

WORK STUDY CELL

Work study report on

Review of Staff in Nagpur-Wardha section of S&T Department in Nagpur Division

OVER CENTRAL RAILWAY

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STUDY NO.

WSCR/S&T/NGP/04/2019-20

Synopsis of the study

StudyNumber	:WSCR/ S&T/NGP/04/19-20						
NameofStudy	: Review of S&T staff in NGP_WF section of Nagpur Division						
Approvedby	:AGM						
Department	:S&T						
Division	:NGP						
DateofCommencement	: 02/07/2019						
DateofCompletion	:22/01/2020						
DateofSubmission	:24/01/2020						
No.ofRecommendations	:01						
Sanctioned strength	:1196						
Men on Roll	:1021						
Vacancy	:175						
No. of posts identified surplus	: 22						
Financial implications	: Rs.1,72,82,628/-						

CONTENTS

Chapter	Description	Page No.
-	Summary of Recommendations&	3
	Suggestions	
I	Introduction	4
II	Observations	5-10
III	Critical analysis and Recommendation	11-13
IV	Financial Evaluation	14

SUMMARY OF RECOMMENDATIONS

	Description	Para ref
	RECOMMENDATIONS:- On the basis of above observations and critical analysis, the following recommendations and suggestions are made:	3.7
	It is recommended that all the existing sanctioned of 22 posts of B/Smith (11-vac & 11-live) of S&T Department in Nagpur Division identified as surplus should be surrendered and live men should be redeployed as SM (Signal Maintainer) or other suitable category against vacant posts in S&T department, subject to fulfillment of other terms and conditions.	
	1 st Phase :- Out of total sanctioned of 22 posts, 11 vacant post of B/Smith should be surrendered immediately from S&T Department of Nagpur division.	
	2nd Phase :- Balance 11 live post of B/Smith should be surrendered after redeployment in SM or other suitable category in S&T Department, subject to fulfillment of other terms and conditions.	
1		Para ref
	SUGGESTIONS:	
	During the course of Work study, it is revealed that 32 no. of posts of Signal Maintainers(SM) in S&T Department of NGP Div. are lying vacant for a long period and as the vacant posts belong to Safety Category, it is suggested that the vacant posts of SM should be filled up on high priority to get rid of scarcity of requisite Manpower.	3.8

ACKNOWLEDGEMENT

The work-study team expresses its deep gratitude to ShriVikasParashar, former Sr. DSTE(Co) / NGP and ShriSudhir Kumar Ch.OS whose valuable guidance provided a successful conclusion to this study and whose productive suggestion enhanced the enthusiasm of the team.

The team is very thankful to other staff, who ever possibly made the availability of documents concerned & directed the team to its positive approach.

AUTHORITY AND TERM OF REFERENCE

The work-study on "Review of S & T staff in NGP-WR section over Nagpur division" is a study proposed by AGM/C.Rly. the same has been included in Annual work study programme for the year 2019-20 with Study No WSCR./S & T/ NGP/04 / 19 – 20.

The terms of reference for given work-study is to review and assess judicious requirement of redundant non operative posts over NGP division corresponding to existing workload.

BASIS OF STUDY

To study the requirement of S &T staff in NGP-WR section.due to changes in up gradation of technology

METHODOLOGY

The work-study team has adopted the following technique for completion of the study.

- Verification of Data provided by S & T Branch in detail with reference to quantum of work load.
- Discussion of details with Supervisor / Staff.
- Critical analysis of the data collected.
- Making recommendations for need base staff in the present context.
- Working out financial implications

