

Sending Station 'X'		Receiving Station 'Y'	
		15.	Give 'Train out of block section' signal and press 'Line closed' and Bell code button at the end of the fourth bell beat in case of push button type block instruments and bring the instrument to 'Line closed' position. In case of handle type block instrument, after the fourth bell beat press both PB1 and PB 2 and enable the Station Master at the other end to normalize the block handle to 'Line closed' position.
16.	In case of push button type the instrument will set to 'Line closed' position, acknowledge the train out of block section signal. In case of handle type block instrument turn the handle to 'Line closed' when co-operation is given by Station Master at the other end. Give 'Train out of block section' signal and press both PB1 and PB 2 at the end of the fourth beat and enable the Station Master at the other end to normalize the handle to 'Line closed' position.		
		17.	Set the Block instrument to 'Line Closed' condition.

### 3.5. Signalling of a train over the block section using Axle Counter proven Block Panel (UFSBI & SSBPAC (D) Single Line):

Taking 'X' and 'Y' as two consecutive Block Stations, the sequential procedure for despatching a train, cancelling 'Line Clear' etc., is as detailed below. Before asking for 'Line Clear' on controlled sections, the Station Master shall obtain the permission of the Controller.

**3.5. (A) (i) Despatching a train.**

**Block panel operators at sending and receiving stations will follow the events listed hereunder for despatching and receiving a train:**

	<b>Sending Station 'X'</b>		<b>Receiving Station 'Y'</b>
1.	SM ensures LINE CLOSED indication YELLOW, SNK indication YELLOW, SNOEK indication YELLOW, LINE FREE indication GREEN, SHUNT KEY indication GREEN, SM KEY indication GREEN.		
	SM sends 'Call Attention' signal to receiving station by pressing BELL button and hold on block telephone.	2.	Ensure SM KEY indication GREEN SM acknowledges the 'Call Attention' signal by pressing BELL button. Attend telephone.
3.	After ensuring correct station has responded, ask "IS LINE CLEAR FOR ..... TRAIN"	4.	After ensuring, LINE CLOSED indication YELLOW, SNK indication YELLOW, SNOEK indication YELLOW, LINE FREE indication GREEN & SHUNT KEY indication GREEN & Then say "LINE IS CLEAR FOR ..... TRAIN" supported by a PN.
5.	Repeat the PN and SM simultaneously presses BELL & TRAIN GOING TO buttons until 'TRAIN GOING TO' arrowhead indication lights up GREEN. (If aforesaid indicator does not appear after 3 seconds (approx.) of pressing the buttons, SM releases the buttons and rechecks conditions at his station and asks station at other end to recheck the conditions for grant of LINE CLEAR.)	6.	'LINE CLOSED' indicator turns off and 'TRAIN COMING FROM' arrowhead indication lights up GREEN.

Sending Station 'X'		Receiving Station 'Y'	
7.	'LINE CLOSED' indicator turns off. 'TRAIN GOING TO' arrowhead indication lights up GREEN. Releases BELL & TRAIN GOING TO buttons.		
8.	Takes OFF 'LSS'. SNK indicator turns 'OFF'. Train enters the Block Section. LSS indication on block panel turns to RED. LINE FREE indicator turns to RED. SECTION buzzer starts ringing & 'TRAIN GOING TO' arrowhead indication turns RED. ACKN indicator lights up. Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off & buzzer is silenced. Puts back the LSS controls to Normal. SNK lights up YELLOW. SNOEK indicator turns 'OFF'.	9.	SNOEK indicator turns 'OFF'. LINE FREE indicator turns to RED. SECTION buzzer starts ringing & 'TRAIN COMING FROM' arrowhead indication turns RED. ACKN indicator lights up.  Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off & buzzer is silenced. SNOEK lights up YELLOW Takes reception signal 'OFF' to receive the train.  SNK indicator turns 'OFF'. Train passes Home Signal. Home Signal replaces to 'ON'. Train clears the Block Section.
11.	SECTION buzzer starts ringing. ACKN indicator lights up.  LINE FREE indicator turns to GREEN.  'TRAIN GOING TO' arrowhead indication turns to FLASHING GREEN.  Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off & buzzer is silenced.	10.	SECTION buzzer starts ringing. ACKN indicator light up & LINE FREE indicator turns to GREEN. 'TRAIN COMING FROM' arrowhead indication turns to FLASHING GREEN.  Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off & buzzer is silenced.

Sending Station 'X'		Receiving Station 'Y'	
13.	SNOEK lights up yellow. 'TRAIN GOING TO' arrowhead indication turns off. 'LINE CLOSED' indicator lights up.	12.	Replaces all controls pertaining to reception of train to Normal. SNK lights up YELLOW. 'TRAIN COMING FROM' arrow head FLASHING GREEN indication turns off. 'LINE CLOSED' Indicator YELLOW lights up.

