CHAPTER XIV
BLOCK WORKING
A. General provisions.

14.01. Means of granting or obtaining Line Clear - The running of every train shall, in its progress from one block station to another, be regulated by means of any one of or a combination of the following -

(a) electrical block instruments of token or tokenless type,

(b) track circuits,

(c) axle counters, or

(d) electrical communication instruments.

14.02. Provision of instruments -

(1) Electrical communication instruments shall be provided at every station, except at class 'D' stations where they may be provided under special instructions.

(2) (a) The electrical block instruments, where provided, and electrical communication instruments at any station shall be of a type approved by the Commissioner of Railway Safety and shall not be brought into use in the first instance unless they have been passed by him.

(b) The person in charge of the maintenance of electrical block instruments or electrical communication instruments shall not without the approval of the Commissioner of Railway Safety, permit the substitution, for the instruments and installation brought into use in the first instance, of any instruments or installation which do or does not satisfy the conditions prescribed in clause (a).

14.03. Consent required before interfering with block working equipment - No railway servant shall interfere with the block working equipment, or their fittings for the purpose of effecting repairs, or for any other purpose, except with the previous consent of the Station Master.

S.R.14.03-1. Whenever block instruments or their fittings are to be interfered with for testing, repairs or replacement, the competent S&T staff shall issue a Disconnection Memo on the prescribed form (S&T/Dn) to Station Master clearly specifying the various signals which shall be affected during such repairs or replacement of block instruments. The Station Master shall not give his consent for this purpose unless the block section is clear of trains and the block instruments, where provided, have been brought to Line Closed position.

If a train is waiting at station to proceed, the block instruments or signals shall not be tested by S&T staff, unless it has been so authorised in writing by the Station Master, who, before giving such permission, shall inform the Driver of the waiting train in writing to treat signal/signals as defective. After the testing of the block instruments and signals has been completed and the Reconnection Memo received from S&T staff, the block instruments and signals shall be brought in use and normal working resumed. The Driver of the waiting train shall also then be advised to this effect.

B. Block Stations at which Electrical Block Instruments,

Track Circuits or Axle Counters are provided.

14.04. Certificate of competency -

(1) No person shall operate the electrical block instruments until he has passed a test in the operation of block instruments and unless he holds a certificate of competency granted by a railway servant appointed in this behalf by the Railway Administration.

(2) The certificate of competency referred to in sub-rule (1) shall only be valid for a period of three years or such longer period as may be laid down by special instruments.

14.05 Bell code - For the signalling of trains, the prescribed code of bell signals as detailed below, shall be used, and a copy thereof shall be exhibited in each block station near the place of operation of the block working equipment –

Ref. No.	Indication	Code	How signalled	How acknowledged
1.	CALL ATTENTION, OR ATTEND TELEPHONE	O	One stroke or beat.	One stroke or beat.
2.	IS LINE CLEAR, OR LINE CLEAR ENQUIRY	OO	Two	Two
3.	TRAIN ENTERING BLOCK SECTION	OOO	Three	Three
4.	(A) TRAIN OUT OF BLOCK SECTION (B) OBSTRUCTION REMOVED	OOOO	Four	Four
5.	(A) CANCEL LAST SIGNAL (B) SIGNAL GIVEN IN ERROR	OOOOO	Five	Five
6.	(A) OBSTRUCTION DANGER SIGNAL (GENERAL)	OOOOOO	Six	Six
	(B) STOP AND EXAMINE TRAIN	OOOOOO — O	Six pause One	Six pause One
	(C) TRAIN PASSED WITHOUT TAIL LAMP OR TAIL BOARD	OOOOOO — OO	Six pause Two	Six pause Two
	(D) TRAIN DIVIDED	OOOOOO - OOO	Six pause Three	Six pause Three
	(E) VEHICLES RUNNING AWAY IN WRONG DIRECTION ON DOUBLE LINE OR INTO THE BLOCK SECTION ON SINGLE LINE	OOOOOO-OOOO	Six pause Four	Six pause Four
	(F) VEHICLES RUNNING AWAY IN RIGHT DIRECTION ON DOUBLE LINE	OOOOOO-OOOOO	Six pause Five	Six pause Five
7.	TESTING.	OOOOOOOO OOOOOOOO	Sixteen	Sixteen

Note : **(1) 'O' INDICATES A STROKE OR A BEAT AND '—' INDICATES A PAUSE.**

(2) EACH SIGNAL SHALL BE GIVEN SLOWLY AND DISTINCTLY.

