

**15.05. Patrolling of lines.—**

- (1) In addition to the inspection referred to in Rule 15.04, whenever any portion of a railway is likely to be endangered by abnormal conditions such as heavy rains, breaches, floods, storms and civil disturbances, the line shall be patrolled in accordance with special instructions.
- (2) When a railway servant deputed to patrol the line notices any condition likely to affect the safety of trains or otherwise apprehends danger, he shall take action in accordance with special instructions prescribed for the purpose to protect the obstruction on line and thereafter inform the nearest Station Master by the most expeditious means. (see also Rule 3.62)

S.R.15.05. For Special Instructions regarding Patrolling of line, see Appendix IV.

**15.06. Work involving danger to trains or traffic.—**

A gang shall not commence or carry on any work which will involve danger to trains or to traffic without the previous permission of the Inspector of Way or Works, or of some competent railway servant appointed in this behalf by special instructions; and the railway servant who gives such permission shall himself be present to superintend such work, and shall see that the provisions of Rules 15.08 and 15.09 are observed:

**Provided that, in case of emergency, when the requirements of safety warrant the commencement of any such work before the said railway servant can arrive, the Gangmate may commence the work at once and shall himself ensure that provisions of Rule 15.09 are observed.**

**SR 15.06. BLOCK**

It is an arrangement of blocking of track against movement of traffic over a particular section duly allowing the required material train or track machines or tower wagons of departments concerned for maintenance.

**SR 15.06.1. Types of Blocks:**

1. Line Block – means blocking of a portion of line for engineering purposes wherein no traffic is permitted except Material trains and Track Machines.
2. Power Block – means blocking of a section of line against movement of electric traffic. However, during this block period, diesel traffic may be dealt. This block is exclusively used for OHE maintenance purposes.
3. Integrated Block – means blocking of a portion of line for maintenance work by more than one department i.e, Engineering, TRD and S&T departments simultaneously.
4. Shadow Block – means a block, which may be or may not be integrated, availed from either end of the block section between two block stations simultaneously. (These shadow blocks can be planned during special works like changing of bridge girders, replacement of turnouts, changing of contact wire etc).

**SR. 15.06.2. SPECIAL INSTRUCTIONS FOR LINE BLOCK ON SINGLE AND DOUBLE LINES****15.06.2.1. Engineering works affecting traffic:**

1. For the purpose of these rules, Engineering works are classified under the following three categories:-

1. Category I - Works of normal routine maintenance, such as renewals of keys and bolts, isolated renewals of a chair, pot or sleeper, picking up of slacks, overhauling etc.
2. Category II - Works such as scattered renewals of pots, sleepers, oiling of bolts, greasing of fish plates, painting of bridges, lifting and packing or other works necessitating observance of hand signals or 'Stop' or 'Proceed with Caution' signals etc.
3. Category III - Works involving renewal of rails/sleepers, re-laying, temporary diversions, loading / unloading of ballast, re-girdering, welding of rail joints or other works causing interference with the traffic.
4. Engineering works listed under SR 15.06.2.1.1. (Category I): No special precautions are necessary and no advice need to be given to any Operating Official.
5. Engineering works listed under SR 15.06.2.1.2. (Category II): SCOR and Station Master shall arrange to issue suitable Caution Order to the Loco Pilots indicating the speed restrictions. However, Caution Order shall be issued even in the absence of speed restriction indicating to look out for Engineering signals. The Engineering Official-in-charge shall also arrange for the protection of the affected area in accordance with SR 15.09.1.
6. Engineering works listed under SR 15.06.2.1.3. (Category III):
  1. In all cases of engineering works involving renewal of rails/sleepers, re-laying, temporary diversions, loading / unloading of ballast, re-girdering, welding of rail joints or other works causing interference with the traffic or observance of any other restrictions in normal train running, the engineering department will interact with the operating department for obtaining line block.
  2. Procedure for obtaining Line Block:  
When it is necessary to obstruct totally any portion of the running line outside the station limits for engineering purpose, the AEN or the PWI or any other official of the engineering branch specially authorized by the DEN should apply to the DRM for line block order.
  3. Engineering Branch will arrange with the Operating Branch for the issue of a '*Circular Notice*'. The *Circular Notice* shall be valid for 3 months from the date of issue, i.e., the work notified must be taken in hand within 3 months. If the work cannot be commenced within 3 months, a fresh *circular notice* must be issued. Once the work is taken in hand, the *Circular Notice* will be effective as long as the work is in progress.
  4. On receipt of advice from the Official-in-charge of the work and before the work is taken in hand, the DOM will issue an all concerned message to the officials mentioned in the aforesaid *circular notice*. The name of the Engineering official-in-charge of the work and the last train which may be allowed on the section before imposing the 'line block' shall be specially mentioned in the 'all concerned message'. This message will be issued at least two days in advance of proposed Line Block.
  5. In the case of daily work on re-laying, the message may cover a period of seven days, on the expiry of which a fresh message shall be issued.
  6. The work must not be taken in hand until acknowledgements have been received from the Station Masters concerned, the SCOR, the TPC and Chief Crew Controller. If acknowledgements are not received, the DOM will take steps to prevent the work being taken in hand.

