EASTERN RAILWAY

WORK STUDY REPORT ON REVIEW OF STAFF STRENGTH VIS-À-VIS WORKLOAD OF DIMINISHING CATEGORIES AT DIVISIONAL HEAD QR UNITS UNDER ENGINEERING DEPARTMENT IN SDAH DIVISION

(STUDY NO.WSER-22/18-19)

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BY

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CONTENTS

SI.No.	Subject	Page No.
1	Acknowledgement	
2	Terms of reference	1
3	Summary of Recommendation	
4	CHAPTER-I Introduction	2-3
5	CHAPTER-II Existing Scenario & Critical Analysis	4-8
6	CHAPTER-III Financial Appraisal	9

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The study team is thankful to PCE/E.RLY, Dy. CE/G/HQ, Sr. DEN (Co-Ord.)/SDAH and all concerned staff at HQ & Division in Engineering department for their heartiest co-operation and guidance in conducting the subject work study successfully.

TERMS OF REFERENCE

The subject work-study has been conducted based on the following terms of references –

- i) Existing sanctioned strength and MOR of Diminishing categories like Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider and Store man.
- ii) Activities of the specific categories such as Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider, Store man, Steno and Typist.
- iii) Need based requirement of the above categories in the present working scenario.
- iv) Activities outsourced.

METHODOLOGY

In conducting the subject work study, the study team has applied the following methodology.

- i) The study team recorded the existing system of working in each category.
- ii) A threadbare discussion was made with the supervisors and staff concerned.
- iii) Critically analyzed the deployment of staff against existing workload.

SUMMARY OF RECOMMENDATION

Summarizing the proposed requirement, it is recommended that 17 posts consist of Steno, Typist, Fero Printer, Chainman, Kh/Helper, Chowkider, Store man and Safaiwala should be rendered as surplus from the existing sanctioned strength of HQ units of Engineering Department in Sealdah Division under Sr. DEN/Co-Ord/SDAH.

CHAPTER-I

1.0 Introduction:

1.1 The subject work study undertaken by the GM's Efficiency Cell was not included in the list of programmed work studies during the year 2018-2019. The study has been undertaken in the 4th quarter of 2018-2019 based on the position collected by the study team during pilot study in connection with the status of staff strength of diminishing categories. This time, a pocket of surplus posts pertaining to diminishing categories of staff namely Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider and Store man deployed at Sr. DEN/Co-Ord office in SDAH Division have been arrested by the study team of GM's Efficiency Cell and the concerned authority is fully convinced with the justification of surplus of such posts raised by the study team during the study period.

In view of above, it is to mention here that the main target of conducting the subject work study is to justifiably curtail the staff strength of diminishing category of staff like Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider and Store man deployed at Sr. DEN/Co-Ord office in SDAH Division.

- 1.2 As the main objective of Indian Railway is to improve the operating Ratio of railway, the GM's Efficiency Cell always pays attention to curtail manpower from different wings of different departments that are found excess in all respect based on the justification drawn by the study team during period of physical observation and as a result, the productivity is increased by decreasing the inputs i.e. by surrendering the excess manpower. Thus, the financial savings achieved due to surrender of manpower would obviously improve the operating ratio of E. Rly.
- 1.3 Indian Railway is facing tremendous financial crunch after implementation of 7th Pay Commission. Operating ratio is gradually increasing. Though Indian Railway is not a business organization but to survive, it is always essential to make the organization in profit i.e. operating ratio should be less than 100. The "Operating Ratios" from 2014-15 to 2018-19 shown in the corporate plan booklet published by the Eastern Railway are given below –

2014-2015	177.27%
2015-2016	180.75%
2016-2017	165.25%
2017-2018	181.15%
208-19 (Proposed)	168.66%

As a result, Railway Board is paying more attention to the concept of rightsizing of manpower to achieve an optimum level of productivity in the Zonal Railways keeping the revised concept of modernization in view.

1.4 In view of the above, Rly Board issued nos. of circulars, orders, etc to minimize expenses and increase earnings to Zonal Railways to achieve better Operating Ratio. The Zonal Railways also implement various measures for financial discipline. At this juncture, the role of Railway Efficiency & Research Directorate is also very important in connection with the productivity without hampering normal progress and

- activity by eliminating diminishing categories/redundant activities, etc. The Railway has also invested huge amount in capital expenditure to improve its infrastructure by adopting new technology time to time.
- 1.5 The prime aim of conducting the subject work study is to assess the revised requirement of Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider and Store man deployed at Sr. DEN/Co-Ord office in SDAH Division consequent upon the changed scenario in activities of these categories. The subject workstudy has been undertaken by GM's Efficiency Cell/E.Rly during the current financial year 2018-2019 to improve the productivity index of the Railway.

