आभार ACKNOWLEDGEMENT

The Central Planning organization takes this opportunity to express hearty thanks to the Officials and staff of Operating Department of Vijayawada Division for their valuable guidance and co-operation in compilation of the report.

विधि METHODOLOGY

The Work Study department has applied the following techniques for completion of the Work Study:

- 1. Collection of workload particulars.
- 2. Interaction with the Staff and Officers in the Division.
- 3. Critical examination of the existing system of working and
- 4. Assessment of manpower requirement for existing workload.

रूपरेखा SYNOPSIS

- Subject: Review of Staff Strength of Trains Clerks in Operating Department over BZA Division.
- Authority: Railway Board's Annual Programme of Work studies 2019-20
- > Study No: WSSCR-11/2019-20
- > Reference File No: G.276/2/WSSCR-11/2019-20.
- > Area of Activity: Vijayawada Division.
- ➤ The Central Planning cell of South Central Railway has taken up the Work study on the Review of Staff Strength of Trains Clerks in Operating Department over BZA Division in order to study the available manpower and to identify if any excess staff is available, with a view to right size the manpower.
- > The Operating department which is responsible for safe running of Exp/Pass and freight trains utilizes the resources offered by all other departments to produce economically viable, fast and mass transportation system for the nation.
- Major activities of Operating Department:
 Train operations Loading, Unloading & movement.
 Arranging maintenance blocks for engineering, S&T and Electrical Departments
- > BZA Division has a unique distinction of running Passenger, long-distance coaching and intensive freight trains.
 - 149Mail/Express Trains.
 - 22 Passenger Trains.
 - 59 DEMU Trains.
 - 50 MEMU Trains.
- BZA Division has 4 Coaching Depots i.e. Vijayawada(BZA), Kakinada(COA), Machilipatnam(MTM) and Narsapur(NS)
 - 8 originating trains from BZA out of which 6 daily Express & 2 Passenger Trains.
 - 7 originating trains from COA out of which 6 daily Express & 1 Passenger Train.
 - 3 originating Express trains from MTM
 - 3 originating Express trains from NS
- ➤ Vijayawada railway division generates much of its revenue from freight transport, which includes major commodities like coal, fertilizers, food grains, cement etc. Krishnapatnam and Kakinada Ports are the two main revenue earners for the division in freight transport.

➤ Main functions of Trains clerk: The main functioning of Trains clerk is to record the number of wagons of inward and outward goods rakes in different goods sheds over BZA division for maintaining the operational statistics. They assist the yard master in certifying the position of wagons for the purpose of shunting operations which help the yard master to form a goods train with correct marshalling order. They also help the commercial clerks giving placement and drawl time of goods wagon from siding lines which are required for calculation of demurrage of wagons. They ensure the placement and clearance of wagons from their record book.

The train clerks have to maintain the registers in regard to movement of wagons, loading, releasing of wagons by TXR after examination. They record the causes of delays in movement of wagons and analyzing these causes adequate steps are being taken to avoid delays in movement of wagons they work out the goods wagon stock position from time to time during a day and relay this to control office over phone.

In addition to above work, the Trains clerk prepares statements of various types relating to the operational statistics which reflect the overall picture of performance of traffic.

> Summary of SAVE position of Train Clerks in Operating Department:

SI. No.	Sanction	Actual	Vacant
1	80	49	31

Requirement of manpower: The present requirement of manpower of TNCs at Control Office, different goods sheds/yards and Coaching Depots has been assessed here in under:

1. Control Office:

SI.	Nature of work	Shift wise
No		deployme
		nt of staff
1	FOIS (3shifts-2 in each shift)	(3X2)=6
2	COIS (3shifts-one in each shift)	(3X1)=3
3	Jumbo& allotment of rakes (3shifts-one in each shift)	(3X1)=3
4	Coaching(Punctuality) (3shifts-one in each shift)	(3X1)=3
5	Bulletin/YR	(3X1)=3
	Total	18
	RG at the @ of 16.66% =18X16.66/100=2.99	3
	LR at the @ 12.5%=18X12.5/100=2.25	2
	Grand Total	23

2. Goods Yards/Sheds /Coaching Terminals:

Sl.No.	Station/Nature of work	deployment of staff
1	GDR-FOIS, Collecting RDs and repeating to Control Offices/BZA, GTL, MAS, Preparing VG for Tr.No.12709Exp and Tr.No.12743	3
	KAPT -Preparation of VG , Feeding loco/ train details in FOIS, Wagon details of incoming/ Outgoing trains	3
	Sub Total	6
	RG at the @ of 16.66% =6X16.66/100=1	1
	LR at the @ 12.5%=6X12.5/100=1	1
	Total	8
2	BZA yard- Preparation of VG , Feeding loco/ train details in FOIS, Wagon details of incoming/ Outgoing trains	6
	BZA Station - COIS, Verifying the VG details of all incoming/outgoing trains, marshalling particulars of coaching trains	6
	KI - repeating of Interchange Goods train Out Reports to Control Office, advising Crew lobby for booking of Crew, incoming/ Outgoing load/rake particulars, TMS&FOIS, Loco position, detentions, LV details of trains W/O Guard	6
	Sub Total	18
	RG at the @ of 16.66% =18X16.66/100=2.99	3
	LR at the @ 12.5%=18X12.5/100=2.25	3
	Total	24
3	COA Old Port-FOIS, Goods trains arrival and placement, release/departure, detention details, Preparation of VG, details of sick wagons, terminal detentions, maintaining of position of goods transported in rail/road ways.	3
	COA New Port - COIS, Verifying the VG details of all incoming/outgoing trains, marshalling particulars of coaching trains	3
	Sub Total	6
	RG at the @ of 16.66% =6X16.66/100=0.99	1
	LR at the @ 12.5%=6X12.5/100=0.75	1
	Total	8
	Grand Total(8+24+8)	40

