limit	20	10	**10**	200
40	Single line token less block instrument per pair	6	2	**2**	12
41	Double line block instrument per pair	6	9	**9**	54
42	Extra weight age for RE area	1	21	**21**	21
43	Key transmitter per pair	1	9	**9**	9
45	Block proving axle counter	50	30	**30**	1500
46	Route relay/panel interlocking equipment complete per route	2	359	**359**	718
48	Indicator boards shunting/block limit sighting and others	0.5	72	**72**	36
49	Data logger a) up to 256 port	10	2	**2**	20
50	b) beyond 256 port	20	8	**8**	160
53	Point to point communication	1	33	**33**	33
TOTAL					**7852.5**

2.13 **SIGNAL UNITS (station wise & gate wise)**

As per the signaling assets installed under the control of SSE/SIG/AWY the lever units are given below (as on 31.3.2019). The list of lever units of stations & gates under the control of SSE/SIG/AWY is placed in **Annexure-II (b).**

SL NO	STATION/LC GATES	LEVER UNITS
1	IJK & LC. 34&35	841.5
2	CKI & LC NO.46	822.5
3	LC NO.53 (IBS)	202.5
4	LC NO. 56&57	137
5	KUC & LC NO. 58A	380
6	AFK & LC NO. 59A	1050.5
7	LC NO. 64	75
8	IBS-LC NO. 64A	185
9	AWY & LC NO. 64B, 64C	1070.5
10	KLMR	1070.5
11	IPL	1439
12	VPDM	578.5
	TOTAL	7852.5

2.14 **FAILURE STATUS:**

The following are the failures which affect the train operations in the Signal Department and the same is tabulated month wise for the period 2016-19 (from April 2016 – March 2019).

MONTH	2016-2017	2017-2018	2018-2019
APRIL	23	18	28
MAY	36	41	22
JUNE	24	26	37
JULY	27	21	23
AUGUST	28	31	26
SEPTEMBER	11	19	21
OCTOBER	25	30	27
NOVEMBER	18	30	26
DECEMBER	24	20	18
JANUARY	37	15	23

FEBRUARY	24	20	17
MARCH	25	12	14
Total S&T failures	302	283	282
Total Non S&T failures	168	187	215
Grand Total	470	470	497
Average per month (both S&T and Non S&T failures)	39	39	41
Average per day (both S&T and Non S&T failures)	1.3	1.3	1.3
S&T failure alone (per month)	25	24	24
S&T failure alone (per day)	0.83	0.8	0.8

2.15 **TYPES OF S&T FAILURES**:

- The following are the various classifications of Signal failures which affect the train operation and attended by the maintenance staff on day to-day maintenance.
  1. Block failure
  2. L.C. failure
  3. Point failure
  4. Signal failure
  5. Track failure
- The above failures may be due to the following causes / reasons:
  1. S&T failures
  2. Operating failures
  3. OHE failures
  4. Engineering failures
  5. Misc failures
- From the above failure analysis, it is observed that the rate of failure attention is very meagre and does not provide any guidance for

arriving man power requirement. Since the Signal maintaining staff has to perform the routine directive / preventive maintenance apart from attending failures.

2.16 **Reliability measures in Southern Railway is as below:**

- Directed Maintenance
- Replacement of batteries and battery chargers
- IPS for RE area
- Improvement to earthing of control/block etc.
- IRS point machine
- Shelf type track relays
- Surge protection arrangements
- Overhauling of lever frames
- Overhauling of Block Instrument

ꕥꕥ.

CHAPTER – III

3.0 CRITICAL ANALYSIS

3.1 In Order to maintain the financial viability of the Indian Railway Organisation, 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 largest and most important component of the expenditure of Indian Railways, the rightsizing of man power is the best way to reduce unit cost which is an effective way to increase efficiency, safety as well as the economy of Indian Railways.

Rightsizing of man power in Indian Railways is a continuous and comprehensive evaluation and it is being done by the process of comparing man power with the actual work load by Norm / Yardstick and Bench Marking. Norms issued by Railway Board and it is being updated / revised by every month. But along with the rightsizing and restriction of intake it will be necessary and very much essential to utilize the existing man power to the optimum level.

3.2 The outturn and workload of SSE/SIG/AWY Depot has been analyzed with the sanctioned / actual strength and actual deployment of staff. The manpower requirement for entire activities has been worked out based on the present suitable concept of benchmark technique & need basis.

