CONTENTS

1. Purpose ...................................................................................................................... 3
2. General ....................................................................................................................... 3
3. Testing Warning Equipment ................................................................................... 3
   3.1. Testing Due to an Incident ............................................................................. 4
4. Rail Traffic That May Not Activate Track Circuits .................................................. 4
5. Active Control Level Crossings with Infrequent Rail Traffic .................................... 4
6. Extended Operation of Warning Equipment ............................................................ 5
7. Potentially Faulty Active Control Level Crossings .................................................... 5
8. Faulty Active Control Level Crossings ..................................................................... 5
   8.1. Faulty Active Control Level Crossing Not Protected by a Competent Worker .... 6
9. Protection by Competent Workers ........................................................................... 6
10. Resuming Normal Operation ................................................................................ 6
11. Disablement and Re-Enablement of Active Control level crossings ......................... 7
12. Wrong Running Direction Movements .................................................................. 7
13. Reference ................................................................................................................ 7
14. Effective Date ......................................................................................................... 7
1. **PURPOSE**

The purpose of this rule is to prescribe the requirements and protocols for managing and testing *Active Control Level Crossings* in the Public Transport Authority (PTA) Network.

2. **GENERAL**

Flashing light *Warning Signals* commence to operate when a *Train* reaches a predetermined *Warning* distance from the *Active Control Level Crossing*. This varies to provide an adequate *Warning* period appropriate to *Track Speed*.

If there is a road junction controlled by traffic lights in close proximity to the *Active Control Level Crossing*, an additional advanced *Warning* is provided to the traffic light controller. This is to ensure coordinated operation of the traffic lights and *Active Control Level Crossing*.

Where boom gates are provided in conjunction with flashing light *Warning Signals*, the operation is as follows:

- when the *Train* reaches the predetermined *Warning* distance, the flashing light *Warning Signals* will operate and bells will ring, and a white flashing side light will be exhibited to the *Rail Traffic Crew*;
- approximately six to ten seconds later the booms will commence to descend to form a barrier across the roadway;
- when the booms are fully lowered, the bells may cease to ring but the *Warning* lights will continue to flash;
- when the *Rail Traffic* is *Clear* of the *Active Control Level Crossing*, the booms will automatically rise to the vertical position; and
- flashing lights will continue to flash until the booms returns to a vertical position.

3. **TESTING WARNING EQUIPMENT**

*Active Control Level Crossing Warning* equipment must be tested by *Authorised* on-site testers. A *Permanent Record* must be made of the test results.

Testing may be suspended only on the *Authority* of the *Signals Maintenance Representative*.
3.1. TESTING DUE TO AN INCIDENT

Where an incident occurs at a Active Control Level Crossing provided with flashing light warning signals and boom gates, a Maintenance Representative is to attend the Active Control Level Crossing as soon as practicable to report on the condition of equipment and to remedy any damage resulting from the incident. The report must be in accordance with the PTA 8110-600-040 Procedure for Reporting Wrong Side Failures/Irregularities.

4. RAIL TRAFFIC THAT MAY NOT ACTIVATE TRACK CIRCUITS

If Rail Traffic needs to use an Active Control Level Crossing operated automatically by Track Circuits, but the Rail Traffic cannot be relied upon to activate the Track Circuits, Rail Traffic Crew must:

- stop short of the Active Control Level Crossing; and
- if possible, manually operate the Active Control Level Crossing; or
- arrange to stop approaching road and pedestrian traffic.

Rail Traffic may proceed over the Active Control Level Crossing only if it is safe to do so.

**NOTE**

Track Circuit Shorting Clips must not be used to activate Active Control Level Crossing Warning equipment.

5. ACTIVE CONTROL LEVEL CROSSINGS WITH INFREQUENT RAIL TRAFFIC

If Rail Traffic needs to use an Active Control Level Crossing operated automatically by Track Circuits, and the Track Circuit cannot be relied on to operate correctly due to rail head condition, the Train Controller must treat the Active Control Level Crossing as faulty and arrange for Competent Workers to attend the Active Control Level Crossing and operate it manually.