CHAPTER1 INTRODUCTION

- 1.1 TheRailways aretheprincipal modeoftransportofnation&haveplayeda crucial roleinthesocial, political andeconomiclife ofthecountry.Railways havesuccessfully adaptedtothechangingneeds oftravelandtransport.Ithas alsoabsorbed advancementinthetechnology andkeptitselfintunewiththe requirements of moving large volumeofPassengersandfreighttraffic. Railways distributedthetaskamongthedifferentdepartment.
- Signal& Telecommunication department playsanimportantrolein working of IndianRailwayswhichisdirectlyconnectedwithalltypesoftrainoperations and communications. In order to proper running of trains in safe and accident free conditions, the S & T staff, plays very important role, dealing the work of maintenance of signaling gears including block instrument, Data loggers D.G sets & proper functioning of entire signaling system.
- 1.3 S&Tdepartmentis havingtwobranchesviz-Signalwhichincludes all signaling systemsfor thepurposeofmovementoftrains/locos in mainline/ branchline andyardsand TelecomwhichdealswithalltypesofRailway telephonesand othermodesofcommunicationlikeinternet,Railnet,faxmachines,cipher etc.
- 1.4 Unlike other central Government Offices/Public Sectors the Railway has its own in-house communication network and does not depend on the communication providers like BSNL. The entire Indian Railways has been brought under communication network and the present advancement in technology has made possible to connect the nook and corner of Indian Railways. In addition to all the above, the Communication Department plays a vital role in Passenger amenities like, Public Address System at railway stations, touch screen to know the reservation status, coach guidance display, LED/LCD arrival, departure boards, scrolling electronic display board, etc.

The nature of Tele-communication Department work can be broadly classified as:-

i) Control communication.

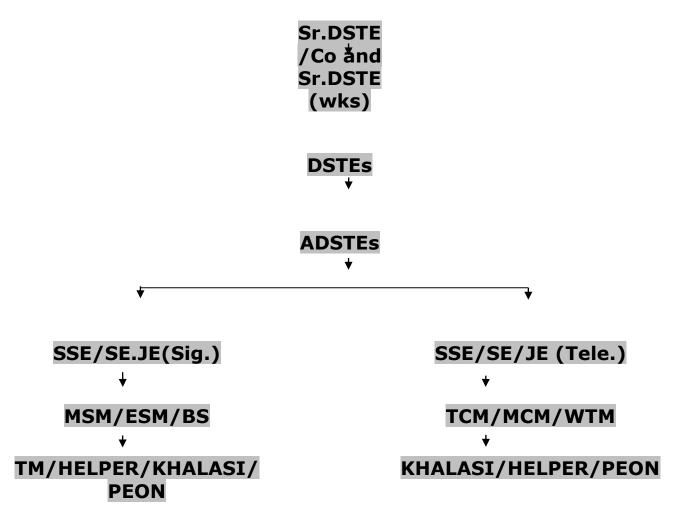
Provides communicationbetween controllers and wayside stations (Overheadline, REcable, OFC/Quadcables).

ii) Telephoneexchange.

ProvidescommunicationwithDivision,ZonalRailwaysand RailwayBoard (overheadline,REcable,OFC/Quadcables).

- iii) Wireless network (communication betweenstations, controller engine crewandfor staff engagedintrainoperations).
- iv) DataNetwork(for passenger reservation,freightmovement,Rail net, etc.).
 - v) Microwave communication (Long distance communication between Divisions, Zonal Railways and Railway Board).
 - 1.4 Theconcept ofright-sizing ofstaffthrough Benchmarking hasbeen introduced by Railway Board.Benchmarkingisthecontinuousprocessofmeasuring our products, services, processes and practices against themost successful competitors or companies which are established industry leaders, then learninghow their excellence was achieved and then setting out to match or even surpass them.
 - 1.5 A Benchmarkingstudyonmanpowerproductivityhasbeenundertakenby Efficiency andResearchdirectorateofRailway Boardforvariousactivities/ departments.Differentparametersforeachactivity havebeen fixedand manpower ratioofall divisions/units onIndianRailways has been computed and the results analyzed to ascertain the overall position of each activity centre.