After summarizing the above; the actual requirement of Train clerks at Control Office and at different goods sheds/Coaching Terminals has been assessed to 63 posts (23 at Control Office +40 at different goods sheds/Coaching Terminals) as against the sanctioned strength of 80, thus rendering surrender of 17 (80-63=17) posts.

It is recommended to surrender 17 vacant posts of TNCs in Operating Department from book of sanctions.

1.0 Introduction

- **1.1** BZA Division is one of the six railway divisions under South Central Railway zone of the Indian Railways. The headquarters of the division is located at Vijayawada. It was formed as one of the eight divisions in Southern Railway on 16 May 1956. After the formation of South Central Railway zone, the division was integrated into it on 2 October 1966.
- **1.2** The division is located completely in the state of Andhra Pradesh. It has a broad gauge route of 957.23 km (594.80 mi) and a running track of 1,646.72 km (1,023.22 mi). It has a total electrified route of 733.25 km (455.62 mi) and a total track of 1,928 km (1,198 mi).

The Gudur-Duvvada (Vijayawada-Gudur and Vijayawada-Visakhapatnam), Vijayawada-Kondapalli and Samalkot-Kakinada Port are electrified and double-track railway lines. While, Gudivada-Machilipatnam and Bhimavaram-Narasapuram are non-electrified and single-track railway lines. Kondapalli railway station is the divisional interchange station.

S.No	Route	Type of track	Traction	Route (km.)
1	Gudur-Duvvada (excl.) (km 134.30-759.7)	Double	Electric	623.66
2	Vijayawada-Kondapalli (km 586.5-568.0)	Double	Electric	18.5
3	Gudivada-Machilipatnam	Single	Diesel	36.70
4	Bhimavaram-Narasapuram branch line	Single	Diesel	29.46
5	Vijayawada-Nidadavolu loop line (Vijayawada-Bhimavaram Town- Nidadavolu)	Single	Diesel	154.75
6	Samalkot-Kakinada Port branch line	Double	Electric	15.60
7	Venkatachalam-Krishnapatnam Port	Double	Electric	18.59
8	Kakinada Town-Kotipalli	Single	Diesel	44.70
	Total			957.23

- **1.3** On a daily average, the division operates a total of 274 passenger and 150.4 freight trains. There are 222 electric, 34 diesel locos, 838 coaches, 29 MEMU, 37 DEMU's.
- **1.4** Vijayawada railway division generates much of its revenue from freight transport, which includes major commodities like coal, fertilisers, food grains, cement etc. Krishnapatnam and Kakinada Ports are the two main revenue earners for the division in freight transport.
- **1.6** Presently 22 Chief Trains clerk, 13 Sr. Trains clerk and 14 Trains clerk against the sanctioned strength of 80 are working in different Goods sheds and Yards over BZA division and 31 posts are lying vacant.

Designation Sanction staff		On roll staff	vacancy
CTNC	61	22	39
Sr.TNC	10	13	-3
TNC	9	14	-5
Total	80	49	31

Total workload of Trains clerk indicates the dealing of average goods trains per month in different goods sheds or yards over BZA Division. During field study, it is seen that on an average 4500 incoming & outward rakes dealt per month by 40 goods yards/sheds /sidings over BZA division.

2.0 EXISTING SCENARIO

- **2.1** All goods sheds & yards are under the overall control of Sr.DOM/BZA and under direct supervision of concerned DOM & AOM. Each goods shed & yard is functioning directly under TI / Chief trains clerk in regard to stock & number taking work of inward & out ward rakes and to look after the rake terminal detention
- **2.2** The main functioning of Trains clerk is to record the number of wagons of inward and outward goods rakes in different goods sheds over BZA division for maintaining the operational statistics. They assist the yard master in certifying the position of wagons for the purpose of shunting operations which help the yard master to form a goods train with correct marshalling order. They also help the commercial clerks giving placement and drawl time of goods wagon from siding lines which are required for calculation of demurrage of wagons. They ensure the placement and clearance of wagons as per the record book.

The train clerks have to maintain the registers in regard to movement of wagons, loading, releasing of wagons by TXR after examination. They record the causes of delays in movement of wagons and analyzing these causes and adequate steps are being taken to avoid delays in movement of wagons. They work out the goods wagon stock position from time to time during a day and relay this to control office over phone.