If Competent Workers cannot attend, then the Active Control Level Crossing must be treated as faulty.
6. EXTENDED OPERATION OF WARNING EQUIPMENT

Where Rail Traffic has stopped and activates an Active Control Level Crossing, the Train Controller must arrange for Competent Workers to control the Active Control Level Crossing.

7. POTENTIALLY FAULTY ACTIVE CONTROL LEVEL CROSSINGS

If an Active Control Level Crossing is potentially faulty, the Train Controller must warn Rail Traffic Crew.

Rail Traffic Crew warned about a potentially faulty Active Control Level Crossing must approach the Active Control Level Crossing at a speed that allows Rail Traffic to stop short of the Active Control Level Crossing.

If it cannot be determined that the Active Control Level Crossing is working correctly, Rail Traffic must stop short of the Active Control Level Crossing to check whether the Warning equipment is operating correctly. Rail Traffic should then:

- if Warning equipment is operating correctly, Proceed; or
- if Warning equipment is not operating correctly, treat the Active Control Level Crossing as faulty; and
- as soon as practicable, report the condition of the Warning equipment to the Train Controller.

8. FAULTY ACTIVE CONTROL LEVEL CROSSINGS

If an Active Control Level Crossing is faulty, the Train Controller must:

- warn Rail Traffic Crew that the Warning equipment is faulty;
- arrange for a Competent Worker to protect the Active Control Level Crossing, or arrange to close the Active Control Level Crossing to road and pedestrian traffic;
- arrange for a Signals Maintenance Representative to attend; and
- make a Permanent Record of the details.
8.1. Faulty Active Control Level Crossing Not Protected by a Competent Worker

If a faulty Active Control Level Crossing is not protected by a Competent Worker, Rail Traffic Crew must:

- stop short of the Active Control Level Crossing; and
- if possible, manually operate the Active Control Level Crossing; or
- arrange to stop approaching road and pedestrian traffic; and
- proceed over the Active Control Level Crossing only if it is safe to do so.

9. Protection by Competent Workers

Competent Workers must not do other work when protecting the Active Control Level Crossing.

If one Competent Worker cannot safely protect an Active Control Level Crossing, additional Competent Workers must be used.

Competent Workers must leave functional Warning equipment in operation unless Authorised by the Train Controller.

Competent Workers may switch off Warning equipment only after they have received the Train Controller’s confirmation that no Rail Traffic is Closely Approaching.

10. Resuming Normal Operation

If told the Active Control Level Crossing has been tested and Certified as working correctly the Train Controller must:

- tell Competent Workers that normal working can be resumed;
- tell affected Rail Traffic Crew; and
- make a Permanent Record of the details.
11. DISABLEMENT AND RE-ENABLEMENT OF ACTIVE CONTROL LEVEL CROSSINGS

Disablement of an Active Control Level Crossing must only be undertaken by the Maintenance Representative in accordance with the PTA 8110-600-037 Procedure for Disabling Active Control Level Crossings.

If the Active Control Level Crossing has an active interface with Adjacent traffic lights the PTA 8110-600-029 Procedure for Bypassing the MRD Interface at Protected Level Crossings must also be followed.

12. WRONG RUNNING DIRECTION MOVEMENTS

In the PTA Network, Active Control Level Crossings are designed to enable the flashing light Warning Signals and boom gates to function in the normal manner for Rail Traffic travelling in the Wrong Running Direction.

13. REFERENCE

PTA 8110-600-029 Procedure for Bypassing the MRD Interface at Protected Level Crossings
PTA 8100-600-032 Procedure for the Scheduled Maintenance of Signalling Equipment
PTA 8110-600-037 Procedure for Disabling Active Control Level Crossings
PTA 8110-600-040 Procedure for Reporting Wrong Side Failures/Irregularities
PTA 8100-600-046 Signalling Equipment Maintenance Manual – Schedules of Maintenance Tasks

14. EFFECTIVE DATE

1 November 2018