

**NORTH EAST FRONTIER RAILWAY**

**WORK STUDY REPORT ON**



**REVIEW OF STAFF STRENGTH OF**

**S & T DEPARTMENT**

**OF TSK DIVISION**

**UNDER Sr.DSTE/TSK**

**CENTRAL PLANNING ORGANISATION**

**EFFICIENCY CELL**

**NORTH EAST FRONTIER RAILWAY**

**MALIGAON/ GUWAHATI-781011**

**WORK STUDY REPORT**  
**ON**  
**REVIEW OF STAFF STRENGTH OF S & T DEPARTMENT**  
**OVER TSK DIVISION UNDER Sr.DSTE/TSK.**

**GUIDED BY:**

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**STUDY NO. WSNF/76 /2018-19**

**CASE NO. Z/375/10/76/2018-19**

**CENTRAL PLANNING ORGANISATION**

**N. F. RAILWAY/MALIGAON**

**GUWAHATI - 781011.**

## EXECUTIVE SUMMARY

SUBJECT : Work study on “Review of staff strength of S & T Department over TSK Division under Sr.DSTE/TSK .”

STUDY NO : WSNF/76 /2018-19

CASE NO : Z/375/10/76/2018-19

AUTHORITY : SDGM/N.F.RAILWAY

CONCERN DIV. : TINSUKIA

DEPARTMENT : S & T

DATE OF COMMENCEMENT : 12.12.18

DATE OF COMPLETION : 18.12.18

DATE OF SUBMISSION : 18.12.18

## TERMS OF REFERENCE:

Annual work study programme approved by SDGM/NFR

## NOS. OF RECOMMENDATION: 1(One)

The study team has proposed to surrender of 11 nos. of vacant posts and 1 No. of manned post , total 12 nos. of posts of different categories (Sr.Tech. B/Smith -1, Tech. B/Smith /Gr-I -1, Tech. B/Smith/ Gr-II-1/Manned Posts , Sr.Trolley Man & Hd. Trolley Man -3, Sr.Tech. Painter-1, Sr.Tech. Carpenter-1, Tech. Carpenter /Gr-I-1, Watch Man-1, Sr.Peon-1, Tech. D/Mech /Gr-I-1), which may be surrendered.

PROJECTED MAN POWER: 12 Posts.

PROJECTED FINANCIAL SAVING: Rs 27.73 Lakhs per annum.

MONTH AND YEAR OF CIRCULATION: DEC/2018

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## **CHAPTER - I**

### **1.0 INTRODUCTION:**

Indian Railways are engaged in transport of passenger and goods trains. S&T Department is responsible of safe and punctual running of trains by providing interlocking among points, T.C, signal, Block Instrument in a particular system of Block working. S&T staff plays very important role dealing the work of maintenance of signalling gears including block instrument, Data loggers, DG sets, Passenger Reservation System, Unreserved Ticketing system, Rail-net and proper functioning of entire signalling system. In pursuance with this policy of Railway Board the Central Planning Organization has conducted this work-study on requirements of S & T Staff of TSK Division.

### **2.0. ACKNOWLEDEMENT :**

Work study team is grateful to Shri N. Singh , Sr.DSTE/TSK for his kind guidance and co-operation for conducting this study.

The work study team is also thankful to Shri Pallab Chutia, ASTE/WC/TSK and Shri Sankar Raksit, SSE/SIG/HQ/TSK for their assistance rendered to conduct the Work Study .

### **3.0. RATIONALE FOR CONDUCTING THIS STUDY**

- Man power is the most costly and precious resource over Indian Railway and Right sizing is the need of the hour.
- Focusing attention on core activities by reducing / elimination of non-core activities.
- Improving the efficiency (out put / input) either by improving the output (numerator) or by decreasing the input (denominator).
- Multi-skilling of existing Staff and combining various activities.
- Upgradation / introduction of automation / Innovations.
- Outsourcing of non core activity.
- Availability of better process/ technology.
- Reducing/ removing redundancy in work.