*Note: 1. The procedure for sending a train from station 'Y' to 'X' will be similar to the above.*

*2. To prevent the other end station from taking Line Clear, the Station Master shall remove the Shunt key from Block panel.*

**3.5. (A).(ii) Procedure for despatch of trains involving IBS in single line UFSBI (Assuming X-Y as UP direction)**

	Station X		Station Y
1	SM ensures LINE CLOSED indication YELLOW, SNK indication YELLOW, SNOEK indication YELLOW, LINE FREE indication GREEN, SMs key shall be turned to IN. SM sends 'Call Attention' signal to receiving station by pressing BELL button and hold on block telephone.		
		2	SMs key shall be turned to IN SM acknowledges by pressing BELL button and attends telephone
3	Establishing Direction of traffic: SM shall ensure both Station controlled IB section and Block controlled IB section for Down direction are free and request the SM/Y for direction setting towards UP supported by PN with intended movement of the train.		
		4	SM shall set the Direction of traffic towards UP as per the request of SM/X supported by a PN for direction setting

	Station X		Station Y
5	SM sets the direction of traffic to UP and asks Line Clear for the train with full description, supported by PN.		
		6	SM shall ensure : LINE CLOSED indication YELLOW, SNK indication YELLOW, SNOEK indication YELLOW, LINE FREE indication GREEN, SHUNT KEY indication GREEN. Exchange information regarding train movement and grants verbal LINE CLEAR supported by two PNs (One for station controlled IB Section and another for Block controlled IB Section)
7	SM presses BELL & TRAIN GOING TO buttons until TRAIN GOING TO arrow head indication lights up GREEN. (If aforesaid indication does not appear after 3 seconds (approx.) of pressing the buttons, SM shall release buttons and recheck conditions of his station and ask station at other end to recheck the conditions for granting Line clear)		
		8	LINE CLOSED indicator turns off and TRAIN COMING FROM arrowhead indication lights up GREEN
9	LINE CLOSED indicator turns off and TRAIN GOING TO arrowhead indication lights up GREEN. Release BELL and TRAIN GOING TO buttons		
10	SM takes the LSS to OFF SNK indicator turns OFF. Train enters the block section; thereby Station controlled IB section line occupation indicator changes to RED. LSS replaces to ON. Put back the LSS controls to Normal. Ensure SNK lights up YELLOW. Give call attention and give train entering Station controlled IB section timings		
		11	Acknowledge call attention and Note down the train entering station controlled IB section timings as given by SM/X. SNOEK lights up YELLOW

	Station X		Station Y
12	<p>SM takes the IB Signal to OFF Train enters the Block controlled IB section. TRAIN GOING TO arrowhead indication turns RED. Block Controlled IB Section line occupation indicator turns RED. ACKN (TGT) indication lights up and buzzer sounds by acknowledging the same, indication turns off and buzzer is silenced. Put back the IB signal control to Normal</p>		
		13	<p>LINE occupied indicator turns to RED. SECTION buzzer starts ringing TRAIN COMING FROM arrowhead indication turns RED. ACKN (TCF) indication lights up Acknowledge the buzzer by resetting ACKN button. ACKN indicator turns OFF and is silenced</p>
14	<p>Give train entering Block controlled IB section timings to Station Y. Station Controlled IB section Indicator turns GREEN.</p>		
		15	<p>Note down the train entering Block Controlled IB section timings as given by SM/X</p>
16	<p>SM can send a second train in to the Station Controlled IB section, with the consent of SM/Y</p>		
		17	<p>SM takes OFF reception signal to receive the train. SNK indicator turns OFF. Train passes Home signal. Home signal replaces to ON. Train clears the Block section. LINE occupied indicator turns to GREEN. SECTION buzzer starts ringing TRAIN COMING FROM arrowhead indication turns to FLASHING GREEN. ACKN (TCF) indication lights up Acknowledge the buzzer by pressing ACKN button. ACKN indicator turns OFF and buzzer is silenced</p>

	Station X		Station Y
18	SECTION buzzer starts ringing. TRAIN GOING TO arrowhead indication turns to FLASHING GREEN. ACKN (TGT) indication lights up. Acknowledge the buzzer by pressing ACKN button. ACKN indicator turns OFF and buzzer is silenced		
		19	SM shall replace the Home signal control to Normal. SNK lights up YELLOW  TRAIN COMING FROM Arrowhead Flashing Green Indication turns off. LINE CLOSED indication lights up YELLOW
20	SNOEK lights up YELLOW TRAIN GOING TO Arrowhead Flashing Green indication turns OFF. LINE Closed indicator lights up		

### **3.5 (B). Refusal to 'LINE CLEAR INQUIRY'**

When the SM does not want to grant line clear for any reason block section is blocked by the presence of a train in the section or train parting or shunting or opening of level crossing in mid section or for any other reason, the SHUNT key of EKT shall be taken out and kept in safe custody.

If the block station SM at other end refuses the "IS LINE CLEAR" enquiry signal, no train shall be allowed to leave until a fresh IS LINE CLEAR enquiry signal has been given to block station at other end and accepted.

