

EAST COAST RAILWAY

WORK STUDY REPORT

on

SSE /Telecom units over WAT Division

EFFICIENCY CELL, ECoRLY, BHUBANESWAR
(Study No.WS/ECoR/08/19-20; Dt:22.04.2020)

Synopsis

1	Name of Work Study	Work study on SSE/Telecom units over WAT division
2	Department Concerned	S &T
3	Division	WAT
4	Aim	To assess the workload vis a vis staff strength of the units and explore possibilities of outsourcing in non safety areas.
5	No. of posts studied	275
6	No. of man on roll	219
7	No of posts lying vacant	56
8	No of posts to be surrendered	83
9	Critical Analysis	<ol style="list-style-type: none"> 1. In Telecom, almost all the maintenance jobs are carried out by staff. It is pertinent to outsource a few non safety areas to reduce staff cost. 2. There are some areas where staff are found surplus to the need. The surplus staff may be redeployed and the posts be surrendered. 3. There are 56 vacant posts the money value of which are lying unutilized. These posts may be surrendered to enforce economy in staff cost. 4. Supply of man power by Zonal contract may please be effected and works in non safety areas may be executed by them under supervision of departmental staff.

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Authority

Directed by Addl. General Manager

Methodology

- *Collection of Data*
- *Review of Telecom cadre*
- *Discussion with Officers and supervisors*
- *Assessment of need based requirement*

Chapter-I

Introduction

Outsourcing in non safety areas has become policy of the Government to reduce staff cost. A step further in this line has already been initiated by the Ministry in shape offering of trains and Stations to outside agencies. This envisages large scale reduction of Posts without which Railway cannot thrive in this competitive age.

Telecom sector in Railways plays an important roll where both safety and non areas are there. The study is undertaken with approval of the PCSTE and astute guidance of SDGM to identify the non safety areas where effective outsourcing can be ushered in to enforce economy.

Chapter – II
Cadre position

The following is the Pin pointed Cadre of Telecom units of WAT Division as per position received from office of Sr.DSTE/WAT.

Table/1

Pin pointed sanctioned cadre of SSE /Tele units (Telecom, wireless & Microwave)												
Units/Posts	Div. Office		SSET/ WAT		SSET/ VZM		SSET/ RGDA		SST/ KRPU		SSET/ JDB	
	San	Opt	San	Opt	San	Opt	San	Opt	San	Opt	San	Opt
Sr.Tech (TM)	1	2	14	12	3	2	4	1	1	1	1	1
Sr.Tech (TCM/L)	0		1	1	1	1	1	1	0	0	0	
Sr.Tech (WTM)	0		3	3	0	0	0	0	0	0	0	
Sr.Tech(CJ)	0		1	0	1	1	0	1	2	1	0	
Tech I TM	1	0	22	16	5	5	6	6	6	1	8	4
Tech II TM	0		3	4	1	0	1	0	1	3	2	3
Tech III TM	0		3	5	2	2	5	2	2	1	2	2
Tech I TCM L	0		2	2	2	1	0	0	0	0	0	
Tech II TCM L	0		1	1	0	1	0	0	1	1	0	
Tech III TCM L	0		0	0	1	0	0	0	0	0	0	
Tech I WTM	0		6	2	0	0	0	0	0	0	0	
Tech II WTM	0		1	1	0	0	0	0	0	0	0	
Tech III WTM	0		1	1	0	0	0	0	0	0	0	
Tech I (CJ)	0		4	6	0	0	0	0	2	0	2	0
Tech II (CJ)	0		0	0	1	0	0	0	0	0	0	
Tech III (CJ)	0		0	1	0	1	1	0	1	1	1	2
Sr Tech (Carpenter)	0		1		0		0	0				
Helper (T)	6	6	50	50	15	15	14	14	16	10	23	14
Sr.Tech MW			5	3								
Tech I MW			0	0	5	1						
Tech II MW			1	0								
Tech III MW			1	2								
Helper MW			5	4	2	2						
Total	8	8	125	114	39	32	32	25	32	19	39	26

Category wise unit wise sanctioned strength

Table/1A

Category	Div. Office	SSET /VSKP	SSET/VZM	SSET/RGDA	SSET/KRPU	SSET/JDB	Total
Tech	2	65	20	17	11	13	128
C/J	0	5	2	1	5	3	16
Helpers	6	55	17	14	16	23	131
Total	8	125	39	32	32	39	275

NB:

1. Total Sanctioned posts studied: $8+125+39+32+32+39=275$
2. Sanctioned position stands good as per pin pointed cadre of the division. On roll are updated from the units during course of study which is shown in the next page.
3. This is excluding SSE, JE and Watch man posts.
4. This excludes 02 posts of MW cadre (steno and Tech III DGM).
5. 02 more posts of Helpers are pinpointed against Sr.DSO/WAT (not included in study)

Sub unit wise on roll position of SSET/VSKP found during course of study**Table/2**

Sub units	On roll Techs	On roll C/J	On roll Helpers	Total
SSET/Stores	2	0	7	9
SSET/WIRELESS	12	0	9	21
SSET/VDPD	3	0	4	7
SSET/MPM	6	4	6	16
SSET/Test Room	6	0	4	10
SSET/Exchange	13	0	8	21
SSET/KTV	10	2	14	26
TOTAL	52	6	52	110

Unit wise on roll position of other SSET units of the Divn.**Table /3**

Units	On roll Techs	On roll C/J	On roll Helpers	Total
SSET/VZM	13	2	17	32
SSET/RGDA	11	1	13	25
SSET/KRPU	7	1	10	18
SSET/JDB	10	2	14	26
Total	41	6	54	101

Position of staff in the division office**Table /4**

Unit	On roll Techs	On roll C/J	On roll Helpers	Total
DIV. OFFICE	2	0	6	8

Summary of cadre position**Table 4/A**

Category	Sanction*	On roll	Vacancy
Tech	128	$(52+41+2) = 95$	33
C/J	16	$(6+6) = 12$	4
Helpers	131	$(52+54+6) = 112$	19
Total	275	219	56

***Reference: Table 1A**

Unit wise on roll breakup of Female & Male staff

Table/5

Unit	On roll		On roll Tech		On roll helpers	
	Tech	Helpers				
SSET/VSKP			Female	Male	Female	Male
SSET/Stores	2	7	2	0	2	5
SSET/WIRELESS	12	9	4	8	2	7
SSET/VDPD	3	4	1	2	2	2
SSET/MPM	6	6	1	5	3	3
SSET/T ROOM	6	4	3	3	3	1
SSET/EXCHANGE	13	8	4	9	6	2
SSET/KTV	10	14	1	9	7	7
DIV. OFFICE	2	6	2	0	4	2
Total	54	58	18	36	29	29
OTHER UNITS						
SSET/VZM	13	17	5	8	5	12
SSET/RGDA	11	13	2	9	2	11
SSET/KRPU	7	10	0	7	2	8
SSET/JDB	10	14	1	9	2	12
Total	41	54	8	33	11	43
G/Total	95	112	26	69	40	72

