

INDIAN RAILWAY SIGNAL ENGINEERING MANUAL PART II (2001 EDITION)

Addendum and Corrigendum Slip No.6

Chapter XIV, Annexure 10 of Para 14.1.7

Modify the existing Annexure 10 of para 14.1.7 of the SEM Pt.II, 2001 edition with the following:-

Chapter XIV of Indian Railway Signal Engineering Manual (IRSEM) Part-II (Annexure 10: Para-14.1.7 Revised)

Comprehensive Policy on Provision of Safety Devices at Level Crossings

Year 2010

Other Stipulations

C class (Manned)

>3000 Cat I & >2500 Cat II

B2 class

>20000 and <25000

B1 class

>25000 and <30000

A class

>30000 and <50000

Spl. Class

>50000

1. Interlocking of Gates with Signals.

TVU →	Should be Interlocked with Station Signals					Should be Interlocked with Station Signals in Suburban Section, in Automatic Block Signalling. In Non-suburban section, it should be Interlocked with Station Signals, if the LC Gate is operated from the nearest Cabin or if it has to be interlocked for any other reason irrespective of the place of operation.	To minimize the Mean Waiting Time for road users, the arrangement of Interlocking should be such that the last operation before taking 'OFF' of Signal should be the closing of the Gate and the first operation after the train has cleared the Level Crossing and the Signal is put back to 'ON' position, should be opening of the Gate by the Gateman.
	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals		
a) Within Station Limits	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals	Should be Interlocked with Station Signals in Suburban Section, in Automatic Block Signalling. In Non-suburban section, it should be Interlocked with Station Signals, if the LC Gate is operated from the nearest Cabin or if it has to be interlocked for any other reason irrespective of the place of operation.	
(b) Outside Station Limits	Should be Interlocked with Gate Signals	Should be Interlocked with Gate Signals	Should be Interlocked with Gate Signals	Should be Interlocked with Gate Signals	Should be Interlocked with Gate Signals	Should be Interlocked with Gate Signals in Automatic Block Signalling Sections.	i) In case of level crossing protected by signal, where the sighting of the signal by an engine driver is inadequate and the Gate signal is not pre-warned through other means (Distant Signal / Independent Warner Signal / Repeater Signal etc.), a Warning Board should be placed at not less than the emergency braking distance in the rear of the Gate Stop Signal. The board should be vertical 2000 mm by 450 mm with alternate black and yellow strips 125 mm width painted on it at an angle of 45 degree. The top of the board should be 4 M above rail level. The board need not be lit at night but should as far as possible be provided with scotchlite or other effective light reflectors or retro-reflective tape. ii) Where level crossing is situated outside station limits but in close proximity thereof, the clear distance between the level crossing and an outer signal should not be less than the full train length

Note: All manned level crossing gates both within and outside station limits falling on suburban sections and Automatic Block Signalling section shall be interlocked irrespective of the classification / TVUs of the gates.

Chapter XIV of Indian Railway Signal Engineering Manual (IRSEM) Part-II (Annexure 10- Revised)

Comprehensive Policy on Provision of Safety Devices at Level Crossings

				Year 2010	Other Stipulations
		B1 class	B2 class	C class (Manned)	
	Year 2010	>25000 and <30000	>20000 and <25000	>3000 Cat I & >2500 Cat II	
c) Normal Position of Gate	Shall be normally kept open to Road Traffic			If Interlocked, shall be normally kept open to Road Traffic.	
2. Telephonic Communication from the Gate Lodge.					
Within or Outside Station Limits	Telephone be provided with ASM's office with all Manned Level Crossing Gates.				In Block Sections having large number of Level Crossing Gates, the connections should be uniformly distributed between the Block Stations.
3. Warning Bells or Hooters Operated by Approaching Train.					
Within or Outside Station Limits	Should be provided.	Should be provided.	Should be provided.	Should be provided, where Level Crossing is Outside the Station limits in all Suburban Sections and Non-suburban Sections provided with Automatic Block Signalling Territories.	Provision of warning bells operated by Approaching Trains should be confined to Interlocked Level Crossing Gates only. Hooters shall be provided, where ever power supply is available.
4. Type of Lifting barrier					
a) Within or Outside Station Limits	Electrically Operated Lifting barrier.	Electrically Operated Lifting barrier.	Electrically Operated Lifting barrier.	Electrically Operated Lifting Barrier in Sub-urban Section.	In Non-suburban Section, Electrically Operated Lifting Barrier be provided, where Power Supply is Reliable.
5. Approach Locking					
	(i) To be provided in Sub-urban Section. Dead Approach Locking with Timing of 30 secs in other sections.			(ii) To be provided in Sub-urban Section. (ii) Dead Approach Locking with Timing of 30 secs in other sections, where Electrically Operated Lifting Barriers are provided.	

BY ORDER

Case No.2010/SIG/SEM/1
New Delhi, dated 11.10.2010

(Kapil Dev Sharma)
Addl. Member(Signal)
Railway Board.