On removal of obstruction, the Shunt Key of EKT shall be inserted and turned to IN position and the Shunt Release Key should be kept OUT. SM shall immediately inform SM of other end about the fact, so as to enable him to send a fresh IS LINE CLEAR signal.

### **3.5 (C) Cancellation of 'LINE CLEAR'**

In a single line 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 LC has been obtained is detained. In case another train is to be dispatched from the same direction fresh LINE CLEAR shall be obtained.



**3.5 (D) Method of Line Clear Cancellation before the train enters the block section.**

Sending Station 'X'		Receiving Station 'Y'	
1.	Puts back LSS to 'ON', if already taken 'OFF, ensures; SNK indicator YELLOW, SHUNT KEY indicator at GREEN SM KEY indicator GREEN Advises receiving end station SM about cancellation on telephone duly communicating a PN after prescribed BELL code.	2.	Agrees to request, communicates a PN and ensures; SNK indicator YELLOW, SNOEK indicator YELLOW, SHUNT KEY indicator GREEN SM KEY indicator GREEN
3.	Ensures SNOEK indicator YELLOW  Presses CANCEL CO-OP button and releases on receipt of BELL code	4.	CO-OP to light up YELLOW Presses BELL & CANCEL button with SM key IN & SHUNT key in 'OUT' CANCEL COUNTER increments by 1 'TRAIN COMING FROM' indicator turns to FLASHING GREEN CANCEL indicator lights up FLASHING YELLOW & Continues flashing for 120 seconds.
5.	'TRAIN GOING TO' indicator turns FLASHING GREEN	6.	On expiry of 120 seconds, TRAIN COMING FROM flashing indicator and CANCEL flashing indicator turns off 'LINE CLOSED' indicator lights up
7.	TRAIN GOING TO indicator turns off. LINE CLOSED indicator lights up		

### 3.5. (E). To close the block section after pushing back of a train.

After a train has been pushed back at the sending station, the sending station advises the receiving station regarding this under exchange of private number. The receiving station can close the section by pressing BELL and CANCEL button after taking cancel co-operation from other end.

#### Method of Cancellation after Push Back operation.

Sending Station 'X'		Receiving Station 'Y'	
1.	Train clears the Block Section. LINE FREE indicator turns GREEN. SECTION buzzer starts ringing. ACKN indicator lights up. 'TRAIN GOING TO' arrowhead indication turns to FLASHING GREEN. Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off.	2.	Train clears the Block Section. LINE FREE indicator turns GREEN. SECTION buzzer starts ringing. ACKN indicator lights up. 'TRAIN COMING FROM' arrowhead indication turns to FLASHING GREEN. Acknowledges the buzzer by pressing ACKN button. ACKN indicator turns off.
3.	Advises receiving end station SM about cancellation duly communicating a PN on telephone after prescribed BELL code.	4.	Agrees to request and communicate a PN and ensures SNK indicator YELLOW, SNOEK indicator YELLOW, SHUNT KEY indicator GREEN and Gives consent on telephone after prescribed BELL code.
5.	After verbal consent from other end SM. Ensure SNK indication YELLOW, SNOEK indication YELLOW, SHUNT KEY indication GREEN Presses CANCEL CO-OP button and releases on receipt of BELL code.	6.	CO-OP to light up YELLOW. Presses BELL & CANCEL button with SM key IN. CANCEL COUNTER increments. CANCEL indication lights up FLASHING YELLOW & continues flashing for 120 seconds.

<b>Sending Station 'X'</b>		<b>Receiving Station 'Y'</b>	
8.	<p>TRAIN GOING TO arrowhead indication turns off.</p> <p>LINE CLOSED indication lights up.</p>	7.	<p>On expiry of 120 seconds, TRAIN COMING FROM arrowhead indication and CANCEL indication turns off. 'LINE CLOSED' indication lights up.</p>

### 3.6. Operation of Slip siding and catch siding while sending/receiving a train:

Slip siding and catch siding control keys are locked in EKT controlled by Block Panel. To operate the slip/catch siding points the key locked in the EKT controlled by Block Panel is removed and inserted in another EKT controlling the slip/catch siding points.

(Station 'X' is assumed to be provided with slip siding protected by Last Stop Signal and station 'Y' with a catch siding protected by First Stop Signal.)

<b>Sending station 'X'</b>		<b>Receiving station 'Y'</b>	
Block Panel displays 'TGT' indication.		Block Panel displays 'TCF' indication.	
1.	Insert SM's key and turn.		
2.	<p>a) Take out the Slip Siding key from the block panel EKT by pressing the 'SCK' push button. Red indication appears on the block panel. Key 'in' indication disappears.</p> <p>b) Insert the slip siding key in the panel EKT controlling Slip siding and turn.</p> <p>c) Observe 'free' indication on slip siding point knob on the panel.</p> <p>d) Set the Slip Siding point.</p>		