

SOUTH WESTERN RAILWAY



Work Study Report

on

**“Review of Staff Strength In Diesel Loco Shed In View of Large Scale
Upcoming Electrification of Traction in SWR”.**

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SYNOPSIS

In view of large Scale upcoming change in Diesel Loco Shed due to Electrification of Traction in SWR, Work-Study on "Review of staff strength in Diesel Loco Shed was conducted as per the approval of competent authority. The total Work load under Sr.DME/DSL/UBL is **195** Locos for **May -2020**, where as the creation of posts was obtained only for **150** locos in DSL/UBL.

Present Sanction staff strength for **150** locos is **712** posts (i.e.88 Supervisor,450 Artisan, 95 Unskilled,79 posts for R&M staff and GM loco training School & Simulator against which **629** incumbents are available of which **83** are vacant posts, as per Sr.DME/DSL/O/UBL statement of May-2020.

Hence creations of staff strength for additional work load for **42 Locos** to be obtain as per the existing rules and procedure.

The data collected was evaluated as per Indian Railway Benchmarking, current IR average and general principles of work-study. After critical examination with the existing pattern of work, work study team opines that the requirement of staff under Sr.DME/DSL/UBL for **150 Locos** is **611** duly applying Railway Board Benchmarking report of JAN-2020.

Hence **101** posts i.e $712 - 611 = 101$ found surplus to the requirement in Sr.DME/DSL/UBL of UBL division for the workload of 150 Locos only. Optimisation of manpower results in improvement of work culture, and increase productivity.

Surrenders are proposed based on the said railway board guide lines:

1. Railway Board letter dated; 02.15.07.2020 of Para 6 stating that more non-core activities, which are not directly related with train operations and safety can be outsourced.
2. Railway Board letter dated; 02. 07.2020 of Para 1.(c) stating that 50% of posts of existing vacancies to be surrendered in Non safety.

The balance posts can be surrender duly outsourcing the non-core activities in Sr.DME/DSL/UBL as per Railway Board guideline.

Optimization of manpower results in improvement of work culture, and increase productivity.

The money value thus obtained from surrender of **101** posts may be utilised for creation of posts for additional work load of **42** Locos. Work study team recommends for outsourcing maintenance of non core activities through maintenance contract.

TERMS OF REFERENCE

As per the instructions of AGM/SWR, a study for “Review of staff strength in Diesel Loco Shed in view of large Scale upcoming Electrification of Traction in SWR” has been carried out.

METHODOLOGY

- Collection of data from site.
- Discussions with field officials and staff.
- Benchmarking / Critical Analysis.

SUMMARY OF RECOMMENDATIONS

The work-study team collected the details of staff strength from the office of Sr.DPO/UBL and Sr.DME/DSL/O/UBL office. The work study team critically analyzed the requirement of staff based on the data collected duly applying Indian Railway Benchmark & current IR average of Jan -2020 and general principal of work study.

Present workload of DSL/UBL is 192 Locos,(**Annexure -I**) however creation of posts obtained only for 150 Locos i.e. 712 posts. i.e. 88 Supervisor, 450 Artisan, 95 Unskilled, 79 other than R&M staff and GM loco training School & Simulator.

Scale check statement for 150Locos of May-2020 of Sr.DME/DSL/O/UBL of UBL division is enclosed as **Annexure -II**.

Benchmarking is the continuous process of comparing different units and identifying the employees with maximum output.

Therefore current IR average and Benchmark has been applied to arrive the requirement of staff in DSL/UBL for 150Locos.

As per Railway Board letter Lr.No.2006/E&R/2800/Rly/Imp/Vol.V(Corr.) dated; 31.03.09 to 27.11.20, man power planning is to be adopted based on current IR average, (4.07 men per Loco if more than 80 Locos as per Jan -2020 report) (enclosed as **Annexure -III**).

The Work Study Team has analyzed the Manpower requirement based on the above guide lines and general principal of work study.

The total number of staff required as per Indian Railway Norms is 4.07 Men per Loco (more than 80 Locos). In DSL/UBL for 150 locos.

Total sanctioned posts in DSL/UBL (as per statement of Sr. DMEO//DSL/UBL)	Actual requirement of staff as per present IR average of 4.07 men per Loco if more than 80 Locos as per Jan - 2020 report.	No. of posts recommended for surrender which are found surplus to the requirement of 150 loco holdings.
712	Total 150 locos holding $150 \times 4.07 = 610.5$ men Total requirement = 611men	101 posts

101 posts found surplus against the sanction of 712 posts for 150 Locos only, for additional work load of 42 Locos the money value thus obtained after surrendering may be utilise of creation of posts in DSL/LOCO/UBL.