7. A material Lorry may be allowed to work in the block section for which the line has been blocked, but the Engineering Official-in-charge must ensure that before the line is declared safe for traffic, the Lorry is removed off the track.
8. The Engineering Official-in-charge will also arrange for the protection of the affected area in accordance with S.R.15.09.2.

SR 15.06.2.2. Slots for Blocks:

1. Slots for integrated blocks for maintenance, identifying the least crowded time span, have been indicated in the Divisional Working Time Tables. The schedule for Line Block required every week for carrying out maintenance works is to be jointly planned by Sr.DOM & Sr.DEN (Co-ord) in previous weekends. All other departments like S&T, Electrical should invariably plan their work coinciding with these blocks. However if safety is endangered, the PWIs can impose emergency Caution Order for ensuring safety.
2. In case of operational exigencies like late running of scheduled express/ passenger trains/accidents/bunching etc., the block timings can be modified and advised to Engineering Control in advance in the morning hours so as to enable them to plan revised utilisation of blocks accordingly.
3. SCOR will advise the Station Masters on either side who in turn will advise Official-in-charge of the work about the commencement of the Line Block and the last train after the departure of which the Line Block will be taken up. Official-in-charge of the work shall adhere to block timings, complete all preliminary works and ensure completion of maintenance work strictly within the time as advised to them by the Station Masters through the memo while granting the Line Block.
4. The general precautions stipulated in rule No.3 should be adhered to.

SR 15.06.2.3. Caution Orders shall be issued by the Station Masters concerned to the Loco Pilots of all trains proceeding to the affected area as imposed by the respective department.

SR 15.06.2.4. Blocking the line on field telephone: When for any special reasons, it is decided to permit blocking of the line on the field telephone, the following procedure shall be observed. This procedure is permissible only on controlled sections.

1. The name of the Engineering Official-in-charge of the work, who shall not be below the rank of a PWI should be mentioned in the 'Circular Notice'. Except the railway official so mentioned, no other person, will be authorized to obtain blocks on the field telephone.
2. The 'all concerned message' issued by the DOM will mention the name of the Engineering official-in-charge of the work and the last train before permitting Line Block and will also state the Line Block will be allowed on advice from the section on the field telephone.
3. On application to the DRM, the official-in-charge of the work will be issued a PN sheet to be used. On completion of the work, the PN sheet should be returned to the DRM.
4. Before leaving the station for the site of the work, the Engineering official-in-charge will consult the SCOR who will advise him the approximate time and the number and description of the last train after which the Line Block will be allowed.
5. After the passage of the nominated train, the Engineering official-in-charge will arrange to protect the place of obstruction in accordance with Rules 15.08 and 15.09 and after having satisfied himself that the obstructed area is properly protected, will call the SCOR on the field telephone, give his name and designation and also reference number of the 'circular notice' under which the work is being carried out.

6. The SCOR will then call the Station Masters at each end of the block section and ascertain from them if the block section is clear of all trains.
7. The Engineering Official-in-charge will then issue a message on the field telephone as follows:-

Date:.....	
From: Engineering Official / PWI	TO: SCOR / SMs/ X & Y
No..... Refer DRM message number .....	
dated .....	
Line (Up or Down in the case of double line) between station X & Y will be blocked from.....Hrs to .....Hrs. PN.....(in figures)	
..... (in words)	
Name.....	
Designation.....	

