

# **CHAPTER I**

## **ORGANISATION OF THE SIGNAL AND TELECOMMUNICATION DEPARTMENT**

### **SECTION 'A'- GENERAL**

#### **1.1 ORGANISATION IN THE HEADQUARTER OFFICE**

(a) The Chief Signal & Telecommunication Engineer- The Chief Signal & Telecommunication Engineer is the administrative and professional head of the Signal & Telecommunication Department and is directly responsible to the General Manager for its efficient and economical working.

b) The Chief Communication Engineer - The Chief Communication Engineer assists the Chief Signal & Telecommunication Engineer in the administrative and professional work for all communication matters.

c) The Chief Signal Engineer- The Chief Signal Engineer assists the Chief Signal & Telecommunication Engineer in the administrative and professional work for all signalling matters.

d) The Chief Planning Engineer (Signal & Telecommunication)- The Chief Planning Engineer (S&T) assists the Chief Signal & Telecommunication Engineer in planning and execution of works.

e) The Deputy Chief Signal & Telecommunication Engineer- The Deputy Chief Signal & Telecommunication Engineer assists the Chief Signal & Telecommunication Engineer, Chief Signal Engineer and Chief Communication Engineer in the administrative and professional work.

f) Senior Scale Officers- Senior Scale Officers designated as Senior Signal & Telecommunication Engineers are employed in the Headquarters Office of each Railway and work directly under the administrative control of the Chief Signal & Telecommunication Engineer or the Engineer-in-Chief (S&T) or the Deputy Chief Signal & Telecommunication Engineer.

g) Assistant Signal & Telecommunication Engineers- They shall be responsible to the Senior Scale Officer/Officers or to the Deputy Chief Signals & Telecommunication Engineer.

#### **1.2 ORGANISATION ON A DIVISION**

(a) A Signal & Telecommunication Engineer in Junior Administrative Scale, Senior Scale or Junior Scale, is incharge of all the signal and telecommunication equipment on the division

and works under the administrative control of the Divisional Railway Manager. If there is more than one JA Grade officer, one shall be exclusively incharge of telecom assets and other for signalling assets.

(b) The Signal & Telecommunication Engineer incharge of a division is also responsible to the Chief Signal & Telecommunication Engineer for the efficient maintenance and control installation of all the signal and telecommunication equipment on the division.

(c) The strength of the Gazetted officer shall be determined by DISTU's (Divisional Integrated Signal and Telecom Units) and ZISTU's (Zonal Integrated Signal and Telecom Units) in the HQ.

### **1.2.1 TELECOMMUNICATION:**

(a) The telecommunication work on each division shall be divided into Sr. Section Engineer/Section Engineer/Junior Engineer.

(b) On a division, each SSE/SE/JE shall be responsible to the Divisional Signal & Telecommunication Engineer/Sr. Divisional Signal & Telecom Engineer through the Assistant Signal & Telecommunication Engineer, for efficient maintenance and correct installation of all telecommunication equipments under his charge.

### **1.2.2 DUTIES OF Sr. SECTION ENGINEER/SE/JE:**

The essential duties of SSE/SE/JE are:-

(a) Inspection and efficient maintenance of telegraph and telephone equipment such as keys, sounders, relays, junction boards, teleprinters, magneto, central battery and auto exchanges, telephone repeaters and other telecommunication installations at large stations including wireless installations. Indicators, Public address System, Interactive Voice Response System, Optical Fibre System, Message Switching System, Computer Communication, Train Radio Communication.

(b) Execution of all works involving alterations to the existing installations, and installations of new equipment, its adjustment and connections.

(c) Carrying out periodical tests on line wires independently as well as jointly with the officials of the Posts & Telegraphs department.

### **1.2.3 STAFF UNDER SSE/SE:**

(a) Each SSE/SE shall be assisted by one or more JE, where necessary, and Technicians shall be provided under him for maintenance. The strength of JE and Technicians shall be fixed in accordance with the density of work and other local conditions.

(b) Each JE must be provided with a gang for attending to works that may be considered normally beyond the scope of the Technicians.

(c) Each JE may be provided with office clerks depending on the quantum of office work. An office khalasi may be provided, where necessary.

(d) Where railway's underground telecommunication cables including Optical Fibre exist (as in electrified areas), a cable break-down transport such as a pick up van shall be provided. An emergency gang with full complement of cable jointing materials, tools and testing equipment's should be available with the break-down vehicle.

## **SECTION 'B'**

### **STRENGTH, CHARGES, DESIGNATIONS AND CODE INITIALS FOR VARIOUS TYPES OF STAFF, INSTALLATIONS AND FUNCTIONS**

**1.3** Strength and charges of SSE/SE, JE, Technicians , section gangs and the strength of the office staff shall be fixed by the Chief Signal & Telecommunication Engineer, with due consideration to the nature of installation density of work, size of installation and general importance of work.

#### **DESIGNATION AND CODE INITIALS**

<b>DESIGNATION</b>	<b>CODE INITIAL</b>
(a) OFFICERS	
(i) Chief Signal & Telecommunication Engineer	CSTE
(ii) Chief Communication Engineer	CCE
(iii) Chief Signal Engineer	CSE
(iv) Chief Planning Engineer(S&T)	CPE(S&T)
(v) Dy. Chief Signal & Telecommunication Engineer	Dy. CSTE
(vi) Signal & Telecommunication Engineer(Senior Scale) in the Headquarters Office (Telecommunication)	SSTE(Tele)
(vii) Assistant Signal & Telecommunication Engineer	ASTE (Tele)

(Telecommunication).

**(b) Sr. SECTION ENGINEER**

- (i) Senior Section Engineer in HQ Office (Telecommunication) SSE (Tele) HQ
- (ii) Senior Section Engineer (Telecommunication) SSE (Tele)
- (iii) Section Engineer SE
- (iv) Jr. Engineer JE

**(c) TECHNICIANS**

- (i) Telecommunication Technicians TC
- (ii) Wireless Technicians WT
- (iii) Cable Jointer CJT
- (iv) Lineman LM
- (v) Motor Mechanic MMC
- (vi) Aerial Rigger (Mast Rigger) AR

**(d) INSTALLATIONS AND FUNCTIONS**

- Telecommunications T
- Works /Construction W
- Maintenance M
- Stores S
- Headquarters Correspondence work HQ
- Auto Exchanges (AX)
  
- Trunk Exchanges & Manual Exchanges (TX)
- Line Plant (LP)
- Telegraphy (TY)
  
- Traffic Train Control (TC)
- Sound Distribution System (PA)
- Electric Clocks (E/C)
- Emergency Mobile Communication System (MOBILE)
- Yard Communication System (YARD)
- High Frequency Radio Communication System (HF)
  
- Line of Sight Systems( UHF/VHF/Microwave) (MW)
- Power Plant System (PP)
- Carrier Communication (CC)
  
- Cable (CABLE)
- Optical Fibre (OFC)
- Repeater Station Cable (RSQ)
- Cable Hut (CHQ)

Computers

(COMP)

**(e) USE OF CODE INITIALS**

- (i) Senior Section Engineer of Maintenance (Telecommunication)      SSE(Tele/M)
- (ii) Section Engineer Incharge of  
Yard Communication System.      SE(YARD)
- (iii) Section Engineer of Sound  
Distribution System and Electric Clocks.      SE (PA & Clocks)
- (iv) Section Engineer for maintenance of Microwave      SE(MW)