TheOrganizational set-up of S&Tstaffisasfollows:-



EXISTINGWORKING PROCEDURE

The S&T staffsworkunder the overall supervision of Sr. DSTE/NGP The statement showing Sanction Strength, Men on Roll and vacancy position of NGP division is as under:-

<u>Total scale check of S&T staff of Nagpur Division as on 31/07/2019</u>

	SS	MOR	VAC
Group C	677	555	122
Group D	519	455	64
Total	1196	1021	175

Staff position of Signalling staff in NGP-WR section as on December 2019

S.No	Design	SSE	JE		ES	Helper	Total		
	Station	(Sig)	(Sig)	MCM	ESM-	ESM-	ESM-	-	
					I	II	III		
1	BD	0	0	0	0	0	0	0	0
2	TMT	1	0	0	1	0	2	3	7
3	MLR	1	0	0	0	1	2	3	7
4	CND	1	0	1	1	0	1	3	7
5	DIP	0	0	0	0	0	0	0	0
6	DMN	1	0	0	1	0	2	5	9
7	TLN	0	0	0	0	0	0	0	0
8	PLO	1	0	0	1	0	2	3	7
9	KAOT	0	0	1	0	0	1	3	5
10	DAE	0	1	0	2	0	0	3	6
11	WR	1	0	3	2	0	3	20	29
12	SEGM	2	0	3	1	1	3	3	13
13	SLOR	0	1	1	1	1	0	5	9
14	TGP	1	0	0	1	1	2	2	7
15	SNI	1	0	1	1	1	1	1	6
16	BOK	0	1	1	1	0	3	4	10
17	BTBR	2	0	2	1	0	5	6	16
18	GMG	0	1	1	3	0	1	2	8
19	KRI	1	0	4	3	1	0	1	10
20	AQ	2	1	12	1	0	2	41	59
21	NGP	5	0	8	2	0	4	23	42
	RRI								
	Total	20	05	38	23	6	34	130	256

<u>Staff position of Telecommunication staff in NGP-WR section as on December 2019</u>

S.No	Design	SSE	JE		ES	SM		Helper	Total
	Station	(Sig)	(Sig)	MCM	ESM-	ESM-	ESM-		
					I	II	III		
1	BD	0	0	0	0	0	0	0	0
2	TMT	0	0	0	0	0	0	1	1
3	MLR	0	0	0	0	0	0	0	0
4	CND	0	0	0	0	0	1	1	2
5	DIP	0	0	0	0	0	0	0	0
6	DMN	0	1	1	0	0	1	2	5
7	TLN	0	0	0	0	0	0	1	1
8	PLO	0	0	0	0	0	1	1	2
9	KAOT	0	0	0	0	0	0	0	0
10	DAE	0	0	0	0	0	1	0	1
11	WR	1	1	1	1	1	0	6	11
12	SEGM	0	0	0	1	0	1	2	4
13	SLOR	0	0	0	1	0	0	0	1
14	TGP	0	0	0	0	1	0	0	1
15	SNI	0	1	0	0	0	1	1	3
16	BOK	0	0	0	0	0	1	4	5
17	BTBR	1	0	0	0	2	0	2	5
18	GMG	0	0	0	0	0	0	0	0
19	KRI	0	0	0	0	1	0	1	2
20	AQ	3	0	5	3	0	3	11	25
21	NGP	9	0	21	7	5	5	37	84
	RRI								
	Total	14	3	28	13	10	15	70	153

CHAPTER -II

Observations

- 2.1 Going through the scale check of telecom staff in NGP-WR section, the staff are at bare minimum and the sanction strength can be justified
- 2.2 But in case of the signaling staff the safety cadre of has a vacancy of 32 posts in the overall Division as under

S.No	Designation	6PC	7PC	SS	MOR	VAC
		GP	LEV			
1	ESM/MSM	4200	L6	78	69	9
2	ESM/MSM	2800	L5	150	69	81
3	ESM/MSM	2400	L4	37	45	+8
4	ESM/MSM	1900	L2	40	90	+50
	TOTAL			305	273	32

