

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
(RAILWAY BOARD)

No.2000/Safety(A&R)/19/39 Pt

New Delhi, dated 19.10.2010

Chief Operations Manager,  
Northern Railway,  
Baroda House,  
New Delhi.

**Sub: Manning of Unmanned Level Crossing Gate within station limits.**

**Ref: (i) Your letter No. 86-T/639/TGP/Level Crossings dated 18.05.2010 and D.O. letter dated 08.06.2010.**

**(ii) Board's letter of even number dated 08.06.2010.**

Further to this office letter under reference (ii), it is intimated that the reply of CCRS to this office letter of even number dated 01.06.2010 has still not been received.

In the meantime, Signal Directorate of Railway Board has issued comprehensive policy guidelines, interalia, for Interlocking of Level Crossing Gates vide letter No.2010/SIG/LX/2 dated 01.10.2010 (copy enclosed). Further, policy guidelines for revised criteria for Manning of Unmanned Level Crossings have been issued by Civil Engineering Directorate vide letter No.2006/CE-I/LX/WP dated 12.04.2010 (copy enclosed).

The policy guidelines having been revised by the Board for both manning and interlocking of level crossing gates, the Railway may like to re-examine the instant reference of Lalganj in the light of these policy guidelines.

Encls: As above.

*[Signature]*

(J S Bindra)  
Joint Director/Safety

कृपया जारी करें।  
दीपचन्द  
19-10-10

|                                   |
|-----------------------------------|
| मन्त्रालय<br>Ministry of Railways |
| हस्ताक्षर<br>Signature            |
| जारी की तिथि<br>Date of Issue     |

SP  
S.No. 83

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
(RAILWAY BOARD)

No.2006.CE-I/LX/WP

New Delhi, Dated 12.04.2010

The Principal Chief Engineers  
All Zonal Railways

**Sub: Manning of Unmanned Level Crossings**

Railway Budget Speech Para 35 quote: "Accidents at unmanned level crossings are a source of deep concern to all of us. Even now, there are about 17,000 unmanned level crossings. The House will be happy to know that manning of around 3,000 level crossings was approved in 2009-10 and a further 1,000 level crossings will be taken up next year. A special drive in this regard is being launched so those in the coming five years, all the unmanned LCs are manned".

In order to comply above, Board has sanctioned manning of about 4000 unmanned LC gates and target for manning has been fixed as 3000 for the year 2010-11 (CRB DO No. 2009/W-I/GENL dated 19.03.10). In this matter, railways are requested to identify the unmanned LC gates qualifying for manning as per extant instructions, viz:

- 1.0 **Revised Criteria of Manning of unmanned level crossing issued vide Board's letter no. No.2006.CE-I/LX/WP dated 12.04.2010:**

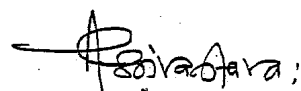
**Category-I:** All level crossings gates where TVU is more than 3000.

**Category-II: (Restricted Visibility):** All level crossings gates having less than 800 meters visibility for road users and where TVU is more than 2500.

Manning of unmanned level crossing gate, where TVU is less than 3000, can also be done, if the State Govt./District Authority permit to close any unmanned Level Crossing gate located in the vicinity of such unmanned level crossing gate, or in very special case involving safety with specific approval of General Manager of the Zonal Railway.

- 2.0 All such unmanned level crossing gates, where three accidents have taken place in past three years should be manned (Authority: IRPWM Para no. 924-b-i).
- 3.0 Unmanned level crossing gates on Shatabdi Express & Rajdhani Routes should be manned. (Authority: Board's Letter no. 94/CE-I/LX/102 dt. 11.07.94 & IRPWM Para no. 924-b-ii).
- 4.0 Railway shall make all efforts to reduce number of level crossing, by constructing diversion road to adjoining ROB/RUB/Level Crossing and road under bridge (Authority: Board's letter no. 95/CE-I/LX/10 dated 15.02.95 and IRPWM Para no.924-c).

The summary position of unmanned level crossing gates qualifying for manning should be submitted to Railway Board as per enclosed proforma. The progress made in this direction should be sent through monthly PCDO position.



(Arun Kumar Shrivastava)  
Executive Director Civil Engineering/B&S-II

CORRIGENDUM

No. 2010/SIG/LX/2

Dated: 01.10.2010

11

General Managers,  
All Indian Railways.