8. The SCOR will then issue a message to the SMs X and Y and also to the Engineering official-in-charge as follows:-

Date:.....	
From : SCOR	To : SMs/X&Y
Copy to PWI	
T.N. number ..... you are authorized to block the line (Up or Down in the case of Double line) between stations X and Y from..... Hrs. to .....	
..... Hrs.	
SCOR (Name): .....	

9. The Station Masters concerned will acknowledge the SCOR message supported by a PN. The SCOR will make a note in his chart in the remarks column and record the name of the Engineering official-in-charge and the PNs received from the Engineering official and the Station Masters.
10. On receipt of the above message from the SCOR, the Station Masters concerned will block the line in accordance with the rules and issue a message to the Engineering official-in-charge with copy to the SCOR on the telephone as follows:

Date:.....	
From: SM	To: PWI/.....
Copy to SCOR	
Number: .....	
Line (Up and Down in the case of double line) has been blocked From .....	
Hrs. to .....Hrs. PN. ....(in figures) ....(in words).	
Name: .....	
Designation: .....	

11. The Engineering official-in-charge will then commence the work. He will keep himself in constant touch with the SCOR.

SR 15.06.2.5. During interruption of Control:

When control lines are interrupted, before the line is blocked for the work, the Official-in-charge of the work will consult the Station Master in regard to the movement of trains in the section and the Station Master after ensuring that the block section is clear of trains, will block the line and issue a written memo as specified under 2.4.10 above to the Official-in-charge of the work to the effect that the line has been blocked and specify therein the duration of the block.

SR 15.06.2.6. Immediately after blocking the line, the Station Masters at both ends of the block section should place the Line Block caps on the plunger of the block instruments and 'line blocked collars' on the signal lever of the LSS. The 'line block caps'/'line blocked' collars, should be removed only when the normal working is resumed. Entries regarding the Line Block should be made in red ink in the TSR.

1. While the Line Block is in force, no traffic train shall be allowed to enter the obstructed section under any circumstances whatsoever. The Station Masters at both ends of the obstructed block section shall not ask for or grant Line Clear for any train to enter the section. A material Lorry may be allowed to work in the block section but the Engineering official-in-charge should ensure that before the line is certified safe for resuming normal traffic, the Lorry is removed off the track. Only when specially mentioned in the 'Circular Notice', a material train is allowed to work in the block section during the period of the Line Block. This train will be given an Authority to proceed to enter into an obstructed block section (T/462 / T/A.462) and piloted by a responsible Engineering official not below the rank of a PWI and the train will work under his personal supervision.
2. On completion of the work and after the track is certified safe for the passage of trains, the Engineering official-in-charge will contact the SCOR on the field telephone on controlled sections again and advise him about the completion of the work. The SCOR will call the Station Masters at both ends of the block section and the Engineering official-in-charge and then issue a message in the following form:-

Date:.....	
From PWI	To: SMs/X and Y
Copy - SCOR	
No. ....	Your No. ....
Track is certified fit for traffic (Up/Dn line in case of Double line) between ..... & ..... stations. Train working may now be resumed (speed restriction, if any, to be mentioned). PN. ....(in figures) .....(in words).	
Name:.....	
Designation:.....	

On receipt of the above message the SCOR will issue a 'Train Notice' to the Station Masters concerned and authorise them to cancel the Line Block and resume normal working and obtain their acknowledgements.

3. When control is interrupted, after completion of the work, the Official-in-charge of the work shall hand over the message as per SR 15.06.2.6.2 above to the Station Master for resumption of normal traffic and specify therein, whether any speed

restriction is to be observed or Caution Order to be issued. On receipt of this certificate, the Station Master shall advise all the concerned as specified in the 'Circular Notice' to cancel the 'Line Block' and resume normal working. In addition, the Official-in-charge shall also hand over a certificate stating that the block section has been cleared of the material train.

