PUBLIC TRANSPORT AUTHORITY

SAFEWORKING RULES AND PROCEDURES

2015

ACTIVE CONTROL LEVEL CROSSING MANAGEMENT

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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*.

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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.

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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*.

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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*.

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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.

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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.*

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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.

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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.

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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*.

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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

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14. EFFECTIVE DATE

1 November 2018

I N T E N T I O N A L L Y B L A N K