Table/7																				
(Sanction position of Telecom staff of WAT division (including wireless and Microwave Staff) as received from Sr.DSTE/VSKP																				
TCM cadre							Wireless Cadre							Microwave Cadre /WAT						
Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total	Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total	Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total
27	53	9	15	126		230	3	6	1	1		16	27	5	5	1	1	7	4	22

Note: Total Sanction is 230+27+22=279

Table/8																				
(On Roll position of Telecom staff of WAT division (including wireless and Microwave Staff)																				
TCM cadre							Wireless Cadre							Microwave Cadre /WAT						
Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total	Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total	Sr Tech	Gr I	Gr II	Gr III	Helper	Other Categories	Total
21	36	20	7	104		188	2	2	2	1		13	20	5	1	0	2	7	2	17

Note: On roll position 225

Chapter –III

Present Scenario

There are 05 SSE Telecom units in the division. Those are SSET/WAT, SSET/VZM, SSET/RGDA, SSET/KRPU and SSET/JDB. The SSET/VSKP unit is the coordinating unit for establishment purpose for 6 other SSET units in and around VSKP location. Those are: SSET/Wireless, SSET/Exchange, SSET/Test Room (control), SSET/ MPM, SSET/VDPD, SSET/KTV. Besides, there are some Techs and Helpers in the divisional Office for Technical assistance to Sr. DSTE.

Telecom cadre is inclusive of Telecom, Wireless and Microwave cadre of the division. As per cadre position received from the office of Sr.DSTE there is a sanction of 279 posts against which there are 225 staff on roll. **As per scope of the study 275 posts have been studied where in 219 staff are on roll.** The various duties of staff of this wing can be summarized as detailed below.

Maintenance of Telecom assets, attending various failures, maintenance of quad cables, EC Sockets testing, up-keeping of Network Management system, maintenance of exchange, providing Auto telephones, Rail net ,WIFI, monitoring maintenance of OFC cable by Railtel & monitoring maintenance of Passenger amenities under AMC are some of the important duties of Telecom staff.

The working of staff of this wing contributes for prompt communication which is directly linked with safe running of trains. It keeps an incessant eye over TC,TPC,RC, Side phones, block phones, LC Gate phones, LVCD, auto phones etc so that proper communication is established between various Railway bodies connected with running of trains.

It also provides media to various Railway systems connected with commercial earnings such as PRS, UTS, ATVMs, and WEIGH BRIDGES etc.

It keeps good rapport with BSNL authorities. Where there is no OFC link / Non-Rail Head locations, BSNL connectivity makes PRS operational. When OFC fails at KK line, BSNL's E1 channel establishes connectivity for Train operations.

Payment of BSNL bills, JIO CUG bills, small scale repair of Tele gears, Manual PA System at Railway Stations and at Public functions, providing media for Tele conferences etc are also the responsibility of this wing.

At the time of disaster, connectivity from disaster site is established by staff this wing. Voice logger and media for data logger, up keeping of Tele assets in the ART/ARME, maintenance of TVs, Tower clocks, CC TVs and repair of VHF sets etc are also some other duties of staff of this wing.

Workload of the individual units are appended below

Chapter –IV SSET/VSKP

This unit is the in-charge unit of **Centralized Store** for all the Tele units of the division. This is also the in-charge unit for all the units in and around Visakhapatnam (SSET/Wireless, SSET/Exchange, SSET/Test Room, SSET/VDPD, SSET/ MPM & SSET/ KTV) for establishment purpose.

C. Store:

SSE: 01, OS: 02, Tech:2 (ladies), Helper:7, Watchman:2 are there in the unit. Out of 7 Helpers, 2 are Ladies and one out of two is handicapped.

Staff distribution

Store (Tech + KSI)	2+4
Establishment : KSI	0+2
Chowkidar (Chowk.+KSI)	2+1

	4+7

There are 02 Techs for assisting the OS Store for preparing requisition as per estimates in the computer. Maintenance of DMTR, Correspondence work in connection with Store procurement and issue of stores to different units are their duties. They assist SSE in inspection for materials received from the contractor. 7 categories of materials are handled in the store section. Those are Wireless-92, General-290, Consumable- 65; Contractual supplied materials-46, Released materials-100, TP items-256 and Dead stock137.

The 04 KSIs, attached to store are utilized for collection of materials, stalking of materials, loading and unloading of materials. Their services are utilized during inspection of Sr.DSTE /DRM. Sometimes they also attend sectional works as per direction of the SSE.

Establishment section:

One Helper is attached to Establishment section to assist the OS /Establishment for salary bill Pass, PTO, PME, Training & Loans etc for 113 staff. And there is one Helper for DAK. There are 02 Chowkidars who are on 12 hrs roster (06.00 -18.00 & 18.00 – 06.00) and 01 Helper is RG

Remarks:

1. To Assist the OS (stores) 02 Techs are there. For assisting OS (Stores) one Tech is enough. There is no work load on the 2nd Tech.
2. There are 5 Helpers. One is a RG to Chowkidar. From the out station duty summary it is seen that hardly once in a month 2 staff going on outstation duty for collection of stores for 2-3days. So in the rest of the days in a month's they can issue of materials. Additional 2 Helpers for issue of stores are surplus.

SSET/Wireless

SSE:1, Tech:12 (G-8+L-4) and Helpers:9 (G-5+L-2) are there in the unit. Monitoring of functioning of Telecom installations in Visakhapatnam Station, maintenance of VHF sets of entire division ie 99 stations of WAT division, maintenance of passenger amenities of VSKP station and coordinating SSE unit for passenger amenities of all stations of WAT division, PA systems in the Station and for functions, PA system for Conference Hall, Help line arrangements during disaster; ART, ARME, DRM/ADRM Saloons – maintenance of installations thereof, clocks of control room, 60 nos of Telephones in Railway station at VSKP and new work proposal if any related to wireless are duties of SSET/wireless in a nutshell. LG special and DRM Special trains are accompanied by staff of this unit. Further, 17 TVs at different locations for display of Train arrival and departure, and other purposes are at the disposal this unit.

Duty distribution

DRM office:	1+1
Shift duty (Station) including RG:	4+4
General shift:	2+2
PA system:	2+2
Sports Person:	1+0
Leave/ CCL etc:	1+0
Generator Mech.	1+0

12+9

Work load in details:

DRM office (Tech+helper:1+1): Most of days in a month some meeting /conference (with GM, DRM, Union etc) are there in the conference hall. One tech + one Helper are nominated for the purpose. They look after Address system, amplifier and speaker etc.

Shift duty at Station (Tech+helper:4+4): one Tech+ one Helper are booked every day in each shift (3 shift working). These staff go on checking point to point in every platform (8 platforms), Enquiry counter, and check of all the equipments in SSET office. PRS opens at 8.00 am and these staff check all equipments at PRS office. In case any disorder noticed they inform Staff in General shift / AMC manpower to rectify respective equipments. They also keep record of failures received over phone from other stations as SSET of the unit is the coordinating SSET of Passenger amenity items of the division.

