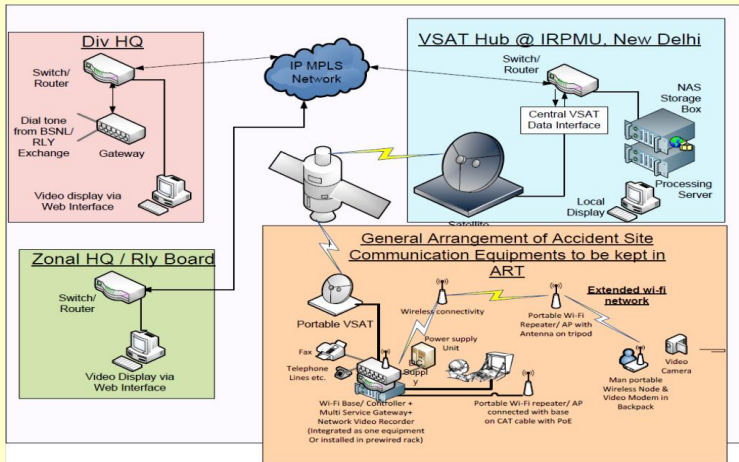




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# GOVERNMENT OF INDIA MINISTRY OF RAILWAYS ROLE OF TELECOM DEPARTMENT DURING ACCIDENTS



**अग्रिम सं RDS**  
रेल अग्रदूत Transforming Railways



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## **ROLE OF TELECOM DEPARTMENT DURING TRAIN ACCIDENTS**

### **TEST ROOM**

As soon as the test room, receive the message of train accident from controller, He/She shall inform to all related officers of the Division such as Sr.DSTE, DSTE, ADSTE, and SSE/Incharge of Test Room etc.

### **TELECOMMUNICATION STAFF:**

- Proceed to site by quickest means available.
- Ensure portable telephone / emergency telephone set is provided at site.
- Wherever feasible, wireless sets to be installed at accident site for communication with Divisional Headquarters and if possible with Railway Headquarters. Walkie-talkie sets / Megaphones / loud hailer to be deployed as necessary.
- DOT/BSNL telephone with STD facility to be arranged at the temporary enquiry offices opened at site and nearest location wherever possible.
- Render such assistance as required by Guard in attending to the accident victims and stranded passengers.
- Arrange for early restoration of telecom equipment as soon as such restoration is permitted.

### **COMMUNICATION AT ACCIDENT SITE**

- As soon as an accident occurs, driver/asst. driver shall establish communication with the portable control telephone by hooking on to the overhead lines / plugging into the emergency sockets, so as to establish communication with control office.
- In addition guards of all passenger trains are also provided with portable control phones of the types mentioned above. Guard shall also establish communication with control office.

- Drivers and Guards of all trains shall be provided with 5 watt walkie-talkie sets, information shall be given in the 5 watt walkie-talkie set to the adjacent station wherever possible. In some sections arrangements are available to communicate with control office on walkie-talkie/duplex VHF sets and this may be used where such arrangement exist.
- Additional means of communication shall be provided progressively within the shortest possible time as under:
  - Provision of Railway telephones.
  - Provision of BSNL telephones.
  - Mobile phones wherever network coverage exists.
- Accident Relief Trains (ART) are located at strategic locations of each division and are provided with telecommunication equipment for providing additional facilities as under:
  - PA system shall be established for making important announcements.
  - Megaphones shall be given as per need at site.
  - Walkie-talkie sets shall be distributed as per need.
  - Magneto communication as required at site.
  - Communication through satellite phone shall be established.
  - FAX, E-mail shall be established wherever communication media is available. It shall be possible to provide the communication using satellite technology / through Railways own OFC links, by extending bandwidth from the accident site to the adjacent station / using BSNL connections. Mobile telephone exchange (WLL) may be established, if available.
  - Wherever cell phone coverage exists, cell phones available with officers and with ART shall be used.
  - MTRC shall be used wherever possible.
  - For communication of Video/Pictures to control office, use of social media Apps may be convenient and efficient

- It is desirable to send pictures of accident spot to Railway Board / Zonal / Divisional Headquarters using e-mail for which extension of internet/railnet to site is required. It is desirable to send video coverage to Railway Board / Zonal / Divisional Headquarters, as and when the necessary equipments are provided in the ARTs.
- Accident site communication system will cater for onsite wireless voice communication and also to provide voice, data and video connectivity of the accident site to Divisional HQ, Zonal HQ and Railway Board.
- For video transmission a mesh Wi-Fi network will be created at the site and with video camera the video shall be wirelessly transmitted to the Multi service gateway.
- The voice, data and video connectivity with remote locations will be provided through VSAT network. Indian Railways have established its own VSAT network including hub. Presently Indian Railways have hired bandwidth from transponder of INSAT-4CR (Ku Band) satellite. Hub for this VSAT network has been set at New Delhi by M/s Hughes. The network is in star topology.
- The VSAT terminal to be used for Accident Site Communication shall be able to deliver bidirectional composite data traffic (Voice, Video and Data) at a speed of 2Mbps. However the actual working bandwidth may be limited in compliance of regulatory requirements.
- The VSAT terminal will deliver the composite data traffic from site to the VSAT hub at New Delhi. From here the composite data traffic will be transported to Divisional HQ, Zonal HQ and Railway Board on existing MPLS network.
- A video server shall be provided at New Delhi VSAT hub to enable web based access to live and stored videos.