(3) Exchange of bell codes under reference numbers 3 and 4 are not required in a section provided with block proving axle counter or track circuit having complete track circuiting of station yard excluding non-running lines on either end.''

[CS 7/4 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 2.9.2002]

14.06. Acknowledgement of signals -

(1) Each signal received shall be acknowledged by sending its authorised acknowledgement.

(2) No signal shall be acknowledged until it is clearly understood.

(3) A signal shall not be deemed to be complete until it is acknowledged,

(4) If the station to which a signal is sent does not reply, the signal shall be repeated at intervals of not less than 20 seconds until reply is received.

14.07. Train Signal Register -

(1) A Train Signal Register shall be kept by the Station Master or under his orders.

(2) All signals received or sent on the electrical block instrument and the timings of receipt and despatch shall be entered therein, immediately after acknowledgment, by the person operating the block instrument.

(3) The timings entered in the register shall be the actual timings, except that any fraction of a minute shall be counted as one.

(4) All entries in the register shall be made in ink.

(5) No erasure shall be made in the register, but if any entry is found to be incorrect, a line shall be drawn through it, so that it may be read at any time and the correct entry shall be made above it.

(6) The person who keeps the register for the time being shall be responsible for all entries made therein and for correctly filling in each column thereof.

S.R.14.07-1. Detailed instructions regarding Train Signal Register are contained in para 12.03 of Block Working Manual.

14.08. Authority to proceed - The Driver shall not take his train from a block station unless he has been given an authority to proceed -

(a) on double line, by the taking 'Off' of the last Stop signal, and

(b) on the single line, either -

(i) by a token for the block section, taken from an electrical block instrument, or

(ii) by a Line Clear Ticket duly signed by the Station Master, or

(iii) by any document prescribed in this behalf by special instructions, or

(iv) by the taking 'Off' of the last Stop signal in lieu of tangible authority as mentioned in sub-clauses (i) to (iii) on sections provided with electrical block instruments of tokenless type or track circuits or axle counters.

S.R.14.08-1. Should the last Stop signal fail to function, the Station Master after obtaining 'Line Clear' from the station ahead shall give the Driver an authority to pass the last Stop signal at 'On' on form T.32-B, on which an endorsement should be made that 'Line Clear' has been received from the station in advance, quoting the Private number received in the space provided for the purpose.

14.09. Driver to examine authority to proceed -

(1) The Driver shall ensure that the authority to proceed given to him is the proper authority under the system of working and refers to the block section he is about to enter, and if the said authority is in writing that it is complete and duly signed in full and in ink.

(2) If the conditions mentioned in sub - rule (1) are not complied with, the Driver shall not take his train past or start from the station until the mistake or the omission is rectified.

14.10 Conditions for closing the block section -

(1) When the block section has been cleared by the arrival of the train or by the removal of the cause of blocking, the block section shall be closed by the block station in advance by giving the prescribed bell code signal.

(2) Before such signal is given, the Station Master shall satisfy himself -

(a) that the train has arrived complete, or the cause of blocking the section has been removed, and

(b) that the conditions under which Line Clear can be given, are complied with.

(3) The provision of clause (b) of sub-rule (2) may be relaxed at class 'A' single line crossing stations. In such cases, the Station Master shall satisfy himself that the train is standing at its Starter clear of the line on which the second train is to run.