4. Extension of the Line Block: If the Line Block is required to be extended beyond the time specified in the 'Circular Notice' and the 'All Concerned Message', the Engineering official-in-charge of the work shall intimate the SCOR, contacting him on the field telephone, and send a written message to the Station Master at one end of the block section expeditiously notifying him the time upto which Line Block has been extended. The Station Master, who receives the written message, shall immediately advise the Station Master at the other end of the revised time upto which the Line Block has been extended by the Engineering branch.
5. The advice of extending the time of the Line Block shall be recorded in the TSR and the Station Diary, at both ends of the block section and after the expiry of the extended time, traffic trains may resume running over the section as provided for in SR 15.06.2.6.2 and SR 15.06.2.6.3.

#### SR 15.06.2.7. Obtaining line block on Portable Radio Communication/VHF:

1. The name of the Engineering official in charge of the work, who shall not be below the rank of PWI should be mentioned in the "Circular Notice". Except the railway official so nominated, no other person shall be authorised to obtain blocks on Portable Radio Communication/VHF.
2. 'All Concerned' message issued by the DOM will mention the name of the Engineering official-in-charge of the work and the last train before permitting Line Block and also state the Line Block will be allowed on advice from the section on Portable Radio Communication/VHF.
3. If PWI is not in possession of PN sheet, he shall obtain one from section Traffic Inspector and return the same on completion of the work.
4. Before leaving the station for the site of the work, the Engineering official-in-charge will consult the SCOR who shall advise him the approximate time and the number and description of the last train after which the Line Block will be allowed.
5. After passage of the nominated train, the Engineering official-in-charge will arrange to protect the place of obstruction in accordance with the Rules 15.08 and 15.09 and after having satisfied himself that the obstructed area is properly protected, will call the Station Master on Portable Radio Communication/VHF and inform about protecting the work spot and give a PN.
6. The Station Master will inform SCOR and the Station Master at the other end. After obtaining permission from SCOR for Line Block, the Station Master will give message to PWI on Portable Radio Communication/VHF regarding the permission granted by the SCOR and give a PN. He will also inform Station Master at the other end of the block section about the Line Block given to PWI with permission of SCOR.

#### SR 15.06.2.8. During emergencies requisition for Line block when Circular Notice is not in force:

The SSE/SE/JE/P.Way will give written requisition to the on duty Station Master for Line Block, indicating the mode of block, the location of work spot, time required for the working, the nature of work required to be done and the station to which the engineering unit will clear. Station Master shall in turn co-ordinate with the control for imposition of Line block.

## SR 15.06.2.9. Cancellation of Line Block:

1. On completion of the work and after the track is made safe for the passage of trains the engineering official-in-charge shall remove the protection and convey to his representative at the station on Portable Radio Communication/VHF (PWI shall keep his representative at the station with a signed written memo from his side with the time and PN columns being kept blank)
2. The PWI shall also communicate a PN to his representative. His representative shall enter the PN and time of cancellation of Line Block and hand over the memo to the Station Master.
3. On receipt of Line Block cancellation memo signed by the PWI, the Station Master will advise SCOR and the Station Master at the other end of the block section and take necessary action for the cancellation of Line Block.

*Note:* In the event of failure of Portable Radio Communication/VHF, the procedure laid down in SR 15.06.2 will be followed.

## SR 15.06.3. General Instructions for the other Blocks

1. SCOR shall call both the Station Masters on either side of the block section and convey the message permitting the Block. Then the Station Masters on either side of the block section exchange messages in relation to the imposition of the Block, the number of units work in the section in each direction, duration of the Block, where the units to clear under exchange of private numbers.
2. On double line, block commutator should be kept in TOL and a Line Blocked collar should be placed on the plunger of the block instruments.
3. On single line, in token and tokenless sections, a Line Blocked collar shall be placed on the plunger of the block instruments as a reminder. Separate private number should be taken for each unit and recorded in the authority. All the entries must be made in red ink in TSR.
4. Before introducing the Block, both the SMs should ensure that the block section is free from obstruction.
5. When it is not possible to establish the communication with the adjacent station, Block shall not be permitted.
6. In case of power block, the instructions for permit to work as per the procedures contained in SR 17.04 should be strictly complied with.

SR 15.06.4. If it is necessary to dispatch a material train into the block section during the period of Line Block:

- (a) When material train is programmed to go into the block section and return to the station where from it started, T/462 shall be issued.
- (b) When material train is programmed to go into the block section and then proceed further to the next block station, T/A 462 shall be issued.
- (c) Only one material train at a time is permitted.