General shift (Tech+helper:2+2) (8.00-17.00 Hrs): They attend the failures detected by the staff of shift duty. Rectification of Passenger amenities, Telephone complaints- 60 nos of phones in the station area, VHF set maintenance, TV maintenance- 17 nos (for train information etc), Complaints in the PRS/UTS & Enquiry locations, WIFI, CCTV Camera, UVSS, Luggage scanner etc are their main duty.

PA System (Tech+helper:2+2): There is auto announcement system and manual announcement system in the VSKP station. There are 140 Speakers in 7 platforms and waiting halls etc. Besides, Different public functions, pledges, prize distribution, sports, Train inaugural function, Celebrations, Meetings, Officers' club functions, ECRROW functions and retirement functions etc are held in Railway premises, clubs, Stadium etc: 10-15 days a month approximately, for which staff are nominated for arranging PA system in short notices.

Further, this unit monitors the repair of passenger amenities (indication boards, Auto announcement system, Cloaks, Cameras, WIFI etc) by AMC agencies of VSKP Station and all stations of the division. And the position as such are sent to Sr.DSTE every morning by mail.

During disaster helpline arrangements are their responsibility. ART/ARME inspection and maintenance of Tele gears therein, accompanying LG special/DRM special etc are the duties of staff of this unit.

Sports person and leave etc: There is one Tech who is a sports person. He takes leave frequently. There 6 Lady staff in the unit. Maternity leave, child care leave etc are taken by them. They also attend duties in Sr.DSTE's office when some lady staff are on prolonged leave. There is one Generator Mechanic in the unit who looks after the generators of Telecom (in ART & ARME) and of Signal wing of the division.

Remarks:

1. PA system maintenance can be outsourced.
2. Telephone maintenance from General shift can be outsourced.

SSET/VDPD

This unit caters to need of a complex Rail network spreading through Visakha Steel Plant, Gangavaram port, NTPC, CONCUR, DVD & GPL. There is a Railway colony having 480 quarters with Hospital at VDPD. The way side stations coming under the unit are RMUY, Gate junction, VDPD RRI & JGPM. DVD is an important station in the main line which is coming under this unit.

Different sections under the unit are: JGPM-DVD, JGPM-VDPD, VDPD-DVD, VDPD-Gate junction, Gate junction-GPL, Gate junction-A Gumpty, Gate junction- FPY, A Gumpty-RMUY, RMUY-RMEY. There is an Exchange inside VSPS at ARM office complex. 12 nos of Rail net connections have been provided inside VSPS.

01 SSE, 03 Techs (M-2+F-1) KSI Helper 4 (M-2+F-2) are there in the unit.

Staff distribution(Tech + Helper) :

DVD RRI (OFC room): 1+1

VDPD RRI: 2+3

Total: 3+4

DVD RRI: 01 Tech (F) + 01 KSI (F): DVD is an important station in the HWH – MAS line. Maintenance and fault rectification of Tele gears such as Traffic control phone, Traction power control phone, emergency control through EC sockets, up keeping of network devices such as PRS, UTS, Rail net, COA, TSR, Modems, Ports, Router, Switches etc. Connectivity to SCADA, Connectivity to data logger, supervision of Passenger amenities provided in the station, Maintenance of manual announcement system (not covered under AMC) are the duties of the staff stationed at DVD.

VDPD RRI: 2 Tech+ 3 Helpers (M-2+F-1): These staff are booked as per need and as directed by the SSET for up keeping and fault rectification of the Tele gears in the way side stations, EC socket testing in the sections, Quad cable maintenance, coordinating for OFC maintenance, maintenance of exchange and installations in the ARM building in the Steel plant area.

Remarks: It's a small unit specially meant for goods traffic network and staff are need based.

SSET/MPM. There is no SSET for this unit. The in-charge of SSET/WAT who looks after centralized Store also looks after this unit. There are 06 Techs, 06 Helpers and 04 Cable jointers in the unit. Within jurisdiction of this unit comes: VSKP RRI to DVD mainline 21 kms, 2 other block sections (Ex VSKP-GPT & CONCUR – SCMN), connectivity from VSKP RRI to DLS, ELS, CONCUR, JGPM and 10 cabins (A – J), new coaching complex, Wagon Store depot, and Crew booking office etc.

The Tele-gears in the above Railway establishments are thus: New Coaching Complex (Rail net -22, Telephones -20), Wagon Store depot (Rail net -13, Telephone-5), DLS (Rail net-34, Telephone- 90), ELS (Rail net-40 Telephone- 60), MPM (Rail net-15, Telephone- 130), Crew Booking Office (Rail net- 12, Telephone- 5), and there are 10 cabins where TC,TPC,VHF set, side phones etc are there.

Staff distribution

Failures:	Tech: 2
Telephone:	Tech: 3
Cable Works:	C/J: 4
Office:	Helper: 1
Assistance to above Techs:	Helpers: 4
DLS:	Tech+ Helper: 2

16

All staff report at office of MPM unit. And they disperse as per as per requirement and instruction by the SSE.

Failures (2 Techs): Staff nominated for this attend the failures on Tele gears like STM, MUX, Charger, switch board etc and connectivity to LVCD, Block instruments etc. They attend special works for providing Rail net, FOIS, COA etc through OFC in the above offices.

Telephone (3 Techs): There are lot of auto phones in the Railway Establishments in the jurisdiction: VSKP- RRI, ELS, GPT-RRI, CONCUR Cabin, CYM Office, North cabin & South cabin in Port area, A - J cabin in Railway area and other offices and colonies. Besides TC, TPC, Rail net and VHF set failures etc are the look out of staff nominated. Station masters are there in 10 Cabins, Block Huts, WAT- RRI, GPT cabin and CONCUR cabin.

Cable work (4 Cable Jointers): There are 4 C/Js in the unit. EC socket testing – 3times a month, Quad cable Cut repairs, low insulation problems and cable protection during Engg works etc are the look out of the staff.

Office (01 Helper): In the MPM unit 01 Helper is the in day duty. She looks after Tele gears, Exchange, Batteries, OFC room etc in the unit' office at MPM.

DLS (01+01): One Tech and one Helper are there at DLS. Maintenance of Tele Gears such as Exchange, STM, MUX, Charger, Batteries, Auto phone & Rail net etc.

Special work: Whenever a chamber is setup for an officer/ new or old, cabling for telephone, Rail net, computer etc are required. These staff are deputed for the purpose. For exchange at MPM and DLS staff are there. For Exchange at ELS, every day one Tech goes there in the morning. Cleaning of Room, Battery cleaning, checking of other installations is the work in the exchange.

There are 4 Helpers in the unit who are utilized as per availability.

EC sockets are checked once in every 10 days

The following are failure data as per failure register wef Jan 2019- 26 Nov 2019. Table/9

Period in month	Auto phones	OFC failures	Quad cable	Rail net , FOIS, IMMIS	Control phone	LC gate phones & VHF
11 months apprx	790	12	24 Apprx	830	220	130
Average/ month	72	1	2.18	75	20	12
Av /day	2.4	0.03	0.07	2.5	0.7	0.4

Remarks:

1. 4 Cable jointers in the unit: seems to be more than requirement. It can be reduced to 01. Rest 03 may be spared to KK/KR where doubling works are in progress / more cable works are required to be executed.
2. Telephone maintenance can be outsourced.