(4) In a section with block proving axle counter or track circuit and complete track circuiting of station yard, excluding non-running lines on either end, block section clear indication provided with such equipment shall also ensure compliance of the provisions of sub-rules (1), (2) and (3) above.

[CS 7/5 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 2.9.2002]

14.11. Responsibility of Station Master as to authority to proceed -

(1) An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

(2) An authority to proceed shall not be given to the Driver except by the Station Master or by some railway servant appointed in this behalf by special instruments.

(3) The Station Master shall see that the authority to proceed given to a Driver is accurate and that, when it is in writing, it is complete and is signed in full and in ink.

(4) If the train stops at the station and is waiting to cross another train, the authority to proceed shall not be given to the Driver until the whole of the latter train has arrived and is clear of the running line for the former train.

(5) If two engines are coupled together or if one engine is in front and another in rear of the train, the authority to proceed shall be given to the Driver of the leading engine.

S.R. 14.11-1. Token, not applicable to the Section or over carried -

(a) If a Driver who has entered the block section with correct token or Line Clear Ticket or authority to proceed without Line Clear loses the same on the run, he shall proceed to the next station and report the matter to the Station Master.

(b) Should a Driver enter a block section without a token not applicable for that section, he shall at once bring the train to a stop and advise the Guard and take immediate steps to protect the train in front and advise the Guard to protect it in rear. The Assistant Guard (or the Assistant Driver if there is no Assistant Guard) shall be deputed to take the token with a note explaining the circumstances to the nearest station. If the token is sent to the station immediately in the rear, the Station Master shall deliver to the Assistant Guard/Assistant Driver a correct token for the train to proceed to the next station. Should the token be sent to the station ahead, the Station Master shall immediately inform the station at the other end of the block section of the circumstance and hand over to the Assistant Guard/Assistant Driver an 'Authority to proceed without Line Clear' to enable the train to come to his station. On arrival of the train, the Station Master shall inform the station at the other end of the block section by a message, supported by a private number, of the complete arrival of the train at his station.

Before starting forward with the correct token or 'Authority to proceed, without Line Clear, the Driver and the Guard should remove the detonators placed on the line for protecting the train.

(c) If the Driver over carries a token beyond the section to which it applies and is in possession of the correct token for the section, he should proceed with his train to the station ahead and hand over the wrong token to the Station Master and obtain a receipt for it. The Station Master shall return the token to the station

concerned with the Guard of the first train in that direction and obtain a receipt from him.

S.R. 14.11-2. Token, Surrender of, by Driver - On arrival of the train at the block station in advance, the Driver of a stopping Mail, Express, Passenger or Parcel train shall throw out the token with the pouch on the platform cautiously near the station office. For all other stopping trains, the Driver must make over the token to a member of the station staff in uniform, on coming to a halt. If the train runs through the station without stopping, the token with the pouch must be dropped by the Driver into the net provided for the purpose.

14.12. Special responsibility as to electrical token instruments and to the token -

(1) The Station Master shall be responsible to ensure that -

(a) no one but himself operates the electrical block instruments,

(b) the procedure regarding bell signals and in addition any Communication made by electrical communication instruments including the use of a private number, as laid down under special instructions, is correctly carried out,

(c) in the case of stopping trains, the incoming token is surrendered by the Driver before an outgoing token is delivered to him,

(d) when he receives the token of an incoming train, it is put in the electrical block instrument immediately, and

(e) no one except the person authorised by special instructions opens the electrical block instruments.

(2) (a) A token shall not be taken out of an electrical block instrument earlier than necessary and when taken out, its number shall be recorded in the Train Signal Register, and it shall be kept in the personal custody of the Station Master till issued to a Driver or returned to the instrument.

(b) On arrival of the train at the block station in advance, the Driver shall give up the token in accordance with special instruments, and this token shall then be placed in the electrical block instrument at that station.

(c) If the train has to return to the block station from which it started, the token shall, on such return, be replaced in the electrical block instrument from which it was extracted.