### **4.0. TERMS OF REFERENCE :**

Review of staff strength of S &T Department over TSK Division under Sr.DSTE/TSK.

### **5.0. METHODOLOGY:**

#### **a) Discussion with Associated officer and Associated supervisor**

During field work, discussion was done regarding present work load of S&T staff in the category of Tech. Black Smith, Tech. Painter, Tech. Carpenter , Tech. Diesel Mech, Watch Man and Trolley Man and adequacy of staff strength with respect to present workload. Discussion also done regarding modernisation of equipment as well as engagement of out agencies against the rightsizing of man power.

Letter of Nomination for Associated Officer and supervisor is placed as Annex-I .

#### **b) Collection of data relating to workload**

After discussion, the relevant data regarding present work load and staff position was obtained from Sr.DSTE/TSK office and on the basis data obtained assessment of work load is done in the study report.

## **CHAPTER-II**

### **EXISTING ACTIVITIES, WORK LOAD & STAFF SUMMARY OF WORK LOAD**

#### **TECH. B/SMITH:**

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Hence, work load of B/smith is reduced many fold.

Staff Position B/Smith under SSE/SIG/SLGR

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Sr.Tech. B/Smith	9300-34800	PB-2	2	1	1
2	Tech. B/Smith/Gr-I	5200-20200	PB-1	5	4	1
3	Tech. B/Smith/ Gr-II	5200-20200	PB-1	1	1	0
4	Tech. B/Smith/ Gr-III	5200-20200	PB-1	1	1	0
	<b>TOTAL</b>			<b>9</b>	<b>7</b>	<b>2</b>

#### **TROLLEY MAN**

In absolute block working, Push trolley working requires 4(four) trolley men, whereas push trolley may not require permission to enter in Block Section, i.e, without line clear it can proceed, which is very essential for P/way staff for checking and repairing of track in Block section as well as station section, but in absolute block system working, the work of signal Dept. is bounded in between Distant signal to Distant signal of both side, thus use of Push trolley is not mandatory for signaling work. In APDJ division the block working is absolute block system, so there is no track circuiting in block section as required in Automatic Block working, hence, all the S&T gears are within station section . Now-a-days train communication to all stations is improved, hence staff movement by trolley is not justified , except any emergency. However, during emergency it is justifiable to move by motor trolley instead of push trolley for speedy movement and in motor trolley working one motor man/driver is required and other staff may be utilized to keep it ON track and OFF track, for this purpose designated Trolley man may not required. Moreover, the motor trolley proceed in block section with proper line clear, so it is not required to OFF track in mid-section as like as push trolley.

Thus, introduction of Motor trolley and as well as improvement of train communication causes redundancy of work load of Trolley man.

**Staff Position Trolley Man under SSE/SIG/SLGR, MXN & TSK**

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Sr.Trolley Man	5200-20200	PB-1	8	5	3
2	Hd. Trolley Man	5200-20200	PB-1			
	TOTAL			8	5	3

**PAINTER :**

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Moreover, painting works are presently carried out by out agencies. Hence, work load of Painter is reduced many fold.

**Staff Position Painter under SSE/SIG/TSK**

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Sr.Tech. Painter	9300-34800	PB-2	1	0	1
2	Tech. Painter /Gr-I	5200-20200	PB-1	0	0	0
3	Tech. Painter / Gr-II	5200-20200	PB-1	0	0	0
4	Tech. Painter / Gr-III	5200-20200	PB-1	0	0	0
	TOTAL			1	0	1

**CARPENTER:**

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Moreover, WOODEN works are presently no use at all. Hence, work load of Painter is reduced many fold.