3.3 DESU, DETU & DISTUs

DESU i.e., divisional equated signal units is derived from the total signaling assets of the concerned depot. Likewise DETU is derived from the total telecom assets of a particular depot. As far as DISTU is concerned, is a combination of DESUs & DETUs. The product value/applying factor of signal and Telecom Units is to convert into DISTUs i.e., Divisional integrated signal units which varies from zone to zone and from Division to Division.

3.4 STAFF REQUIREMENT

In general, the staff requirement is worked out considering the yardsticks in vogue. Since yardstick is very old and lot of changes has been taken place in the system of working, Railway Board has formulated a new concept to work out the staff requirement which is Benchmarking. This is very useful, zero based and helps in system improvement comparing by unit to unit. It is one of the best tools available to identify the slack areas of the organization by comparing each one with the best areas in the organization itself and thereby implementation of the best practices followed at best areas, so that the identified slack area can also become the best in a phased manner. Keeping the above concept in view, thorough examination of the collected data is analyzed by the study team, requirement of manpower is arrived, to create a healthy competition and to improve the related efficiency.

3.5 Application of uniform yardstick:

The application of yardstick for shunt signals, calling on signals, shunting permitted indicators, route indicators, LED lamps etc. under broad categories is not very scientific as some of the subsidiary signals have no light in normal aspect and their working time depends on failures, shunt moves, reception on obstructed roads, etc. which is occasional only. So also, the allocation of equal points for all roads is not very scientific since the dealing of trains is mainly on main lines, especially at Intermediate stations. The sub-categorization of certain equipment's is like panel / RRI, LC gates is not very rational especially for routine maintenance and inspection.

There is no guideline to the extent of reduction on signal units on account of outsourcing and AMC in some activities like BPAC, Data logger, IPS, etc. So, a detailed analysis of the signal units seems to be necessary in the study.

3.6 **Calculation of DESU of TVC Division:**

Divisional Equated Signal Units is a derived unit from Signal units after the addition of many other factors and constants like Annual Train Kilometers, Route Kms etc., and the abbreviations in the formula are as under.

A1 =	Total No. of signal units	-	70557.500
F =	Annual Train Kms	-	12124.280
H =	Passenger & proportion of Mixed trains	-	9998.830
J =	Goods including goods proportion of mixed	-	1169.959
K =	Departmental trains	-	146.000
L =	EMU train	-	537.928
M =	Spl Trains	-	271.560
	Total F = H+J+K+L+M	**=**	**12124.28**

Calculation of A2

G = Total Route Kms	=	625.47
F/G-7.3 12124.28/625.47=19.384-7.3	=	12.084
A2 = A1 x (F/G-7.3) x 3.42/100	=	29160.14

Calculation of A3

Signal units/Route Kms	=	112.81
Value of Y	=	0.000
A3 = A1 x Y/100	=	0 .000

Calculation of A4

Z=F/G 12124.28/625.47	=	19.38
A4 = A1 x Z x 0.94/100	=	12856.43

Calculation of A5

A5 = G x 1.67	=	1044.53
DESU= A1+A2+A3+A4+A5	=	113618.60
DESU	**=**	**113619**

3.7 **FAILURE ANALYSIS**

The details of month wise failure for the calendar year 2016-19 is tabulated in preceding chapter vide **para 2.14**.

Total No. of failures for the above period = 867 (for 36 months).

= 867/36

Average per month = 24.08

Average per day = 24.08/30

= 0.80

Say 0.80 failures per day.

The above failure analysis does not provide any perfect guidance or norms for the arrival of manpower requirement. Apart, from attending failures, signal maintainer has to perform the routine, preventive check and maintenance. Also in changing scenario of signaling i.e., Electronic Signaling System, warrants outsourcing of certain activities such as maintenance activities through EOM/AMC contracts for the electronic items like charger inverter, CVT, IPS, Data logger, AFTC, Digital Axle Counter, etc.

3.8 Therefore, the study team has adopted benchmarking methodology & need basis to arrive the manpower requirement for rightsizing the manpower to improve the efficiency coupled with productivity.