S.no. 110

Sub: Provision of Safety Devices at Level Crossing  
Gates – Comprehensive Policy.

Ref: Board's letters No. –

- i) 77/W-3/SG/LX/2 dated 16.3.79.
- ii) 2002/Sig/PI/1 dated 09.07.2002 (Item No. A/A3/vi) &  
Clarification letter vide No. 2000//Sig/LX/2 Pt. dated  
05.05.2003.
- iii) 2001/CE-1/LX/AC/01 (Data) dated 25.09.2002.
- iv) 2000/Sig/LX/2 dated 23.07.2003, 07.04.2006 & 02.08.2006.
- v) 2006.CE-I/LX/WP dated 12.04.2010.

In supersession of the policy letters issued by Signal Directorate vide reference (i), (ii) & (iv) above and based on the criteria for classification of Level Crossing Gates issued vide references (iii) & (v) above, instructions regarding provision of Safety Devices at Level Crossing Gates have been reviewed, updated and consolidated keeping in view the present day requirement of safety making them simple and easy to interpret. Accordingly, Comprehensive Policy for provision of safety devices has been approved by the Board (ML, ME, MT/CRB). (Enclosed in two Pages)

Correction Slip to Chapter XIV of IRSEM Part II, Annexure 10, Interlocking Communication Device, is being issued separately to include this revised policy.

Correction Slip to Para 904, Annexure 9/1, Item 9 of IRPWM shall also be issued separately.

Railways should immediately review the position as per the revised comprehensive policy and take up works where there is a shortfall in terms of provision of these Safety Devices.

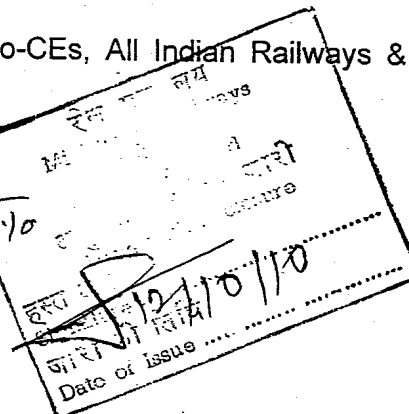
Encl. As above

Copy to:

(Arun Saksena)  
Adviser(Signal)  
Railway Board

All CSTE's, PCE's, Co-CE's, All Indian Railways & Chief Commissioner of  
Railway Safety/Lucknow.

(Arun Saksena)  
Adviser (Signal)  
Railway Board



# 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

| TVU --> | Spl. Class | A class                 | B1 class                | B2 class                | C class                    | (Manned) | Other Stipulations |
|---------|------------|-------------------------|-------------------------|-------------------------|----------------------------|----------|--------------------|
|         | >50000     | >30000<br>and<br><50000 | >25000<br>and<br><30000 | >20000<br>and<br><25000 | >3000 Cat I & >2500 Cat II |          |                    |

### 1. Interlocking of Gates with 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 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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 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<br>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

|                            |                                             |                                                             |
|----------------------------|---------------------------------------------|-------------------------------------------------------------|
| c) Normal Position of Gate | Shall be normally kept open to Road Traffic | If Interlocked, shall be normally kept open to Road Traffic |
|----------------------------|---------------------------------------------|-------------------------------------------------------------|

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

**Comprehensive Policy on Provision of Safety Devices at Level Crossings**

Year 2010

| Level Crossings                                            |  |                                                                                                                 |                                        |                                        |                                        |                                                                                                                                                                                 | Year 2010                                                                                                                                                                               |
|------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TVU -->                                                    |  | Spl. Class                                                                                                      | A class                                | B1 class                               | B2 class                               | C class (Manned)                                                                                                                                                                | Other Stipulations                                                                                                                                                                      |
|                                                            |  | >50000                                                                                                          | >50000 and <50000                      | >25000 and <30000                      | >20000 and <25000                      | >3000 Cat I & >2500 Cat II                                                                                                                                                      |                                                                                                                                                                                         |
| 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.                    | 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. | 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.<br>(ii) Dead Approach Locking with Timing of 30 secs in other sections |                                        |                                        |                                        |                                                                                                                                                                                 | (i) To be provided in Sub-urban Section.<br>(ii) Dead Approach Locking with Timing of 30 secs in other sections, where Electrically Operated Lifting Barriers are provided.             |