

APPENDIX - XIII

S&T maintenance works – Testing of points, signals and other equipment – Disconnection Notice

I. Disconnection and testing of S&T gears:

1. There are certain works such as replacement of fuses, bulbs etc., which can be carried out without any hindrance to the normal working of trains. These works may be attended to by the S&T staff without the consent of the Station Master on duty.
2. The testing of points / signals / interlocking of the lever frame etc., may not require Disconnection Notice but definitely requires the consent of on duty Station Master as it is likely to interfere with the train movements and safety of operation. It has accordingly, to be done with the consent of the operating staff only. The written consent shall be obtained in the proforma enclosed (Annexure – A)
3. It is essential in the interest of safety that whenever any work is to be executed necessitating interference with any points or its fittings, signals or its fittings, signal wires, point rodding or any interlocking gear or locking of switches or any other signalling gears for carrying out repairs or for making alterations to the circuitry or for any other purpose, which is likely to affect safe running of trains, the Station Master on duty must be given Disconnection Notice in the form S&T (T/351) (Annexure – B of para 1416 of Signal Engineering Manual) and his permission obtained before the work is started.
4. To summarize for this purpose, the situations are grouped under three sets and the details under each group are shown below:-

Group (A) – Situations not requiring the consent of on duty Station Master.

Group (B) – Situations definitely requiring the consent of on duty Station Master.

Group (C) – Situations in which issue of Disconnection Notice is definitely required.

While undertaking the items of work listed in Group (B), it is essential that the Station Master concerned be kept informed by the official of S&T department undertaking the work so that Station Master on duty is aware that the S&T staff is working on signalling gears at his station.

5. When the situation mentioned in group (C) arises, the work shall commence only after traffic staff accepts Disconnection Notice.

For undertaking maintenance and repair works under Disconnection the instructions given below to be followed.

- a. Signal maintenance and repair works should be done only under clear Disconnection Notice as per provisions contained in Para 11.4 of IRSEM (Part-II). They should also mention the duration of requirement to SM.
- b. Disconnection for duration up to one hour should normally be allowed by the SM depending upon trains in the section.
- c. If Disconnection is not allowed by the SM, it should be requisitioned again by the S&T Official and allowed by the Control depending upon the flow of trains. Otherwise, the available slot may be indicated by the Control to the S&T staff.
- d. In extreme exigencies, if the maintenance / repair of S&T gear is urgently needed to avoid an accident, the same may be suspended with the approval of Sr. DSTE.

- e. For works involving disconnection for more than one hour, a Disconnection schedule jointly signed by Sr.DSTE, Sr.DOM, Sr.DEN & Sr.DEE/TRD should be issued and notified to all concerned and the progress of the joint schedule should be reviewed by the DRMs periodically.
- f. For Disconnections/maintenance likely to last for more than a day:
 - a. Temporary working instructions must be issued.
 - b. The SM shall be responsible for ensuring that relevant points are correctly set, clamped and padlocked.
 - c. S&T Officials may restrict the aspect of signals to give only 'caution' aspect.
 - d. Thereafter the SM can take 'off' signals after ensuring correct setting clamping and locking of points.
 - e. Temporary Engineering Indicators with speed of 15 KMPH should be placed at the site.
6. In the interval between Disconnection and Reconnection of gears, when it is necessary to pass trains or perform shunting in the affected portion of lines where points etc., have been disconnected, procedure laid down in S.R. 3.51.7.1 should be strictly followed.
7. Attending to signal and point failures:

As soon as the Station Master on duty becomes aware of any failure of signaling equipment at his station governing the movements of trains, he should immediately report such failures in writing personally or through control phone to the MSM / ESM as the case may be and to the Signal Inspector apart from advising all other officials in accordance with S.R. 3.68.3. It should be understood by S&T staff attending to the gears that a written or control message from the Station Master is only the intimation for the maintenance staff to attend the defect. Before attending to the defect involving interference with the interlocking gears, procedure laid down for Disconnection Notice as brought out in paras 3, 4 & 5 above will be followed. In all such cases the traffic staff must accept Disconnection Notice.

After the failure is set right, the person-in-charge shall test and certify in writing the rectification of the defect and if necessary demonstrate to the traffic staff about the normal working.

ESM/MSM who attends such failures shall record the failure in the pro-forma as given on the reverse side of Annexure A of 1414 © of SEM. These reports shall be forwarded weekly to the Signal Inspector for further scrutiny. It is reiterated that the Signal Maintainer must not permit any other artisan or Group D staff to do any adjustment for cleaning or repairs of signal equipment except under his personal supervision.

GROUP (A)

Situations not requiring the consent of on duty Station Master –

1. Tightening of terminals without causing any short circuits.
2. Replacement of fuses.
3. Replacement of bulbs.
4. Cleaning of colour light lenses and roundels outside and focusing of signals and route indicators.
5. Cleaning and opening of top covers and lever locks, circuit controllers, detectors, points and signal mechanism.
6. Lubrication of pins of cranks and compensators, lock bar clips, down rods of signals, signal diversion wheels, signal & point mechanism detectors and external cleaning and lubrication of points.
7. Renewal and re-fixing of pulleys.