14.13. Failure of electrical block instruments or track circuits or axle counters -

(1) If the electrical block instruments, track circuits or axle counters or their electric connections fail. Line Clear shall be obtained through the electrical communication instruments.

(2) When Line Clear has been so obtained, an entry to that effect shall be made in the Train Signal Register, and the train may be allowed to proceed

on the issue of a written authority to proceed, which shall also bear a remark to that effect.

S.R. 14.13-1. Instructions for working of trains during failure of block instruments on double line and single line sections are given in paras 4.20 and 10.12 respectively of block Working Manual.

Instructions regarding working of trains during abnormal conditions of tokenless block instruments and during failure of single line tokenless block instruments are given in paras 10.14 and 10.15 respectively of Block Working Manual.

14.14. Closing of Intermediate Block Post - If the electrical block instruments provided at the stations on either side of an Intermediate Block Post or the track circuiting provided beyond the Last Stop signal, or the axle counters provided at either end of block section fail, the Intermediate Block Stop signal shall be treated as defective and the Intermediate Block Post shall be deemed to be closed and the section between the stations on either side of the Intermediate Block Post shall be treated as one block section.

C. Block Stations at which Electrical Block Instruments are not provided.

14.15. Transmission of signals - For the working of trains at such stations where electrical block instruments are not provided, signals as prescribed under special instructions shall be transmitted, as occasion may require, on the electrical communication instruments.

14.16 Train Signal Register - The Train Signal Register referred to in Rule 14.07 shall also be maintained at block stations where block instruments are not provided.

14.17. Forms for messages and written authority to proceed -

(1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written on forms specially provided for the purpose by the Railway Administration.

(2) Such forms shall be bound up in books and kept at each block station by the Station Master, or by some railway servant appointed in this behalf by special instructions.

14.18. Distinction of messages -

(1) Every messages despatched in connection with the working of a train shall distinctly describe the train to which it relates.

(2) For every train a separate inquiry and reply shall be sent.

14.19. Writing and signing of messages and written authorities to proceed -

(1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written up in ink and signed by the person authorised to despatch or issue the same.

(2) No messages or written authority to proceed shall be written out, either in full or in part, or signed, until necessary.

14.20. Completion of messages - No part of any message shall be despatched or acted upon until the whole message has been written out except with a view to the prevention of an accident, or in some other case of emergency.

14.21. Preservation of messages and written authorities to proceed -

Messages and written authorities to proceed shall be destroyed at such time after issue as may be prescribed by special instructions :

Provided that no message or written authority to proceed shall be destroyed before one month after issue.

S.R. 14.21-1. Preservation of messages and authorities to proceed -

Messages and authorities to proceed where Morse instruments are in use must be preserved for a period of six months.

14.22. Cancellation of Line Clear - On a single line when a Line Clear has been cancelled, no train shall be allowed to leave in the opposite direction until a message has been received acknowledging such cancellation and stating that the train for which the Line Clear has been given is and shall be detained.

14.23. Driver to have authority to proceed - The Driver shall not take his train from a station unless he has in his possession, as his authority to proceed ,a Line Clear Ticket duly signed by the Station Master.

S.R.14.23-1. Driver's responsibility in regard to Line Clear Tickets -The Driver is responsible for seeing that the Line Clear Ticket is correct in all respect and that it is intended for his train and that it contains a Private Number.

S.R.14.23-2. Delivery of Line Clear Ticket if a Driver is illiterate or is not conversant with English - If a Driver is illiterate or is not conversant with English, the Station Master must hand over the Line Clear Ticket to the Guard, who will verify that it is the correct one for the section. After making a note of the Private Number on the Line Clear Ticket on the journal against the name of the Station at which it is delivered, he will either himself hand it over to the Driver or send it to him with the Assistant Guard or a member of the station staff in uniform.

S.R.14.23.3. Line Clear Tickets, Disposal of - On completion of the journey, the Driver must hand over all the Line Clear Tickets to the Guard. The Guard must forward them to the Divisional Railway Manager alongwith his journal.