**Staff Position Carpenter under SSE/SIG/TSK & SSE/Tele/TSK**

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Sr.Tech. Carpenter	9300-34800	PB-2	1	0	1
2	. Tech. Carpenter /Gr-I	5200-20200	PB-1	1	0	1
3	Tech. Carpenter /Gr-II	5200-20200	PB-1	0	0	0
4	Tech. Carpenter /Gr-III	5200-20200	PB-1	0	0	0
	TOTAL			2	0	2

**WATCH MAN & PEON :**

Now-a-days, Most of the works are carried out by out agencies in S&T Department, so requisition of materials is reduced and so requirement of Watchman is also reduced . Similarly, requirement of peon is reduced due to use of internet communication.

Staff Position Watch Man under SSE/SIG/TSK, SSE/SIG/SLGR & Peon under Sr.DSTE/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Watch Man	5200-20200	PB-1	3	2	1
2	Sr.Peon	5200-20200	PB-1	2	1	1
	TOTAL			5	3	2

**DIESEL MECHANICS :**

Staff Position Diesel Mech under SSE/SIG/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC
1	Sr.Tech. D/Mech	9300-34800	PB-2	1	1	0
2	Tech. D/Mech /Gr-I	5200-20200	PB-1	1	0	1
3	Tech. D/Mech / Gr-II	5200-20200	PB-1	0	0	0
4	Tech. D/Mech / Gr-III	5200-20200	PB-1	0	0	0
	TOTAL			2	1	1

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### **CHAPTER –III**

#### **CRITICAL ANALYSIS OF EXISTING WORK LOAD AND STAFF REQUIREMENTS**

The scope of the study is restricted only in the categories of Telephone operator and Trolley man in the S&T department on the basis of redundancy of work load due to inclusion of advanced technology.

##### **3.1. Redundancy of work load B/Smith**

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Hence, work load of B/smith is reduced many fold.

##### **3.2. Staff Position B/Smith under SSE/SIG/SLGR**

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURPLUS
1	Sr.Tech. B/Smith	9300-34800	PB-2	2	1	1	1
2	Tech. B/Smith/Gr-I	5200-20200	PB-1	5	4	1	1
3	Tech. B/Smith/ Gr-II	5200-20200	PB-1	1	1	0	1
4	Tech. B/Smith/ Gr-III	5200-20200	PB-1	1	1	0	0
	<b>TOTAL</b>			<b>10</b>	<b>7</b>	<b>2</b>	<b>3</b>

##### **3.3. TROLLEY MAN**

In absolute block working, Push trolley working requires 4(four) trolley men, whereas push trolley may not require permission to enter in Block Section, i.e, without line clear it can proceed, which is very essential for P/way staff for checking and repairing of track in Block section as well as station section, but in absolute block system working, the work of signal Dept. is bounded in between Distant signal to Distant signal of both side, thus use of Push trolley is not mandatory for signaling work. In APDJ division the block working is absolute block system, so there is no track circuiting in block section as required in Automatic Block working, hence, all the S&T gears are within station section . Now-a-days train communication to all stations is improved, hence staff movement by trolley is not justified , except any emergency. However, during emergency it is justifiable to move by motor trolley instead of push trolley for speedy movement and in motor trolley working one motor man/driver is required and other staff may be utilized to keep it ON track and OFF track, for this purpose designated Trolley man may not required. Moreover, the motor trolley proceed in block section with proper line clear, so it is not required to OFF track in mid-section as like as push trolley.

Thus, introduction of Motor trolley and as well as improvement of train communication causes redundancy of work load of Trolley man.

### 3.4. Staff Position Trolley Man under SSE/SIG/SLGR, MXN & TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Sr.Trolley Man	5200-20200	PB-1	8	5	3	3
2	Hd. Trolley Man	5200-20200	PB-1				
	TOTAL			8	5	3	3

### 3.5. PAINTER :

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Moreover, painting works are presently carried out by out agencies. Hence, work load of Painter is reduced many fold.

