



Point locking, point drives, and point detection

RiSSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Train Control Systems Standard



This Australian Standard® AS 7659 Point locking, point drives, and point detection was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

ARTC

Wabtec

VicTrack

PTA WA

RTBU

TfNSW

V/Line

Rio Tinto

UGL

Arc Infrastructure

The Standard was approved by the Development Group and the Train Control Systems Standing Committee in May, 2021. On June 22, 2016 the RISSB Board approved the Standard for release.

This standard was issued for public consultation and was independently validated before being approved.

Development of the Standard was undertaken in accordance with RISSB's accredited process. As part of the approval process, the Standing Committee verified that proper process was followed in developing the Standard

RISSB wishes to acknowledge the positive contribution of subject matter experts in the development of this Standard. Their efforts ranged from membership of the Development Group through to individuals providing comment on a draft of the Standard during the open review.

I commend this Standard to the Australasian rail industry as it represents industry good practice and has been developed through a rigorous process.

**Deb Spring**

Exec. Chair / CEO

Rail Industry Safety and Standards Board

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This Standard was prepared by the Rail Industry Safety and Standards Board (RISSB) Development Group AS 7659 Point locking, point drives, and point detection. Membership of this Development Group consisted of representatives from the organisations listed on the inside cover of this document

Objective

The objective of this Standard is to provide a consistent approach to point locking and point detection within the Australian and New Zealand railway industry.

This standard should be read in conjunction with AS 7711 Signalling Principles

Compliance

There are four types of provisions contained within Australian Standards developed by RISSB:

1. Requirements.
2. Recommendations.
3. Permissions.
4. Constraints.

Requirements – it is mandatory to follow all requirements to claim full compliance with the Standard. Requirements are identified within the text by the term 'shall'.

Recommendations – do not mention or exclude other possibilities but do offer the one that is preferred. Recommendations are identified within the text by the term 'should'.

Recommendations recognize that there could be limitations to the universal application of the control, i.e. the identified control is not able to be applied or other controls are more appropriate or better.

Permissions – conveys consent by providing an allowable option. Permissions are identified within the text by the term 'may'.

Constraints - provided by an external source such as legislation. Constraints are identified within the text by the term 'must'.

For compliance purposes, where a recommended control is not applied as written in this Standard it could be incumbent on the adopter of the standard to demonstrate their actual method of controlling the risk as part of their WHS or Rail Safety National Law obligations. Similarly, it could also be incumbent on an adopter of this Standard to demonstrate their method of controlling the risk to contracting entities, or interfacing organisations where the risk may be shared.

Controls in RISSB standards address known railway hazards, and are addressed in Appendix A.

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1 Scope and general

1.1 Scope

This Standard provides requirements and recommendations for the prevention of inadvertent movement of points through point locking, and the methods of point position detection.

This Standard also provides guidance on the use of point drive systems.

This Standard relates to points that are part of or directly related to an interlocking system.

The scope of this Standard includes the following:

- (a) Design considerations.
- (b) Network and operational requirements.
- (c) Testing and maintenance requirements.
- (d) Commissioning and decommissioning activities specifically related to point locking, drives and detection.

1.2 Exclusions

The following items are excluded from this Standard:

- (a) Components not directly involved in the locking or detection of the points.
- (b) Manually operated points without point locking or detection.

1.3 Referenced documents

1.3.1 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

- AS 7706 Interface with Points
- AS 7711 Signalling Principles
- AS 7642 Turnouts and other special trackwork

NOTE: Documents referenced for informative purposes are listed in the Bibliography.