SSET/Test Room (Control)

Tele Test Room is the heart of Telecom system of the division. Duties of staff attached to the Test Room are summarized below. The Test Room functions in 3 shifts (6.00-14.00, 14.00-22.00, 22.00-6.00). Besides that there is a general shift (8.30-17.30).

Test room (Control) maintenance duties:

1. Maintenance of Control circuits for Control Telephones, Traction Power Control and maintenance of 12 volt Batteries for the same.
2. Monitoring of Network Management system for OFC link for control phones (programming and monitoring of STM and MUX over all stations of the division).
3. Maintenance of multiplexing equipments (STM & MUX at VSKP).
4. Maintenance of EC socket circuits.
5. Monitoring of voice logger for section control, TPC and auto phones.
6. Maintenance of data logger circuits (for signal).
7. Maintenance of 48 volt Battery bank.
8. Compilation of morning position, Control PCDO, Cable cut monthly position, correspondence work in connection with cable cut and blocks.

There is one SSE and 6 Techs (L-3+G-3) and 4 Helpers (L-3+G-1) in the unit. Duty distribution amongst the staff is appended below.

3Shifts +RG @1+1: 4+4

General Shift : 2+0

6+4

Remarks: The staff in this section are just to the need. This is an important unit. The exchange unit and Control Test Room unit are housed side by side in the DRM building. The SSET/Test Room looks after the works of exchange and the SSET /Exchange also looks after the woks of Test Room in absence of the other. Both the units share the STM/MUX room where equipments of both the units are installed.

Tele Exchange unit

There are 02 SSEs and 21 staff (13 Techs: G -9, L-4 and 8 Helpers G-2 & L- 6) in the unit. There is a sub unit (Outdoor unit) for telephone maintenance in the colonies and offices around, away from DRM Office. Out of 21, 16 staff are in the Exchange while, 5 (Tech-3 and Helpers-2) staff are in the outdoor unit meant for Telephone complaints from residences and offices in the periphery.

The Telephone exchange (with 1150 subscribers), the intercom exchange (with 150 connections), and Rail net room are the work centers where the exchange functions. Various duties of the Exchange staff are as follows:

1. Monitoring of NMS for UTS, PRS and FOIS for all the stations of the division.
2. Attending failure of PRS, UTS, FOIS, COIS, Rail net, CCTV etc within VSKP.
3. Complaints for Telephones at DRM office, DRH and East Point Rest House.
4. Telephone complaints from residences and offices in the periphery.

5. Conference hall duty for Video conferences.
6. Maintenance of Exchange – change of cards and resistance, installation of new configuration, maintenance of battery bank, giving new connections, Fault in Tele gears – STM, MUX, Modem, Router, Switch etc.

Staff distribution

Table/10

Srl	Description of duty	Tech +Helper
1.	Shift duty for complaints + RG	4+4
2	Auto phone & TV failures at Hospital & East Point area	2+0
3	PRS, UTS, Data logger:	2+0
4	FOIS + Rail net	1+0
5	CCTV+ Conference	1+0
6	Helpers to assist Techs	0+2
7	Outdoor unit	3+2

Shift duty including RG (4+4): There is a 3 shift working (6.00-14.00, 14.00-22.00, 22.00-6.00) in the Exchange. Sectional failures (PRS, UTS, FOIS, etc), Telephone/Rail net complaints over the division are communicated to staff of this shift for rectification.

Hospital, E.Point, TV maintenance (2+0): Telephone complaints from DRM building Div. Railway Hospital, East Point Rest House area and TV maintenance (12 TVs in E.Point Rest house + 4 TVs at DRM, ADRM's chamber, DRM's residence & Operating Conference Hall) are the duty of this staff.

PRS, UTS, Data logger 2+0: Staff in the group attend to the failures in PRS, UTS, Data logger. One Tech is nominated for VSKP station as lot of Counters are there in station itself (PRS building – 6 counters, Jnanapuram gate – 4 counters, Booking office- 5 counters, current reservation, TT Lobby, Station's Rail net, OSD office- Rail net).

Other Tech looks for outstation PRS UTS. There are PRS at other locations at VSKP also: Naval base-1, MVP colony-2, Lalit Nagar-1, 3Town Police Station area-1. Data logger's user is Signal wing but media provision is from Telecom side. Telecom staff attends failure in circuit.

FOIS, Rail net 1+0: In and around VSKP Freight operation information System (FOIS) is in use at Crew Lobby at VSKP Station, ARM Office, VSPS – ARM office, at VSKP Sea Port, Gangavaram Port, HPCL, CFL, IOCL, VSPS-CGS (RMPSY). Staff attends failure for connectivity, and coordinate where Railway staff are there and also for places where there is BSNL link. Monitoring through NMS for all stations over the division is also a responsibility. Rail net failures are a minor job.

CCTV + Conference -1+0: there is CCTV camera at DRM office, Railway Medical and Parcel Office. Only connectivity/networking is of Telecom's responsibility. Various conferences are held in the Conference Hall of DRM's office. Projector and screen are under SSTE/Exchange

Remarks:

1. The unit's responsibility in NMS is for 02 channels, one UTS back ground and the other FOIS background. In UTS background runs: PRS,UTS,PMS,ATVM KIOSK etc and in the FOIS background runs: ICMS, CMS, TSR,COA, PAM etc

2. Networking is same but applications are different. Due to networking precautionary majors are taken before failures occur and this contributes dropping down of number of failures now days.
3. Time has changed. Use of CUG has made use of Rly auto phone redundant. Use of Auto phones now is restricted to Rail net connectivity.

3. Failures in FOIS, UTS and Auto Phones

Table/11

Month	FOIS background	UTS background	Auto Phones
July'19	24	34	166
Aug'19	15	21	184
Sept'19	14	20	120
Oct'19	16	22	190
Nov'19	23	16	128
Dec'19	21	21	110
Total	113	134	898
Average per month	18.8	22.3	149.6
Average per day	0.6	0.74	4.98

NB: The above failures recorded are of entire division where VSKP area is also included.

Observations:

1. Shift duty: 1+1 staff are in each shift to note the complaints. The volume of complaints as seen above are very scanty. Only one staff/ Helper is sufficient. Test Room is adjacent to Exchange. There also staff work in 3 shifts. It will not be difficult if 1 staff is booked. With RG this figure comes to 4 only in place of 4+4.
2. Day shift: It is seen that 8 Staff (6Techs and 2 Helpers) excluding Outdoor are in day shift. Failure in FOIS background and in UTS back ground are less than 1 per day. For attending Telephone failures in DRH, E.Point Rest House Area and TV maintenance 2 Techs are there. TVs are not repaired by the Telecom staff. Only connectivity to be checked in case of disruption. In place of 8, 4 staff (Techs) are sufficient to the need.
3. Outdoor unit 3+2: These 5 staff are exclusively engaged for Telephone maintenance purpose for Telephones in VSKP area except that of DRM building, DRH building & East Point area. Use of Railway Telephone has become redundant now. For Rail net purpose it has some utility. Keeping staff for this purpose is not preferable if economy given priority. It should be outsourced. Only one Tech may be retained for guiding the outsourced man power for the purpose.