2.3 In case of Tech(Blacksmith) the scale check of Division is as follows

S.No	Designation	6PC	7PC	SS	MOR	VAC
		GP	LEV			
1	TECH(BS)	4200	L6	3	2	1
2	TECH(BS)	2800	L5	9	3	6
3	TECH(BS)	2400	L4	4	1	3
4	TECH(BS)	1900	L2	6	5	1
	TOTAL			22	11	11

CHAPTER -III CRITICAL ANALYSIS AND RECOMMENDATION

The critical analysis is done based on the existing workload of Blacksmith

- 3.1 There are no Blacksmith staff in maximum units which indicates that the post of B/Smith is no more required.
- 3.2 It is observed that the workload of B/Smith in S&T Department has become very less.
- 3.3 It is learnt that, presently solid connecting rods for Points and LC gates are fabricated and kept ready for replacement which reduces the workload of Blacksmith drastically. Standard tools like chisels, punches, centre punches, etc., can be procured from reputed companies. After usage, the same can be sharpened by using grinding machine. Light weight and handy battery operated/hydraulic drilling machines can be carried and used for drilling holes with precision and accuracy in required places.
- 3.4 Presently, Multi-skilling concept(MTS) is gaining momentum and being adopted universally for rightsizing manpower and optimum utilization of all other resources. In this modern era, updated technology, improved methods and advanced tools can be tried and adopted for efficient use of 5M's i.e. Men, Materials, Machines, Minutes (Time) & Money.
- 3.5 It is observed that the existing 11 posts of B/Smith are lying vacant since long time and presently there is no designated duty of B/Smith as utilization of mechanical lever/points, technological upgradations in S&T Deptt. has been adopted to the maximum.

3.6 <u>Summary of sanction, Actual, Proposed & excess staff strength of BS/HM in S&T Deptt./NGP Div.:</u>

S#	Designation	Sanction	Actual	Vacant	Proposed	No. of surplus post to be surrendered
1	BS	22	11	11	00	22
TOTAL	-	22	11	11	00	22

3.7 RECOMMENDATIONS:

On the basis of above observations and critical analysis, the following recommendations and suggestions are made:

- 3.8 It is recommended that all the existing sanctioned of 22 posts of B/Smith (11-vac & 11-live) of S&T Department in Nagpur Division identified as surplus should be surrendered and live men should be redeployed as SM (Signal Maintainer) or other suitable category against vacant posts in S&T department, subject to fulfillment of other terms and conditions.
- **1**st **Phase**:- Out of total sanctioned of 22 posts, 11 vacant post of B/Smith should be surrendered immediately from S&T Department of Nagpur division.
- **2**nd **Phase**:- Balance 11 live post of B/Smith should be surrendered after redeployment in SM or other suitable category in S&T Department, subject to fulfillment of other terms and conditions.

3.8 SUGGESTIONS

During the course of Work study, it is revealed that 32 no. of posts of Signal Maintainers(SM) in S&T Department of NGP Div. are lying vacant for a long period and as the vacant posts belong to Safety Category, it is suggested that the vacant posts of SM should be filled up on high priority to get rid of scarcity of requisite Manpower.

<u>CHAPTER -IV</u> <u>FINANCIAL IMPLICATIONS</u>

The financial implications for surrendering the following 22 posts of Technician Blacksmith will be as follows

S.No	Design	Level	Mean	Pay	Yearly	No of	Total	Total
			pay	with	money	posts	saving	saving per
				DA	value		per	annum
				17%			month	
1	TECH(BS)	6	73900	86463	1037556	3	259389	3112668
2	TECH(BS)	5	60750	71078	852936	9	639702	7676424
3	TECH(BS)	4	53300	62361	748332	4	249444	2993328
4	TECH(BS)	2	41550	48614	583368	6	291684	3500208
							Total	17282628

An amount of Rs.1,72,82,628/- will be saved on surrendering the above said 22 posts.