### 3.6. Staff Position Painter under SSE/SIG/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Sr.Tech. Painter	9300-34800	PB-2	1	0	1	1
2	Tech. Painter /Gr-I	5200-20200	PB-1	0	0	0	0
3	Tech. Painter / Gr-II	5200-20200	PB-1	0	0	0	0
4	Tech. Painter / Gr-III	5200-20200	PB-1	0	0	0	0
	TOTAL			1	0	1	1

### 3.7. CARPENTER:

In S&T Department modernization is done by replacing Mechanical Signal By Electrical & Electronics Signalling. In the TSK division also all the stations are equipped with RRI, SSI & P.I ( All Electrical & Electronics signalling). Moreover, WOODEN works are presently no use at all. Hence, work load of Painter is reduced many fold.

### 3.8. Staff Position Carpenter under SSE/SIG/TSK & SSE/Tele/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Sr.Tech. Carpenter	9300-34800	PB-2	1	0	1	1
2	. Tech. Carpenter /Gr-I	5200-20200	PB-1	1	0	1	1
3	Tech. Carpenter /Gr-II	5200-20200	PB-1	0	0	0	
4	Tech. Carpenter /Gr-III	5200-20200	PB-1	0	0	0	
	TOTAL			2	0	2	2

### 3.9. **WATCH MAN & PEON :**

Now-a-days, Most of the works are carried out by out agencies in S&T Department, so requisition of materials is reduced and so requirement of Watchman is also reduced . Similarly, requirement of peon is reduced due to use of internet communication.

#### 3.10 Staff Position Watch Man under SSE/SIG/TSK, SSE/SIG/SLGR & Peon under Sr.DSTE/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Watch Man	5200-20200	PB-1	3	2	1	1
2	Sr.Peon	5200-20200	PB-1	2	1	1	1
	TOTAL			5	3	2	2

### 3.11 **DIESEL MECHANICS :**

#### 3.12. Staff Position Diesel Mech under SSE/SIG/TSK

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Sr.Tech. D/Mech	9300-34800	PB-2	1	1	0	0
2	Tech. D/Mech /Gr-I	5200-20200	PB-1	1	0	1	1
3	Tech. D/Mech / Gr-II	5200-20200	PB-1	0	0	0	
4	Tech. D/Mech / Gr-III	5200-20200	PB-1	0	0	0	
	TOTAL			2	1	1	1

### **EXISTING SANCTIONED AND PROPOSED STAFF STRENGTH:**

#### **Redundancy of work load of TROLLEY MAN**

Now-a-days train communication to all station is improved, hence staff movement by trolley is not justified , except any emergency. However, during emergency it is justifiable to move by motor trolley instead of push trolley for speedy movement and in motor trolley working one motor man/driver is required and other staff may be utilized to keep it ON track and OFF track, for this purpose designated Trolley man may not required. Moreover, the motor trolley proceed in block section with proper line clear, so it is not required to OFF track in mid-section as like as push trolley.

Thus, introduction of Motor trolley and as well as improvement of train communication causes redundancy of work load of Trolley man. Even, the Railway Division may create a staff bank of Trolley man at division by polling all trolley men from all branches as such the man power may be utilized judiciously as when required basis, avoiding keeping idle, which may lead a pave way of right sizing of man power.

## 3.2.1. EXISTING SANCTIONED STAFF STRENGTH:

**TROLLEY MAN**

Desgn	Basic	GP	SS	OR	Proposed	Surplus
HEAD TROLLEY MAN	5200-20200	1800	06	08	08	04
Sr. TROLLEY MAN	5200-20200	1800	06			
TOTAL			12	08	08	04