4. Man power requirement

Table/12

Srl	Description of duty	Present on roll Tech +Helper	Proposed on roll Tech +Helper
1.	Shift duty for complaints + RG	4+4	0+4
2	Auto phone & TV failures at Hospital & East Point area	2+0	4+0
3	PRS, UTS, Data logger:	2+0	
4	FOIS + Rail net	1+0	
5	CCTV+ Conference	1+0	
6	Helpers to assist Techs (at srl: 2-5)	0+2	0+2
7	Outdoor unit	3+2	1+0
		13+8	5+6

SSET/KTV

02 SSEs and 26 staff are there in the unit out of which 17 are in the main line under SSET/KTV and 09 are in the sub unit at SUP with 01 SSE. Jurisdiction of the unit is from SCM – KUK, 5 stations in the main line (39 kms apprx) and KTV – KVLS, 9 stations (84 kms apprx) in the KK line.

Staff distribution in the Mainline

SCMN:	2+0+4
PDT:	1+0+2
KTV:	2+2+4

	5+2+10

Staff distribution in the KK line

SUP:	2+4
TXD:	1+0
BGHU:	1+1

	4+5

SCMN: There is a big establishment at SCMN for the reason of which 2+4 staff (Tech+Helpers) are there. Maintenance and attending failures at RRI Cabin, LC gates (3), Crew booking office, RRD office, OHE office, PSI office, SCM station, Yard cameras, PA system, TSR, FOIS, TC, TPC, Hot line phones , block phones, VHF sets , Railnet, UTS, PRS, ATVMs Battery bank etc.

Staff at PDT look after sections from SCM, SCMN & PDT.

KTV is the Head quarter unit. A store is there at KTV. Repeater, exchange, Rail net, auto phones (38 nos) , PRS, UTS , TC TPC phones, Hot line phones, LVCDs and Passenger amenities (for KTV station) are the Tele gears looked after by the staff. It is a 4 line section and junction point for KK line. Staff at this station look after sections from KTV to Korukonda (3 Stations: KTV, KPL, ALM).

Sub-unit at SUP is under one SSE with 9 staff who look after sections over 9 stations in KK line. The Telecom assets in the KK line stations are less in comparison to mainline. It is a line for goods traffic. Only one Passenger train Up & Dn ply in the section and it is the mode of communication for staff to move in the section. The Express Train in the line does not have a halt in the sections of the unit. There are 43 Tunnels in the section under SSET/SUP.

Maintenance of Assets in all stations on rotation, monitoring of Passenger amenities, Fault rectification in UTS/PRS/ATVM/FOIS circuits, attending failures in Control phone, LC gates phones Auto Telephone, rail net etc, attending quad cable problems, EC socket testing, are the duties of staff in a nut shell.

Inspection of every station by SSET once in a month, battery maintenance at every station by staff once in every 15 days, EC socket testing in the section thrice in a month, Cable testing once in a year, Earth resistance testing once in a year are the schedule of inspection/maintenance in the section.

Observations:

1. A special gang has been formed for finding failures in EC sockets over KK line and KR line. Their route shall be in the line of GM's inspection. One Helper from the unit is in the gang. Their duty is to find faults and restore.
2. Record of failures just initiated wef 1.11.2019 by the SSET. Failures are communicated to the unit through Test Room, VSKP.

Chapter - V

SSET/VZM

02 SSEs, 01 OS, 01 Chowkidar and 32 staff are there in the unit. There is a sub unit at CHE under 01 SSET. Jurisdiction of the unit is from KUK – Ex PSA, 14 stations in the main line (150 kms apprx) and from NWP – GNPR 6 stations in NWP- GNPR line (89 kms apprx).

Staff distribution

Table/13

Main Line		NWP- GNPR Line	
VZM:	8 + 1 +10	PLH	0+0+1
CPP:	0 + 0 + 2		
PDU:	1 + 0 + 0		
DSI:	0 + 1 + 0		
CHE:	2 + 0 + 2		
KBM:	1 + 0 + 1		
PSA:	1 + 0 + 1		
Total	13+2+16		0+0+1

There are 20 staff including one Chowkidar at HQ, VZM. The duty distribution of staff at VZM is as follows.

Shift duty (2 shifts)	2+2
General shift	1+1
Auto phone failure	1+1
Sation failure	1+1
EC Socket testing	1+1
Chowkidar	0+1
Supervision of	
Contractual works	1+0
C/J at section	1+0
Office	0+2
Leave /Rest	1+2

9+11

Duty in detail:

1. Staff (1 Tech +1 Helper) in shift duty (6.00-14.00, 14.00-22.00) inspect station platforms at VZM to find out if any failure has occurred to passenger amenities. They also record messages from control regarding other failures.
2. Staff in the general shift and for failures work for rectification of the faults identified and recorded by the staff in shift duty. There is AMC for passenger amenities. Only circuits are checked. For other repairs they follow routine.
3. For socket testing Staff are stationed in every alternate station. They attend the sockets placed with a distance of 01 km upto one station ahead and one station back. Staff at VZM cover KUK-VZM –NML sections.

4. There is only one Chowkidar in the unit. One week day duty and one week night duty, he performs in a 5 day routine. There is a OHE unit functioning in the adjacent room of the Station building which functions 24 Hrs. And so, there is no need of posting any staff for the watch and ward in the next shift unattended by the Chowkidar.
5. Contractual works are going on for laying OFC cable in sections SGDM-PDU, SGDM-CPP, KBM-TIU& NWP-KBM. 01 C/J and 01 Tech are deputed to show existing cable lines to the contractual staff so that the existing cable is not disturbed.
6. In the Office of SSET 02 Helpers (L) are to assist the OS for store, Establishment & DAK etc.
7. Duty of staff in other units are: maintenance of Assets in all stations on rotation, monitoring of Passenger amenities, Fault rectification in UTS/PRS/ATVM/FOIS circuits, attending failures in Control phone, LC gates phones, Auto Telephone, rail net, attending quad cable problems and EC socket testing etc. There are PRS at VZM, CPP, PDU, CHE, NWP, KBM, TIU, CHE, PLH, PLH Town & GNPR. There are UTS at every station.
8. Different Failures recorded during 2019 are appended next page.