CHAPTER-II

2.0 EXISTING SCENARIO & CRITICAL ANALYSIS:

2.1 Indian Railway system is one of the largest railway systems in the world under a single management having over 63000 routes Km and about 1.1 lakh track kilometers. Volume of traffic moved & its relatively low cost to common man makes Indian Railway the prime mover of the nation.

Civil Engineering department or commonly known as Engineering department of the Railways specifically performs or holds responsibility of the following three different kinds of works.

- i) To upkeep the railway track under the supervision of PWI or Sr. Section Engineer (P Way)
- ii) To upkeep the building, sewage, water system etc under the supervision of IOW or Sr. Section Engineer (Works).
- iii) To upkeep the bridges under the supervision of BRI or Sr. Section Engineer (Bridge).
- 2.2 There are total 17 Works units (including Water Works) in Sealdah division out of which three units i.e. W/KPA, E/KPA and WS/KPA are under the administrative control of the CWM/KPA.

The workload in terms of ITKM (Integrated Track Kilometer) of 17 works unit under SDAH division is appended below:

SI. No.	Works Units	ITKM
1	SDAH	346.029
2	NKG	125.437
3	СР	367.395
4	ВР	187.417
5	NH	149.962
6	L/KPA	100.173
7	RHA	183.474
8	KNJ	204.411
9	BEB	115.571
10	ВТ	241.225
11	BNJ	178.01

12	BLN	251.39
13	SPR	331.856
14	NAP	88.468
15	SSE/WEST/KPA	
16	SSE/East/KPA	784.6
17	SSE/WS/KPA	
	TOTAL	3655.418

2.3 Similarly there are 14 PWay units in SDAH division. The work load in terms of ETKM is tabulated below.

Unit wise ETKM						
Unit	Total Track KM	ETKM				
SDAH	112.77	148.77				
ВР	112.846	172.97				
СР	77.352	73.05				
TD/BLH	6.865	2.75				
NH	144.571	182.02				
КРА	156.803	185.61				
RHA	164.796	239.91				
KNJ	180.012	255.71				
BQG	204.617	320.64				
BNJ	166.047	227.21				
ВТ	156.098	204.85				
BGA	144.497	179.65				
SPR	114.64	159.25				
BRP	223.719	277.65				
TOTAL	1965.633	2630.04				

- 2.4 One BRI units at SDAH division is functioning with a work load of 403.56 ITKM under Sr. DEN /Co-Ord/SDAH for maintenance of Bridges throughout the division.
- 2.5 Various categories of staff (ministerial & non ministerial) are working at Divisional Head Quarter unit for smooth functioning of various works of the division under administrative control of Sr. DEN/Co-Ord.
- 2.5.1 Among the various categories of staff at Divisional Head quarter, the study team has conducted the subject work study on diminishing categories such as Typist, Steno, Feroprinter, Chainman, Safaiwala, Chowkider and Store man. The sanctioned strength and men on roll position of these categories are tabulated below.

Unit	Category	Sanctioned strength	Men on Roll	Vacancy
	Steno	7	2	5
	Typist	5	4	1
	Fero Printer	4	3	1
Divisional Head	Chainman	9	1	8
Quarter office	Khalasi Helper	6	5	1
	Safaiwala	2	1	1
	Chowkider	3	1	2
	Store man	1	0	1
то	TAL	37	17	20

2.6 CRITICAL ANALYSIS AND RECOMMENDATIONS

2.6.1 During physical observation, the study team has visited every section in HQ unit and noted their existing workload and various activities.

The study team also discussed concerned supervisors of each section regarding their deployment according to their work load.

Consequent upon the changed scenario of working, it is felt justified by the study team without any bias that, there is a clear scope of surplus of posts from the present staff strength due to proportionate reduction of workload as well as redundant activities of some categories. It is obvious; that the impact of adoption of advance technology i.e. computerized accountable of different activities which were previously maintained manually has reduced the requirement of some categories and some categories are going to be redundant.

2.6.2 To assess the actual requirement of staff, the study team has critically analyzed the activities performed by the concerned staff. As the work load of some of the categories mentioned above could not be quantified by the department, the study team has got no other alternatives except applying Random Sampling Technique on

the daily activities of the concerned staff. This scientific tool generally uses in the cases, where the workload cannot be quantified rightly. In the subject work study, the need based requirement of Typist, Fero Printer, Chainman and Kh/Helper are carried out depending upon their effectiveness through random activity sample technique.

