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AUSTRALIAN RAIL INDUSTRY
STANDARDS ORGANISATION

AS 7706

Interface with Points

STANDARDS



Advancing safety and productivity

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Development of this Standard was prepared by an Australian Rail Industry Standards Organisation (ARISO) Development Group consisting of representatives from the following organisations:

Sigtech Solutions Australia, Central Queensland University, SYSTRA ANZ, WSP Australia Pty Ltd, Engineering Institute of Technology (EIT), and Talbot Advisory Services Pty Ltd.

The Train Control Systems Standing Committee verified that ARISO's accredited process was followed in developing the product, before the ARISO Board approved the document for publication.

ARISO 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 comments 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.



Alan Fedda
Chief Executive Officer
Australian Rail Industry Standards Organisation

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2026	10 September 2026	This document has been reviewed to ensure it remains relevant and applicable. The latest review assessed the content, confirming that while updates were made to align with current industry practices, technologies, and regulatory requirements, the original authorship and copyright have been acknowledged as required.

Approval

Name	Date
Australian Rail Industry Standards Organisation Board	10 September 2026

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Preface

This Standard was prepared by the Interface with Points Development Group, overseen by the ARISO Train Control Systems Standing Committee.

Technical changes from previous editions of this document include the following:

- (a) The review of the technical requirements for interface of points and crossing systems.
- (b) A review of definitions, normative and informative references.

Objective

The objective of this Standard is to provide the Australian rail industry with a set of requirements to be used to define the interfaces with points and crossing systems and control the risks associated with point and crossing systems.

This Standard is intended to:

- (a) specify the interfaces with points, including:
 - (i) safety functions;
 - (ii) interface with track;
 - (iii) interface with track support;
 - (iv) interface with personnel;
 - (v) interface with the traction power system; and
 - (vi) interface to other track and signal equipment.
- (b) provide a uniform basis for compliance with the Rail Safety National Law; and
- (c) be able to cover differing rail operations across Australia.

Compliance

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

- (a) Requirements.
- (b) Recommendations.
- (c) Permissions.
- (d) 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’.

Using this Standard

Appendices in ARISO Standards may be designated either “normative” or “informative”. A “normative” appendix is an integral part of a Standard and compliance with it is a requirement, whereas an “informative” appendix is only for information and guidance.

ARISO Standards identify known hazards relevant to the railway industry. Appendix A provides a non-exhaustive list of hazards relevant to the scope of this Standard.

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Section 1 Scope and general

1.1 Scope

This document defines the minimum interface requirements for points and crossings systems and aligns with the performance standards applied by rail infrastructure managers (RIMs), which are based on local experience and good engineering practice. It is not intended to replace, override or supersede the performance standards, requirements or arrangements established by individual RIMs, as set out in their points and crossings standards, codes, guidelines and procedures.

This document is applicable to all configurations of moveable track; Examples of these are:

- (a) points or switch assemblies;
- (b) V crossing – swingnose;
- (c) catch point;
- (d) K crossing – switchable; and
- (e) slip – single or double.

1.2 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 7716:2017, Signalling Testing Processes
- AS 7717:2016, Signalling Testing and Commissioning

NOTE:

Documents for informative purposes are listed in a Bibliography at the back of this document.

1.3 Defined terms and abbreviations

For the purposes of this document, the following terms and definitions apply:

1.3.1

actuator

mechanism used to move a switch blade into position

1.3.2

authorized command

authorized instruction sent to the points and crossing system to move switch blade(s) from normal to reverse or vice versa

1.3.3

catch point

set of points designed to prevent unauthorized access to a section of track by prior intentional derailment of rail traffic

1.3.4

detector

device for proving that points are correctly set before the signalling system can authorize the passage of a train over the points