14.24. Authority to proceed : when to be given to Driver - An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

S.R.14.24-1. Line Clear Tickets, delivery of, to Drivers of trains proceeding in opposite direction.- When two trains from opposites directions cross at a station the Station Master shall first obtain Line Clear for the train which is to leave first and after ensuring that the Line Clear Ticket has been sent to the Driver of the first train, he may then, and not before, obtain Line Clear for the second train and send it to the Driver.

When a Driver is illiterate, or is not conversant with English, Line Clear Ticket will be sent through the Guard as required in S.R.14.23.-2. In case of two stopping trains crossing, when the Driver is illiterate or he is not conversant with English, the Guard of each train shall be held responsible for seeing that correct Line Clear Ticket is delivered either by himself or by a member of the station staff in uniform to the Driver.

D. Line Clear Tickets.

14.25. Line Clear Tickets –

(1) When owing to failure or non-provision of electrical block instruments the authority to proceed is a Line Clear Ticket, it shall, except under special instructions, be in the following form -

Form No. T/B 1425 Central Railway

Sr. No. _____

PAPER LINE CLEAR TICKET
(Driver/Record)

Down

Number of Train _____Down (Description)_____

Date _____Time _____ hours _____ minutes.

From Station Master _____

To The Driver of Train No. _____ Down

The line is clear and you are authorized to proceed to_____station.

Last train No. _____ cleared section at _____station.

Private No (in words) _____ (in figures) _____

AUTHORITY TO PASS SIGNAL AT 'ON' POSITION

***You are authorized to pass last Stop Signal in danger, when the signal is interlocked with Block Instrument.**

Signature of Station Master

Station Master's Stamp

***Strike out which ever is not applicable**

Form No. T/D 1425 **Central Railway**

Sr. No. _____

PAPER LINE CLEAR TICKET
(Driver/Record)

Down

Number of Train _____Down (Description)_____

Date _____Time _____ hours _____ minutes.

From Station Master _____

To The Driver of Train No. _____ Down

The line is clear and you are authorized to proceed to_____station.

Last train No. _____ cleared section at _____station.

Private No (in words) _____ (in figures) _____

AUTHORITY TO PASS SIGNAL AT 'ON' POSITION

***You are authorized to pass last Stop Signal in danger, when the signal is interlocked with Block Instrument.**

Signature of Station Master

Station Master's Stamp

***Strike out which ever is not applicable**

C/S 8//4 **(Ref Rly. Board's letter No. 2005/Safety (A&R)/19/01 dated 05.05.2005)**

Form No. T/C 1425 **Central Railway**

Sr. No. _____

PAPER LINE CLEAR TICKET
(Driver/Record)

Up

Number of Train _____Up (Description)_____

Date _____Time _____ hours _____ minutes.

From Station Master _____

To The Driver of Train No. _____ Up

The line is clear and you are authorized to proceed to_____station.

Last train No. _____ cleared section at _____station.

Private No (in words) _____ (in figures) _____

AUTHORITY TO PASS SIGNAL AT 'ON' POSITION

***You are authorized to pass last Stop Signal in danger, when the signal is interlocked with Block Instrument.**

Signature of Station Master

Station Master's Stamp

***Strike out which ever is not applicable**

[C/S 7/7] (Ref Rly. Board's letter No. 97/Safety (A&R)/29/15 dated 29.01.2003)

(2) Each such ticket shall bear a serial number which shall be recorded in the Train Signal Register, the numbers for the Down direction being clearly distinguished from those for the UP direction.

(3) The Ticket referred to in Sub-rule (1) and (2) shall be printed on white paper with blue font to distinguish paper line clear ticket for Up and Down direction, water mark arrow pointing Up and Down will be printed on the ticket.

[CS 4/12 dated 23/01/2001]

E. Use and Operation of Block Working Equipment.

14.26. Use and operation of block working equipment - The use and operation of electrical block instruments shall be governed by special instructions to be issued with the prior approval of the Railway Board.

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