- 2.6.3 The category wise physical observations in regard to assessment of percentage of effective utilization of the staff deployed to cater to the daily workload at HQ office were taken on different period of time and different working days based on the random activity sampling method. The above results would obviously reflect the effectiveness of the staff engaged to perform their workload as a routine measure.
- 2.6.4 During observation period, the effectiveness of the staff such as Typist, Fero Printer, Chainman and Kh/Helper deployed in different area is neatly assessed.

	staff		n taken during pan	Nos. of observation during which staff were found Working		% of Effectiveness		Actual Requirement of Gr.'C' staff based on Effectiveness as assessed		giving LR 6 days work)
Sr. no.	Categories of staff	No. of staff deployed (P)	Total Nos. of observation taken during different time span	Effectively (B)	ldle (C)	Effectiveness without contingent allowance E=B/Ax 100 (E in %)	Effectiveness with contingent allowance @ 20% Ef=1.2E (Ef in %)	Bare Requirement (R=Ef x P)		Actual Requirement giving LR (No RG will be given as 6 days w
1	Typist	4	62	46	16	74	89	3.56		4
2	Fero Printer	3	50	36	14	72	86	2.58		3
3	Chainman	1	26	20	6	77	92	0.92		1
4	Kh/Helper	5	72	53	19	72	87	4.35		5

2.6.5 Need base requirement of Stenographers:

Stenographers are generally attached to the officers to take dictation and published it in prescribed manner. Though, in present practice, most officers preferred to formulate various letters on its own. Hence, requirement of Stenographer has drastically come down. At present, the branch officers employed in SDAH division are listed below.

- a) Sr. DEN/ Co-Ord.
- b) Sr. DEN/1
- c) Sr. DEN/2
- d) Sr. DEN/3
- e) DEN/Track
- f) DEN/Spl/Works
- 2.6.5.1 The study team opines that 1 stenographer each for Sr. DENs and 1 stenographer for both DENs should be employed for catering various workloads in division. Hence, 5 stenographers are required in SDAH division.

2.6.6 Need base requirement of Safaiwala, Chowkider and Store man:

The Safaiwalas are utilized to clean the work place so that the routine works can be carried out in a hygienic condition. Presently, all cleaning activities at different working places are outsourced. The work load of Safaiwala has become nil. Hence, the Safaiwala category has become diminishing category and the requirement of Safaiwala has automatically been reduced.

The activity of Chowkider is to look after the store materials and the activities of Store man is to issue of store materials. Hence, both the activities are directly depending on the area of stores and the number of store items. Due to outsourcing of store materials, the activities of Chowkider and as well as Store man has been reduced and they become diminishing categories.

Hence, study team opines that the vacant position of above mentioned category should be surrendered immediately and the remaining posts should be surrendered in phase wise as the activities of these categories have become redundant.

2.7 As per analysis, made in the study report, it is recommended that the actual requirement of Steno, Typist, Fero Printer, Chainman and Kh/Helper, Chowkider, Store man and Safaiwala duly revised will be as under.

Division/Department		Existing	Propo	Proposed		
SDAH/Divisional HQ	Sanctioned (Gr.C + Gr. D)	MOR (Gr.C + Gr. D)	Vacancy	Requirement	Surrender	
Steno	7	2	5	5	2	
Typist	5	4	1	4	1	
Fero Printer	4	3	1	3	1	
Chainman	9	1	8	1	8	
Khalasi Helper	6	5	1	5	1	
Safaiwala	2	1	1	1	1	
Chowkider	3	1	2	1	2	
Store man	1	0	1	0	1	
TOTAL	37	17	20	20	17	

Consequent upon the changed scenario the study team thus opines to surrender the existing vacant posts of Steno, Typist, Fero Printer, Chain man, Kh/Helper, Safaiwala, Chowkider and Store man in the $1^{\rm st}$ phase and the remaining posts may be surrendered in due course.

2.8 **RECOMMENDATIN**:

Summarizing the proposed requirement, it is recommended that 17 posts consist of Steno, Typist, Fero Printer, Chainman, Kh/Helper, Chowkider, Store man and Safaiwala should be rendered as surplus from the existing sanctioned strength of HQ units of Engineering Department in Sealdah Division under Sr. DEN/Co-Ord/SDAH.

CHAPTER-III

3.0 FINANCIAL APPRAISAL:

3.1 According to recommendation made in para-2.8 the financial savings thus achieved on account of surrendering of 17 posts consist of Steno, Typist, Fero Printer, Chainman, Kh/Helper, Chowkider, Store man and Safaiwala is tabulated below. For easier calculation, the bottom most GP on lower Grade pay is considered.

LEVEL	G.P	PAY	MEAN PAY	D.A	NO OF POSTS	MONE	Y VALUE
				9%		MONTHLY	ANNUAL
2	1900	19900- 63200	41550	3739.5	17	769930.00	9239160.00

Thus, consequent upon implementation of recommendation, the annual savings will be Rs 92, $39,160/-\approx Rs.92.39$ Lakhs.