SR 15.06.4.1. When track machine/machines is/are programmed to be sent into the block section during the period of block:

- (a) If one track machine is programmed to go into the block section and return to the station where from it started, T/465 shall be issued.
- (b) When one track machine is programmed to go into the block section and then proceed further to the next block station, T/A 465 shall be issued.

- (c) If more than one track machine are programmed to go into the block section and return to the station where from they started, the first one will be given T/465 and the succeeding ones will be given Caution Order. When T/465 is received back by the Station Master, it ensures that the block section is clear.
- (d) If more than one track machine are programmed to go into the block section and then proceed further to the next block station, the first one will be given Caution Order and the last one will be given T/A 465. When T/A 465 is received by the Station Master of the next station, it ensures that the block section is clear.

SR 15.06.4.2. When Tower Wagon/Wagons is/are programmed to be sent into the block section during block:

- (a) If one tower wagon is programmed to go into the block section and return to the station where from it started, T/1708 shall be issued.
- (b) When one tower wagon is programmed to go into the block section and then proceed further to the next block station, T/A 1708 shall be issued.
- (c) If more than one tower wagon are programmed to go into the block section and return to the station where from they started, the first one will be given T/1708 and the succeeding ones will be given Caution Order. When T/1708 is received back by the Station Master, it ensures that the block section is clear.
- (d) If more than one tower wagon are programmed to go into the block section and then proceed further to the next block station, the first one will be given Caution Order and the last one will be given T/A 1708. When T/A 1708 is received by the Station Master of the next station, it ensures that the block section is clear.

SR 15.06.4.3 Speed of Track Machine/Tower Wagon:

The speed of the first Track Machine/Tower Wagon will be booked speed and the following ones will observe a speed restriction of 25KMPH during day and when view is clear and 10kmph during night and also during day when view is not clear.

SR 15.06.4.3.1 Station Master whoever receives T/462, T/A 462, T/465, T/A 465, T/1708 and T/A1708 shall intimate to the other Station Master under exchange of Private Number in token of block section being free of Material Trains or Track Machines or Tower Wagons.

SR 15.06.4.4 If it is necessary to dispatch Material Train and/or Track Machine and/or Tower Wagon into the block section during the period of integrated block:

1. If Material Train and/or Track Machine and/or Tower Wagon are programmed to go into the block section and return to the station where from they started, they are issued with the relevant authorities i.e., T/462, T/465 and T/1708 and information in the Caution Order regarding the number of Material Train/Track machines/Tower Wagons are permitted to precede/follow to work in the same block section and to maintain a distance of 150 metres among them all the time. They shall maintain the speed of 15 KMPH when view is clear and during day time and 8 KMPH when view is not clear and during night time. The receipt of all the authorities back by the Station Master ensures that the block section is clear.
2. If Material Train/Track Machine/Tower Wagon are programmed to go into the block section and proceed further to the next block station, they are issued with the relevant authorities i.e., T/A 462, T/A 465 and T/A 1708 and information in the Caution Order regarding the Material Train/Track Machines/Tower Wagons that are permitted to precede/ follow to work in the same block section and to maintain a distance of 150 metres among them all the time and to maintain the speed of 15 KMPH when view is clear and during day time and 8 KMPH when view is not clear and during night time. The receipt of all the authorities by the Station Master of the block station at the other end ensures that the block section is clear.

However, only one Material Train is permitted along with TT Machines and/or Tower Wagons

SR 15.06.4.5. If it is necessary to dispatch material train and/or track machine and/or tower wagon into the same block section from both the ends during shadow block the following procedure shall be observed:

1. If material train and/or track machine and/or tower wagon are programmed to go into the block section from either end, they are issued with the relevant authorities i.e., T/462, T/465 and T/1708 and information in the Caution Order how many Material Train/ Track Machines/Tower Wagons are permitted to precede/follow to work in the same block section from either end and to maintain a distance of 150 metres among them all the time and always look out for the obstruction in the opposite direction and on sighting the obstruction, maintain at least 150 metres distance from the opposite obstruction. During this block the speed should not exceed 15 KMPH when view is clear and during day time and 8 KMPH when view is not clear and during night time.

During the shadow block, only one Material Train can be permitted in to the block section. All the units should return to the station from where they started. The receipt of all the authorities back by the Station Masters at either end of the block section ensures that the block section is clear.