In addition to above work, the Train clerks prepare statements of various types relating to the operational statistics which reflect the overall picture of performance of traffic.

2.3 Main loading/unloading locations: There are two Ports (COA & KAPT) and 33 loading/unloading locations in BZA division. The details of loading / unloading of BZA division are given here under:

LOADING SCENARIO:

Loading location	Rakes/Month
KAPT	413
COA	223
28 locations : AKVD, APT, BVL, BVM, BVRM,EE, DWP, CLX, GDV, KCC, KI, KVR, MTM, NASP, NBM, NDD, NDM, NZD, PGU, PKO, REG, RJY, RVD, SLO, TDD, TEL, TNKU&UPL	157
Total	793

UNLOADING SCENARIO:

Unloading location	Rakes/Month
KI	226
KAPT	48
COA	44
19 locations: EE, GDV, KCC, KVR, NASP, NDM, NZD, PGU, PKO, REG, RJY, SLO, TDD, TEL, GWM, MBL, OGL, SDM, SKM	140
Total	458

2.4 The category wise position of total sanctioned strength vis-à-vis total men on roll of Chief Trains clerk, Sr.Trains clerk & Trains clerk of Vijayawada division as on 31.05.2019 furnished below:

Designation	Sanction staff	On roll staff	vacancy
CTNC	61	22	39
Sr.TNC	10	13	-3
TNC	9	14	-5
Total	80	49	31

2.5 Vijayawada Division is the most important Division of South Central Railway and ranks amongst the top five divisions of Indian Railways in terms of freight loading. It has a dedicated work force of 20555 employees. It handles passenger traffic as well as freight traffic. Freight traffic is being handled at 35 stations spread throughout the division, which includes two ports, COA& KAPT.

Vijayawada railway division generates much of its revenue from freight transport, which includes major commodities like coal, fertilizers, food grains, cement etc. Krishnapatnam and Kakinada Ports are the two main revenue earners for the division in freight transport

The activities catered by the Trains clerk in dealing with the Freight traffic in different goods shed over BZA division are more or less same as stated in para-2.2 but special attention is to be given for customer satisfaction and the workload of Trains clerk is decreasing nature due to introduction of FOIS system. The advantages of FOIS are shown below:

Advantages:

- Concessional freight rates (Train-load).
- Fast transportation and timely delivery.
- Assured wagon availability
- Bulk transportation facility.
- Better safety and security of goods.
- Technical guidance from experienced railway officials.
- User friendly simplified formalities.

3.0 CRITICAL ANALYSIS:

3.1 Ongoing through the different activities involved in different goods sheds and yards over BZA division in connection with the dealing of number of incoming & outgoing rakes has been observed by the study team. The proposed requirement of Trains clerk under different goods sheds & yards over BZA division have been critically analyzed here under based on the existing workload as discussed in Chapter-II.

Keeping the optimum level by using the resources including the manpower in mind, the study has been conducted to determine required manpower based on the time taken for recording of wagon units in reception and dispatch yard.

- **3.2** The details of workload and their existing deployment of total 7units of goods shed/yard over BZA division have been studied by the study team.
- **3.3** As discussed vide Para 2.4, thirty one(31) Train clerks out of on roll strength 49 are deployed in different goods shed & yard/ Coaching terminals over BZA division and rest i.e. (49-31) = 18 Trains clerk are deployed at Control Office/BZA.
- 3.4 Requirement of manpower: The present requirement of manpower of TNCs at Control Office, different goods sheds/yards and Coaching Depots has been assessed here under:

Control Office:

SI.	Nature of work	Shift wise
No		deployme
		nt of staff
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5	Bulletin/YR	(3X1)=3
	Total	18
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	Grand Total	23

1. Goods Yards/Sheds /Coaching Terminals:

Sl.No.	Station/Nature of work	deployment of staff
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3.5 It is recommended to surrender 17 vacant posts of TNCs in Operating Department from book of sanctions

4.0 FINANCIAL APPRAISAL:

- **4.1** As per recommendation made in Para 3.5, the total surplus posts of TNCs works out to **16** posts.
- **4.2** As per recommendation made in Para -3.5, Annual financial savings to be achieved on account of surrender of 17 posts of Train clerks under Operating department in BZA division is calculated on the basis of lowest pay band and Grade pay as under.

Category & Scale of Pay (Rs.)	Grade Pay (Rs.)	Mean pay after 7thpay commission (in Rs)	D.A (17%) (in Rs)	Total (in Rs)	No. of posts Recommended for Surrender	Monthly savings of total staff (in Rs)	Annual savings. (in Lakhs)
Trains clerk (5200- 20200)	1900	41550/-	7063/-	48613/-	17	826421/-	99.17

> On implementation of the recommendations brought out in the Work-study report an annual savings of **Rs. 99.17 lakhs** can be achieved.

अध्याय-5 С **H A P T E R - 5**

संस्तुती RECOMMENDATION

Recommendation	Para No.
It is recommended to surrender 17 vacant posts of TNCs in Operating Department from book of sanctions	3.5