Failures recorded in a period of one year wef Jan 19-Dec 19 /SSET/VZM

Table/14

Failures/ MONTH	TC	TPC	RC	VHF	DATA Logger	PRS	UTS	FOIS	PMS	TSR	Auto phone	Hot line	LG Gate phone	Quad Cable cut	Pass amenities
											Per annum				
JAN '19	20	6	4	3	0	2	4	0	0	0	85	24	113	25	118
Feb	9	3	3	4	0	3	1	1	3	0					
March	8	3	0	2	0	0	4	0	8	0					
April	3	0	1	3	0	4	4	0	3	0					
May	8	2	0	1	1	1	1	0	4	1					
June	8	0	0	0	0	0	0	0	1	2					
July	6	2	1	0	1	5	5	0	5	5					
Aug	3	1	0	0	0	5	3	0	2	2					
Sept	5	1	0	1	0	2	3	0	0	0					
Oct	3	0	0	4	1	0	8	0	0	0					
Nov	10	0	0	4	0	0	3	0	0	0					
Dec '19	6	0	0	2	1	0	1	0	0	1					
Per annum	89	18	9	24	4	22	37	1	26	11					
Per month	7.41	1.5	1.5	2	0.3	1.8	3.08	0.08	2.16	0.91	7.08	2	9.41	2.08	9.8

Month total is 51.11 day average is $51.11/30=1.7$ say 2

Remarks:

1. It is seen in the above table that only 2 failures average per day are recorded. Utility of 2+2 (Techs + Helpers) for inspecting platforms at VZM station in 02 shifts seems inappropriate. It can be covered by staff in general shift and staff for station failure with a change of roster. Failures are very less also.
2. 2+2 (Techs + Helpers) for shift duty are surplus.

Chapter - VI

SSET/RGDA

SSE: 2, Sr.Clerk: 1, Techs: 11, CJ: 01 and Helpers 13 are there in the unit. Jurisdiction of the unit is from EX KKGm to SPRD 10 stations (118 km, K-R line) and Ex THV to GTLM 14 stations (137km, R-V line) and VBL- Salur (16 Kms). Staff distribution at different stations is appended below.

Staff distribution

<u>Station</u>	<u>Tech + Helper</u>
LKMR	0 + 2
TKRI	1 + 1
BLMK	0 + 1
RGDA*	7* + 6
PVP	2 + 1
VBL	1 + 1
GPI	1 + 1

	12 + 13

*One C/J is inclusive of 7 Techs at RGDA.

Equipments: at all stations are the same more or less with some exceptions in passenger amenities, ART, ARME and exchange etc. There are 2 exchanges under this unit, one at RGDA and the other at LXP. ART & ARME are at RGDA. OFC room equipments, Control communications, Auto phones, Hot line phones, Block telephones, LC gates Telephones, VHF sets, NMS for UTS,PRS & FOIS, connectivity for PRS, UTS, ATVMs, Voice logger, data logger, CCTV, Rail net, LVCD; equipments in ART & ARME, Quad cable and EC Sockets in the section, PA system- Auto & Manual, Digital clocks, Various boards in the station (TIBs, CIBs), TVs etc are the Tele gears to be looked after by the staff of the unit.

RGDA is the HQ of the unit and it an important station where Tele gears are more. ART & ARME are there at RGDA. 6+1+6 (Techs, CJ and Helpers) are there in the station. Staff distribution for different sections are appended below.

Distribution of staff at RGDA

1. LLGM-SKPI:	1+0
2. SKPI-Ex A Cabin:	1+1
3. A Cabin, B cabin & SPRD:	1+1
4. RGDA-KNRT:	1+1
5. RGDA Station:	1+1
6. ART,ARME battery maintenance:	1+1
7. RGDA Exchange:	1+0
8. Office/ for assisting clerk	0+1

	7+6

118 kms in KR line is a gradient section and it is full of tunnels. Distance between 2 adjacent stations is unusually longer than in plane area. It varies from 8 to 18 kms and it cannot be covered in a single day for EC socket testing. Mobile network is feeble and unavailable at some places. Cable maintenance is very tough and requires more manpower. R.E. works have been just finished in KR line. Due to RE works, and as cables are 30 yrs old in the line, cable disturbances are more. 1+4 (Tech+ Helpers) are there at 3 stations (LKMR, TKRI and BLMK) and 3+2 (Tech+ Helpers) from RGDA cover the entire line. Passenger traffic is increasing in the line. 5 up and 5 dn trains are plying now.

137 kms in RV line is also a big jurisdiction. GPI, VBL & PVP are important stations where PRS UTS, LC gates & IBs in the mid sections are there. And staff at above Stations cover 3 stations each. VBL to SLUR is also a section 18 Kms long, comes under jurisdiction. Three more stations LDX, JMPT & KNRT are covered by (1+1) staff from RGDA.

For maintenance of Tele gears at RGDA, attending failures: TC ,TPC,RC, Auto phones-100, Railnet-12, side phones, gate phones, passenger amenities (1+1) staff and for maintenance of ART & ARME and batteries, 1+1 staff are there at RGDA. For sudden movement of ART/ARME 2 Techs are needed to be in HQ all the times. Zonal contractor is of no help in maintenance jobs. Only large scale quad cable laying is done by zonal contractor. Every work managed by staff.

Remarks:

1. Though staff are in general shift they are responsible for 24 hours and they attend works in odd hours also.
2. Telephone maintenance can be outsourced.

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Chapter-VII

SSET /KRPU

One SSET and one JET and 19 staff are there in the unit. Jurisdiction of the unit in KK line is from Ex- KVLS to CJS, 168 kms in the KK line – 18 stations (SMLG, ARK, GPJ, DPC, PFU, BHJA, MKRG, PBV, Suku, KRPU, MVF, JRT, MVG, CTS, JYP, DIR, KDPA, CJS) with one A Cabin near KRPU; and 46 kms in the KR LINE – 4 stations: Dumuriput, Damanjodi, Baiguda & Kakirguma with one B cabin near KRPU. KRPU is a junction station for KK-1, KK-2 and KR line.

There is a sub unit at ARK being headed by JET of the unit. SSET's office at KRPU is a new set up. ASTE's office also is a new set up at KRPU. Previously both offices were used to be operated from ARK.

Staff distribution, (Tech +C/J+Helper)

ARK:	3+0+2
BHJA:	0+0+1
KRPU:	2+0+4
JYP:	1+1+2
DMNJ:	1+0+1

7+1+10

NB: There is one Chowkidar under JET/ARK. So total staff under SET/KRPU is 18+1=19

Work load of the unit:

Tele gears : OFC equipments, 24 VHF sets of staions, 6 VHF sets of ART/ARME, LVCD, Control phones, TPC, SCADA, side phones, Auto phones- 110 at KRPU, 45 at ARK and 30 at Jeypore, Railnet: KPU-21,ARK -10, Jaypur -5, Gates -10,WIFI in every station, UTS is there at all the 22 stations, PRS at KRPU, Jeypore and ARK, 3 exchanges at KRPU, Jaypur & ARK, manual announcement systems, auto announcement system in 3 stations, display boards etc .

There is ART & ARME at KRPU. Schedule of maintenance for ART/ ARME – 4 times a month by Techs and by SSET once in a month.

EC socket testing – 3 times a month.