CALCULATION:

The total No. of Signal Units of TVC Division : 70557.5

DESU as per Railway Board calculation
(Shown in Annexure-II (b) for TVC Division : 113619

Therefore, 113619/ 70557.5 : 1.61

SO, DESU FOR AWY SECTION = 7852.5 X 1.61

= 12642.53 Say **12643.**

Railway Board has insisted to identify the optimum man power in every unit by which the required operating ratio can be achieved. The yardstick prescribed for the Signal Unit based on 1500 DESU=1MSU is deriving more than double the time of man power compared to the existing sanctioned strength over IR. Hence, Railway Board initiated a committee to identify the new yard stick based on the movement of the Traffic which is on anvil. The present operating ratio of Southern Railway is 161.14, hence as per the Zonal directions, the work study team identify the optimum man power by applying various techniques in which utilizing the best Man power ratio of the Zone, can also be utilized for other Divisions. The SA division signal man power ratio is 2.22 as per Bench marking for the month of May 2019 published by E&R Directorate, applied for the SSE/Sig/AWY section.

As per the current benchmark issued by RB in the Month of MAY 2019, **(Placed as Annexure – III)** TVC division falls under the classification **'Divisions less than 120 DISTUs '.** The best performing signal unit with less than 120 DISTUs is SALEM/SR which has the manpower of 2.22 per 1000 DESUs.

If the best performing signal unit is adopted, the man power required for SSE/Signal/AWY would be = 12643 /1000 X 2.22

= 28.06

= 28.06 Say **28 staff** leaving a surplus of 4 staff.

The Work Study team thoroughly analysed the present working condition of SSE/Sig/AWY Section in TVC Division with data, field study and it could be understood that they arrived man power of 28 can be very optimum and recommends 4 posts as surplus.

Note: the work study team suggests to create one post of office clerk to look after the daily routine work in the office like verification of TA bills, NDA statement, preparation of muster roll, preparation of tenders etc., in order to

reduce the work load of SSE/JE. However, the office clerk may be utilised in the section nearer to AWY (if there is no office clerk is available) in order to optimise the manpower utilisation.

3.9 Station wise requirements:

- IJK - 3
- CKI - 3
- KUC - 2
- AFK - 3
- AWY - 8
- KLMR - 3
- IPL - 3
- VPDM - 3

= 28

3.10 To **Sum up, the Sanction vs Requirement is as follows :**

Sanction Vs Requirement:

Category	Sanction	Actual	Requirement	Surplus
SSE	2	2	2	-
JE	2	1	2	-
Sr.Tech.	6	5	**6**	-
Tech.I	10	5	**10**	-
Tech.II	4	3	**4**	-
Tech.III	1	6	**1**	-
Helper	7	2	3	4
TOTAL	**32**	**24**	**28**	**4**

Recommendation:

Four vacant posts of Helper in Scale Rs. 5200-20200 with Grade Pay Rs.1800/- is found excess to the requirement; the same may be surrendered and credited to the Bank of Surplus Posts**.**

(Four Posts)

ꣿꣿ.

CHAPTER – IV

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

The planning branch remarks is incorporated against the coordinating officer's views received on 26.08.19, vide letter No V/SG.155/work study dated 24.08.2019. The coordinating officer's views are attached in Annexure IV.

Based on the discussion with the coordinating officer, two more posts are allowed on need basis to look after the coordination works with the engineering department such as crossing renewals, packing, point renewal, etc. as there is no sanction for heavy repair gang. Hence, the revised total requirement is 30 instead of 28 as shown in the draft and hence the net surplus posts identified is two helper posts.

Sanction Vs Requirement :(REVISED)

Category	Sanction	Actual	Requirement	Surplus
SSE	2	2	2	-
JE	2	1	2	-
Sr.Tech.	6	5	6	-
Tech.I	10	5	10	-
Tech.II	4	3	4	-
Tech.III	1	6	1	-
Helper	7	2	5	2
TOTAL	**32**	**24**	**30**	**2**

SUMMARY OF RECOMMENDATIONS(REVISED)

The following vacant posts mentioned below in respect of SSE/SIG/AWY section is found excess to the requirement, the same may be surrendered and credited to the vacancy Bank.

(Total – 02 Posts)

Category	Grade Pay (Rs.)	No. of posts	Total
HELPERS	1800/-	2	2
TOTAL			**02**

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:

Sl. No.	Category	Grade Pay (Rs)	No. of post	Money value	Annual financial savings (Rs)
1.	HELPER	1800	2	41944	10,06,656
TOTAL			**2**		**10,06,656**

ꣿꣿ.