**SUMMARY OF IDENTIFIED SURPLUS POSTS UNDER Sr.DSTE/TSK**

SN	Desgn	Scale of pay	Pay Band	SS	OR	VAC	SURP
1	Sr.Tech. B/Smith	9300-34800	PB-2	2	1	1	1
2	Tech. B/Smith /Gr-I	5200-20200	PB-1	5	4	1	1
3	Tech. B/Smith /Gr-II	5200-20200	PB-1	1	1	0	1(Manned Post)
4	Tech. B/Smith/ Gr-III	5200-20200	PB-1	1	1	0	0
5	Sr.Trolley Man	5200-20200	PB-1	8	5	3	3
	Hd. Trolley Man						
6	Sr.Tech. Painter	9300-34800	PB-2	1	0	1	1
7	Sr.Tech. Carpenter	9300-34800	PB-2	1	0	1	1
8	Tech. Carpenter /Gr-I	5200-20200	PB-1	1	0	1	1
9	Watch Man	5200-20200	PB-1	3	2	1	1
10	Sr.Peon	5200-20200	PB-1	2	1	1	1
11	Tech. D/Mech /Gr-I	5200-20200	PB-1	1	0	1	1
12	Sr. Tech. D/Mech /Gr-I	9300-34800	PB-2	1	1	0	0
	TOTAL			27	16	11	12 (1 NO. Manned Post)

## CHAPTER-IV

### 4.0 RECOMMENDATION

On the basis of work load, scope of utilisation of staff and activities, the study team has proposed to surrender of 11 nos. of vacant posts and 1 No. manned post, total 12 nos. of posts of different categories (Sr.Tech. B/Smith -1, Tech. B/Smith /Gr-I -1, Tech. B/Smith/ Gr-II-1, Sr.Trolley Man & Hd. Trolley Man -3, Sr.Tech. Painter-1, Sr.Tech. Carpenter-1, Tech. Carpenter /Gr-I-1, Watch Man-1, Sr.Peon-1, Tech. D/Mech /Gr-I-1), which may be surrendered and which may be deleted from BOS.

### CHAPTER-V

SN	Category	Pay Band	G/Pay	Basic Pay in Rs	Revised Pay as per 7 <sup>th</sup> CPC	Salary per annum in INR	Nos. of posts proposed for surrender	Total amount in Rs per annum
1	Sr.Tech. B/Smith	9300-34800	4200	26,250	67,462.5	8,09,550	1	8,09,550
2	Tech. B/Smith /Gr-I	5200-20200	2800	12700	15,500	39,835	1	39,835
3	Tech. B/Smith/ Gr-II	5200-20200	1900	12700	14,600	37,522	1	37,522
4	Sr.Trolley Man & Hd. Trolley Man	5200-20200	1900	12700	14,600	37,522	3	1,12,566
5	Sr.Tech. Painter	9300-34800	4200	26,250	67,462.5	8,09,550	1	8,09,550
6	Sr.Tech. Carpenter	9300-34800	4200	26,250	67,462.5	8,09,550	1	8,09,550
7	Tech. Carpenter /Gr-I	5200-20200	2800	12700	15,500	39,835	1	39,835
8	Watch Man	5200-20200	1800	12700	14,500	37,265	1	37,265
9	Sr.Peon	5200-20200	1900	12700	14,600	37,522	1	37,522
10	Tech. D/Mech /Gr-I	5200-20200	2800	12700	15,500	39,835	1	39,835
						TOTAL	12	27,73,030 (27.73 L)

## **FINANCIAL IMPLICATION**

### 5.1. **PROJECTED FINANCIAL SAVINGS PER ANNUM**

**Rs 27.73 Lakhs per annum**

## **CHAPTER-VI**

### **READY RECKONER**

Pay Band	GP	Mean pay	Basic Pay in Rs	M.F. of 7 <sup>th</sup> CPC(2.57) & revised Pay	Salary per annum in INR
9300-34800	4600	22050	26,650	68,490.5	8,21,886
9300-34800	4200	22050	26,250	67,462.5	8,09,550
5200-20200	2800	12700	15,500	39,835	4,78,020
5200-20200	2400	12700	15,100	38,807	4,65,684
5200-20200	2000	12700	14,700	37,779	4,53,348
5200-20200	1900	12700	14,600	37,522	4,50,264
5200-20200	1800	12700	14,500	37,265	4,47,180