## ACCIDENT INFORMATION FOR PUBLIC

- As soon as information regarding an accident is received, accident information number (Help Line, mostly 1072) shall be activated and manned. This number shall normally be at the zonal/divisional headquarters. Adequate personnel shall be posted by commercial branch to meet the demand depending on the seriousness of the accident. Number of lines for this number shall be suitably augmented depending on the demand.
- Close liaison shall be maintained with BSNL officials for monitoring the call rates and increasing the lines as necessary.
- The accident information number should be made wide publicity through audio, video and print media.

## OFFICER OR SENIOR SUPERVISOR FIRST REACHING AT THE SITE:

1. The Officer or the Senior Supervisor first reaching the site of the accident shall check up:-
  - a) Whether protection has been done.
  - b) On a double line, whether the other line is free from obstruction for moving trains.
  - c) Whether necessary message supposed to be relayed regarding the details of the accident, casualties etc., have already been relayed or not.
2. He shall make a quick assessment of the assistance required and relay the same to the control. He will also marshal all available resources like Guard, TTEs, other Railway employees, volunteers from passengers, escort RPF, etc., and organize rescue and relief of the injured and other passengers.
3. He shall also examine and make a note of all evidence which may prove useful in ascertaining the cause of accident.

4. He shall arrange for protection of the site/area that holds the clues/evidence which will be essential to arrive at the cause of accident. He shall ensure that such clues/evidence is not tampered with by Railway staff or outsiders.

5. The following points require special attention:

a) The condition of the track, with special reference to the alignment, gauge, cross levels, curvature, super elevation and rail headwear:

b) Point of mount or point of drop, if any

c) The condition of rolling stock with special reference to Brake power.

d) Marks on sleepers and rails:

e) Position of derailed vehicles;

f) The position of Block Instruments, signals, points, levers, indicators, keys;

g) If the accident has taken place within station section, the position of switches and indications of the Signals, points and track circuits should be jointly recorded preferably by three officers (or three senior subordinates of Traffic, S&T & Engineering departments) of different branches and the relay room should be sealed as soon as possible.

h) Position of important relays and the condition of the block instrument (i.e. whether open or locked) and

i) He should cross check the list of casualties prepared by the Railway Doctor and countersigned by the civil police (if some bodies are yet to be recovered, it should be mentioned that the list is not final and will be conveyed after salvaging bodies from debris).

6. Where possible a rough sketch showing the position of Derailed vehicles, marks on sleepers etc., should be made.

7. All relevant materials, clues, damages and deficiencies on the locomotive and rolling stock as well as position of broken or detached parts of Permanent way and rolling stock must be carefully noted and all such clues etc., carefully preserved so that,

if considered necessary, the scene could be reconstructed before the police, the Commissioner of Railway Safety or any other senior officer, or court of law.

8. If, however, sabotage is suspected, in addition to noting and preservation of all such clues, no object should be disturbed unless the police have had an opportunity of making thorough inspection of the site.

However, if there is delay in the arrival of Civil and Police officials at the site of the accident, the senior most Railway Official at site may, at his discretion, jack up any portion of a coach or shift any property to the minimum extent necessary, after noting its original position by sketch to extricate human beings trapped under it, in the shortest possible time to save life and minimize sufferings. Normal traffic, however, should not be permitted without consulting the police.

a) Further specific enquiry should also be made from the Commissioner of Railway Safety in case of suspected sabotage to ascertain if he would like to inspect the site before the clearance operations commence.

b) Restoration / clearance should not commence (except to the minimum extent necessary to save human lives) unless such permission has been received from police authorities as well as CRS.

9. In the case of serious explosion or fire caused by explosives or dangerous goods, all wreckage and debris must be left untouched, except in so far as its removal may be necessary for the rescue of the trapped / injured persons and recovery of dead bodies, until the Chief Inspector of Explosives or his representative has completed his inquiry or intimated that he does not intend to make any investigation.

10. If the station staff are prima facie responsible, the train passing records must be seized and statements of station staff concerned recorded.

11. If a passenger carrying train is involved, the officer or senior subordinate must secure the written evidence of as many witnesses as possible and their names and addresses should be recorded. The witnesses selected should not be railway men.

12. He should have a complete list of names and addresses of the injured and dead along with the addresses of relatives and ensure messages are sent to the relatives of the injured or dead.

13. He should also ensure that Superintendent of Police and District Magistrate have been advised.

14. He should give the prima-facie cause of the accident with the expected time of restoration.

15. He should ensure that progress report is relayed to control every one hour.

### **SENIOR DIVISIONAL SIGNAL AND TELECOMMUNICATION ENGINEER:**

- Proceed to site of accident. Make arrangements for installing, Mobile/Railway/ BSNL/ Satellite phones at site in sufficient numbers so that communication from site to control office/divisional office/Zonal office/ other stations, outside agencies takes place smoothly and without delay.

- Establish communication between the site and Divisional Head Quarters Office.

- Ensure that a detailed record is made of all evidence bearing on the accident so far as S&T and interlocking are concerned.

- Preserve clues and seal the relevant equipment if required.

- Restore the signaling and interlocking for normal working without delay.

*DISCLAIMER :The information given in this pamphlet does not supersede any existing provisions laid down in Telecom Manual, Rly. Board and RDSO publications. This document is not statutory and instructions given in it are for the purpose of guidance only. If at any point contradiction is observed, then Telecom Manual, Rly. Board/RDSO guidelines or Zonal Rly. instructions may be followed.*