Observation:

1. Doubling work is under progress in KK1 & KK2 line , so more staff are deputed to site to safeguard cables. Cable cuts/cable works are more now. Quad cable failure brings: failure of bock instrument, side phones, LVCD, EC sockets, failure of automatic section etc.
2. Railtel repairs OFC cable cut. But connectivity, STM,MUX etc are to be checked by staff and they are to be alert till services resume.OFC failure brings: failure of Control phones, RC, Auto phones, Rail net, FOIS, COIS, PRS, UTS, etc

3. A store is there which is being handled by the SSET himself. Out of 4 KSIs one KSI (Ladies) is attached to office for misc jobs and receiving calls/complaints. So work force is 2+3 (Tech+Helper) for sectional maintenance, attending failures, ART/ARME and station maintenance etc.
4. Failure register is being maintained by the present SSET/KRPU wef 01.08.2019 Failures as recorded wef August 2019 – 24th Jan2020 are appended below.

Table/15

Month	Cable failure	Auto phone	OFC	Control/side phone/ VHF
August 2019	7	9	8	24
September	4	7	7	13
October	4	7	16	12
November	17	3	20	6
December	4	11	9	21
January by 24.01.20	11	-	-	7
Month Av. (Total/5.5)	47/5.5=8.5	37/5.5=6.7	60/5.5=10.9	123/5.5=22.36

Chapter - VIII

SSET/JDB

One SSET, One JET and 26 staff (Tech: 10+ CJ: 2+Helper: 14) are there in the unit. The jurisdiction of the unit is Ex Charmuli Kusumi to KRDL, 204 kms : 20 stations (KPRR, AGB, AGZ, NKX, JDB, KMEZ, TPQ, BDXX, DMK, SZY, KMSD, KKL, KWGN, DBF, GIZ, DWZ, KMLR, BHNS, BCHL & KRDL). There are three exchanges (JDB+BCHL+ KRDL). There is ART at KRDL. There is a sub unit at DWZ under the JET/ DWZ.

Staff distribution

(Tech+C/J+KSI)

KPRR: 1 +0 +2

JDB: 3 +1 +6

DMK: 1 +0 +1

KKLU: 0 +0 +1

DWZ: 3 +1 +3

BCHL 1 +0 +0

KRDL: 1 +0 +1

10+2+14

JDB is the important station in the Line. Tele gears at JDB are more than other stations. There is ASTE office at JDB. Staff distribution and duties of staff at JDB is appended below.

Staff distribution at JDB

Exchange: 1+0+1

For Station maintenance 2+0+0

Office 0+0+2

For section 0+1+3

3+1+6

Repeater/Exchange : Electronic exchange , FOIS cable hut, NMS 2 Boards (1 for FOIS+ 1 for PRS/UTS), Battery Bank, Auto phone -70, Railnet-20, SCADA, STM, PD MUX, 48 Volt Power Bank, etc are there in the Exchange at JDB. One Tech and one helper attend the duties at exchange in general shift.

Station Maintenance: 2 Techs: Control of all the 20 Stations of the jurisdiction for UTS, PRS (at JDB, DWZ, BCHL & KRDL), FOIS, CMS is at JDB. Faults are monitored from JDB. Besides TC, TPC, SP, hot line phones, WIFI, LC Gate phones (20 LC gates), DATA logger, 25 WAT VHF sets , LVCD, IPDSLM, Rail net, display boards at Railway platforms , Auto/Manual Announcement systems, Touch Screen etc are taken care of when faults detected. The PRS is working with E1 BSNL Channel.

Office 02 Helpers: one clerk is there in the office for Store and establishment. 01 Helper assists the clerk for various establishment works such as muster, Pass, PTO, and other establishment works. The other helper is for DAK and issue of stores etc.

Sectional duties (CJ-1 + 3 helpers): These staff go for socket testing, and maintain the assets of Stations in rotation, EC socket testing- 3 times a month, attend Cable Cut (15-20 times/yr) and other cable works in the jurisdiction.

Sub unit, DWZ (Tech, CJ & Helper: 3+1+3): There is a sub unit at DWZ under a JET of the unit . 9 stations from Kaklur to Kirondol are being looked after by the JET. Manual PA system and UTS at all stations, FOIS & CMS at BCHL & KRDL, PRS at DWZ, BCHL & KRDL, IPDSLM for Rail net at DWZ, BCHL and KRDL, RYD & Weigh bridge of NMDC at BCHL, E1 BSNL circuit – BCHL, ART at KRDL are some important Tele gears towards the fag end in the KK line.

KRDL & BHL being the loading points are important from Telecom the point of view. Besides the above, EC socket testing, quad cable maintenance, attending failures- TC, TPC, rail net SCADA, data logger etc, maintenance of ART are some of routine works like other units.

Staff at other locations: Staff at other locations attend duties such as socket testing and up keeping of station equipments and other routine maintenance job. Sometime other staff join with them, sometimes they join with other staff also.

Observation:

1. KK line ends at KRDL. There is Railway track beyond. In case FOIS connectivity fails at a station in between, it cannot be established through the next station in a roundabout way as don in a through station. E1 BSNL circuit is the only alternate in-case of FOIS failure.
2. Its a nuxlite area. Being surrounded by jungles and hills with a few passenger trains in a day, it becomes difficult to attend failures in the night time. At some places direct road connectivity is not there. Staff who are deputed to attend urgent failures – LC gate, control phone, block instrument and cable cut etc during night time, do not find scope to return same day due to unsafe roads. Mobile Network is feeble and do not work at all places.
3. A 4 wheeler vehicle is badly necessary for the unit.
4. There was no failure register in the unit. The present SSE started the same wef Oct 29, 2019. Average quad cable cut in a year, as informed, is 15-20.

Chapter IX

Divisional office

Sr.DSTE's Office: There are 2 Techs and 6 Helpers in the office of Sr. DSTE. The duty of staff and their distribution is appended below.

Technical Section 2+1: One SSET, 02 Techs and 01 Helper are there in the section. This section is the coordinating section which collects and compiles data from other units of the division and supports Sr.DSTE in technical matters. Preparation of MCDO, PCDO, Interdepartmental correspondences in Technical matters, Technical certification for purchase of Electronic gadgets, correspondence with Rail Tel, passing of JIO(4750Sims),BSNL (149 connections) and Rail Tel Bills, compliance of Inspection note of DRM and high officials etc are the work of this section. The Techs and Helper attached to this section assist the SSET in above works.

Helpers in Sr.DSTE's Office: There are 5 Helpers in the Office of Sr DSTE. Their distribution amidst sections in the office is thus.

Dispatch section:	01
Establishment section:	01
Budget section:	01
Test room:	01
Sr.DSTE:	01

05

Chapter X

Critical analysis

1. Almost all the maintenance jobs of the Telecom wing are being executed by the staff except maintenance of OFC cable (by Railtel). The existing Zonal contract is for large scale laying of quad cable which is like a special work, not a maintenance job.
2. As burden of staff cost is too heavy, it is essential to reduce staff strength by bringing more and more day to day maintenance activities under outsourcing in non safety areas.
3. The following activities can be put under outsourcing without hampering safety.
 - i. Attending auto phone failures, laying of cables for new connections, Battery maintenance in exchanges, repeater rooms, Stations and other locations along with cleaning of the area do not involve safety. Now a days auto phones carry no meaning except Rail net that comes through. It can save staff cost of 02 staff average per unit who are engaged for the activity.