Immediate surrender of 50% of vacant posts as per Railway Board guide line letter dated: 02. 07.2020 of Para 1.(c) stating that 50% of posts of existing vacancies to be surrendered in Non safety.

CHAPTER – I

INTRODUCTION:-

Capital and labour are the basic factors of production for any organization. The role of these two factors is complimentary and not supplementary. While the capital provides for basic infrastructure, labour makes use of the same and contributes for production. The requisite production cannot be achieved in the absence of any of these two factors.

Human resources are the most indispensable asset of any organization. Effective utilization of this asset is the prime responsibility of the Management, especially for an organization like Indian Railways. The Engineering Department is one of the important department in Indian Railways and first largest department in terms of manpower employed.

The work force cost constitutes around 40% (excluding pension) of gross ordinary working expenses of Indian Railways. Human resource development and manpower planning are thus crucial for Indian Railways financial viability. Continuous updating and designing of job descriptions, reduction of number of categories for job enrichment through multi skilling, qualifications and responsibilities are need of the day.

Review of work methods and sequences regularly, so as to create groups for execution of job whenever new technologies are introduced. The controlling of the manpower and its best utility is the need of the hour in the organization. It is realized that output of every individual railway employee has to be substantially optimized to enable the railway system to work with requisite economy and achieve more productivity.

Keeping the reforms in view, there should be sweeping changes in the content and composition of manpower.

In view of the fore said objectives, AGM/SWR has advised the Work-Study cell to take up study on “Review of Staff Strength in Diesel Loco Shed in view of large Scale upcoming Electrification of Traction in SWR”.

CHAPTER - II

Existing Manpower

Sanctioned Staff strength for 150 Locos in Sr.DME/DSL/UBL as per Sr. DME/DSL/O/UBL is shown below:-

Sl. No.	CATEGORY	S	A	V	E
01.	Supervisor	88	70	18	Nil
02.	Artisan staff	450	370	80	Nil
03.	Unskilled staff	95	120	Nil	25
04.	Other than R&M staff	79	69	10	Nil
	TOTAL	712	629	108	25
				Net vacant posts (108 - 25 = 83)	

CHAPTER – III

SUGGESTIONS:

1. All staff are required to be trained in multi-skilling works using modern technology.
2. Maintenance of non core activities can be done through maintenance contract.

CHAPTER – IV

CONCLUSION:

1. The work study is concluded with the recommendation for surrender of **101** posts in Sr.DME/DSL/UBL which are found surplus to the requirement for the workload of **150 Locos** based on the Railway Board Benchmarking report of Jan -2020.
2. For additional workload of **42** Locos creation of posts has to obtain as per the existing rules and procedure.
3. The money value thus obtained from these surrenders may be utilised for the creation of posts for additional workload.
4. Optimization of manpower results in improvement of work culture, and increase Productivity.

CHAPTER – V

FINANCIAL IMPLICATIONS:

Implementation of work study recommendations by surrendering **101** surplus posts will Optimisation of manpower results in improvement of work culture, and increase productivity ratio as shown below:-

SL No	Category	S	A	V	No. of posts recommended for surrender	Emoluments per month in Rs	Annual Emoluments in Rs
1.	Supervisor (GP-	88	70	18	11	951093.00	11413116.00
2.	Artisan staff	450	370	80	80	3889080.00	46668960.00
3.	Unskilled staff	95	120	Nil	Nil	Nil	Nil
4.	R&M staff and GM loco training School Staff.	79	69	10	10	486135.00	5833620.00
TOTAL		712	629	108	101	-----	63915696.00

Immediately surrender of 50% vacant posts as per Railway Board Letter Railway Board letter dated; 02.07.2020 of Para 1.(c) stating that 50% of posts of existing vacancies to be surrendered in Non safety.

The money value thus obtained from these surrenders may be utilised for the creation of posts.

ANNEXURES

Sl. No.	Description	Annexure
1.	Workload of DSL/UBL	I
2.	Scale check statement as on 01.01.2020 of Sr.DME/DSL/O/UBL	II
3.	Benching marking report of Jan -2020	III