2. This shadow block can be permitted only when the units at either end can work at their work spot without overlapping. In case the work spot of any unit is beyond the work spot of the other unit towards the other end of the block section, the units shall be permitted from only one end.

SR 15.06.5. Brake Power:

The driver of every TT Machine/Tower wagon shall check the fitness of the unit and its brake power. The Official-in-charge and the driver must personally satisfy with the efficacy of brake power before the unit enters the block section.

SR 15.06.6. Communication:

All the units shall be equipped with adequate communication facilities i.e., walkie talkie / CUG phones / Field telephones etc.

SR 15.06.7. Despatch:

If the unit is to be allowed on to right line, Starter signal can be taken 'off'. If the unit is allowed on to the wrong line, all the points over which the unit/s move shall be correctly set, clamped and padlocked. The unit shall be piloted out of the station on PILOT-OUT memo. Invariably, the machine that is programmed to work at a farther distance from the station shall be dispatched first.

SR 15.06.8. Protection:

While moving into the block section, a competent railway servant shall be deputed with stop hand signals to look out for the other units and in any case walkie-talkie sets shall be used to know the whereabouts of other units. At the time of working, each machine shall be protected by a competent railway servant walking at a distance of 150 metres with hand danger signals exhibiting towards the direction of the other machine. If any one of the machines stops at a particular place without movement, the machine shall be protected by placing two detonators, 10 metres apart, at 150 metres away in the direction of the other machine expected and a competent Railway servant standing at 45 metres beyond the detonator exhibiting hand danger signal. The distance may suitably be increased in case of curves / poor visibility.

SR 15.06.8.1. On double line sections, when one line is obstructed for working of these units, the officials-in-charge of the units at the work spot shall ensure that the units should not infringe the movement of traffic on the adjacent line.

## SR 15.06.9. Shunting:

No shunt movement is permitted towards the block section, in which the material train / track machine / tower wagon are working under block.

## SR 15.06.10. Reception:

On completion of the block, the units shall clear at their designated ends. All the units should start back at one time, duly maintaining the distance of 150 metres among the units.

1. Right Line: The first unit can be received on reception signals. The following units will be admitted on Calling-on signal or all the points over which the unit/s move shall be correctly set, clamped and padlocked and the units one after the other shall be received on a written authority (T/509) with proceed hand signals separately for each unit on the same line duly observing the precautions for reception on an obstructed line.
2. Wrong Line: They shall be brought to a stop at LSS of the wrong line and then give a continuous long whistle. The units one after the other shall be received on 'Pilot-in' memo separately for each unit on the same line after all the points over which the unit/s move shall be correctly set, clamped and padlocked.

## SR 15.06.11. Resumption of normal working:

1. On completion of the work and after ensuring that the block section is free from Material Train/Track Machine/Tower Wagon, the respective officials-in-charge of various units who have carried out the works during block will hand over to the Station Master a 'Safety Certificate' in writing for resumption of normal traffic and specify therein whether any speed restriction is to be observed. On receipt of this certificate, the Station Master will advise the SCOR, the Station Master at the other end and all concerned.
2. Before cancelling the block and resuming normal working, Station Masters at both ends must scrutinise the TSR entries to satisfy themselves that the section is clear of all units such as Material Train/Track Machine/Tower Wagon. They shall exchange the messages to that extent supported with Private Numbers. Then the Line Blocked collars from the block instruments shall be removed and normal working can be resumed.

**15.07. Work in thick, foggy or tempestuous weather impairing visibility.—**

**In thick, foggy or tempestuous weather impairing visibility, no rail shall be displaced and no other work which is likely to cause obstruction to the passage of trains shall be performed, except in case of emergency.**

**15.08. (1) Precautions before commencing operations which would obstruct the line.—**

**No person employed on the way or works shall change or turn a rail, disconnect points or signals, or commence any other operation which would obstruct the line until Stop signals have been exhibited and where prescribed detonators used; and if within station limits, he has also obtained the written permission of the Station Master and all necessary signals have been placed at 'on':**

**Provided that the exhibition of Stop signal may be dispensed with, if such operations are performed or carried out after the necessary signals, other than Automatic Stop signals, have, in addition to being placed in the 'on' position, been disconnected, so that such signals**