In ECoR HQ maintenance of auto phones, attending failure in auto phones, laying of cable for new connections and etc have been outsourced.
 - ii. Quad cable maintenance can be outsourced like OFC cable.

At the time of Quad cable cut staff may be engaged for resuming temporary connection as they are doing now so that normal running of trains do not hamper. Rest of the works can be executed by outside agency within stipulated time.
 - iii. EC socket testing is a duty – every unit is carrying out – 3 times a month as per guide line. But its importance is fading away in main line/RV line due to CUG. However, to continue the system for a remote exigency, the activity can be executed by a EC gang of outsourced manpower under supervision of departmental staff. This also can be taken to KR & KK line subsequently with proper planning.
 - iv. PA system maintenance in Station & PA system for public functions can be outsourced.
4. Lot of Female staff (Tech & Helper) are there on roll (Table/5). Technical and field works are the nature of jobs in Telecom wing. Restriction may be imposed for further entry made through compassionate grounds, as more accommodation in unit's offices curb productivity.

5. Mostly cable cuts are happening by JCBs engaged for works of Engg department. Prior information to Telecom should be given so that Telecom staff could guide along and the cables are safe.
6. Cadre of cable jointers is small. It may be merged in Tech cadre to help the on roll staff in career progression. For multipurpose utility, all the Techs should be trained in cable jointing works.
7. In some units around VSKP, staff are found excess to the need. They may be redeployed in other wing of the department / other departments. Staff cost should be adjudged with output.

Staff cost

Srl	Pay Band (in Rs)	Mean Pay (in Rs)	DA @ 17% (in Rs)	Money value per post per month (in Rs)	Money value per post for annum (in Rs)
1	2	3	4	5	6
Tech-III (Level-II)	19900- 63200	41550	7064	48614	5,83,368
Helper (Level-I)	18000- 56900	37450	6367	43,817	5,25,804

8. Supply of manpower may be included in the zonal contract and future Tech and Helper need of units may be drawn out of it as per requirement in the non safety areas.
9. Non safety areas may be brought under outsourcing gradually in a phased manner and staff requirement should be restricted to bare necessity in safety points.

Chapter XI

Assessment on required cadre

1. As per points discussed in the critical analysis, item no 3 (i), activity of attending telephone failures along with Battery maintenance in the units at Main line & RV line may be taken into account in the 1st phase. 1+1 (Tech + Helper) per unit may be surrendered as assessed under.
2. Besides, as per assessments done in SSET/VSKP's sub units and SSET/VZM surplus manpower assessed may be redeployed and posts may be surrendered.
3. Reduction as per point 1 & 2 above is stated below (for Tech, C/J & Helper posts).

Summary of reduction from SSET units

Table/16

Srl	Unit	Present On roll			Reduction proposed			Proposed on roll		
		Tech	C/J	Helper	Tech	C/J	Helper	Tech	C/J	Helper
1	SSET/WAT(sub units)									
	Store	2	0	7	1	0	2	1	0	5
	Wireless	12	0	9	1	0	1	11	0	8
	VDPD	3	0	4	0	0	0	3	0	4
	MPM	6	4	6	1	3	1	5	1	5
	Test Room	6	0	4	0	0	0	6	0	4
	Exchange	13	0	8	8	0	2	5	0	6
	KTV	10	2	14	1	0	1	9	2	13
	Total	52	6	52	12	3	7	40	3	45
	Other units									
2	VZM	13	2	17	3	0	3	10	2	14
3	RGDA	11	1	13	1	0	1	10	2	12
4	KRPU	7	1	10	0	0	0	7	3	10
5	JDB	10	2	14	0	0	0	10	2	14
	Total	41	6	54	4	0	4	37	9	50
6	Sr.DSTE's office	02	0	06	0	0	0	02	0	06
	Total	02	0	06	0	0	0	02	0	06
	G/Total	95	12	112	16	3	11	79	12	101

NB:

- i. SSET/Store: Surplus 1+2 (Tech+ Helpers)
- ii. Wireless: Auto phone/general shift: 1+1 (Tech+ Helpers).
- iii. MPM: Surplus 3 C/J. Auto phone 1+1 (Tech+ Helpers) from.
- iv. Exchange: Surplus 4 Techs/Shift duty: Auto phones/DRH & E.Point: 2 Techs and Auto phone/outdoor sub unit: 2+2 (Total 8+2)
- v. KTV & RGDA units: Auto phones 1+1(Tech+ Helpers) from each unit.
- vi. VZM: surplus 2+2 staff/ shift duty and Auto phone: 1+1 (Tech+ Helpers).
- vii. KRPU and JDB unit has been excluded as there prevails a typical condition: Fear of Nuxlite intervention and in KK line no diverted route to establish OFC link in case there is a failure.

4. There is a vacancy of 56 posts. It can be surrendered.
5. There are 3 surplus C/Js in the SSET/MPM unit. They have been proposed to be redeployed at RGDA & KRPU units (Table 16) as cable works are found to be more in the units.

Proposed cadre

Table/17

Srl	Unit	Sanctioned cadre			Proposed cadre		
1	2	3			4		
		Tech	C/J	Helper	Tech	C/J	Helper
1	Sub units of SSET/WAT						
	Store	65	5	55	1	0	5
	Wireless				11	0	8
	VDPD				3	0	4
	MPM				5	1	5
	Test Room				6	0	4
	Exchange				5	0	6
	KTV				9	2	13
	Total	65	5	55	40	3	45
	Other units						
2	VZM	20	2	17	10	2	14
3	RGDA	17	1	14	10	2	12
4	KRPU	11	5	16	7	3	10
5	JDB	13	3	23	10	2	14
	Total	61	11	70	37	9	50
	Divisional HQ						
6	Sr.DSTE's office	02	0	06	02	0	06
	Total	02	0	06	02	0	06
	G/Total	128	16	131	79	12	101
		275			192		

Surrenders proposed

Table/18

Srl	Tech	C J	Helper	Total	Reference
Sanctioned posts	128	16	131	275	Table 17 /Column 3
Proposed cadre	79	12	101	192	(-)Table 17 /Column 4
Proposed surr.	49	04	30	83	

Brake up of surrenders

Table/19

Surrender from:	Tech	C J	Helper	Total	Reference
Vacancy	33	4	19	56	T/4A page 4
After redeployment	16	0	11	27	Proposed surr-Vacancy
Total	49	4	30	83	

Chapter XII

Recommendations

Basing on the assessment done in the previous chapter the following recommendations are made:

1. Surrender proposed: (Tech+ C/J+ Helper): $49 + 04 + 30 = 83$ posts i.e. (56 posts from vacancy and 27 posts after redeployment).
2. Care may be taken to surrender posts in lower grades as far as possible.