

Railway Infrastructure - Survey



Infrastructure Standard





This Australian Standard® AS 7634 Railway Infrastructure - Survey was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

 Queensland Rail
 Aurizon Operations Limited
 Pacific National

 ARTC
 TfNSW
 Sydney Trains

WSP

The Standard was approved by the Development Group and the Infrastructure Standing Committee in March, 2017. On March 23, 2017 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 Standard 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.

Paul Daly

Chief Executive Officer
Rail Industry Safety and Standards Board

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1 Introduction

1.1 Purpose

The purpose of this Standard is to -

- (a) specify requirements relating to the design, construction, measurement, maintenance and monitoring of a railway survey system, to be able to support various engineering activities undertaken within, and applicable to a modern railway environment;
- (b) achieve a standardised approach to railway engineering surveying; and
- (c) provide mandatory and recommended guidance so that the rail survey system developed is aligned with the safe operation of the railway network, in accordance with the requirements of Rail Safety National Law.

1.2 Scope

This Standard covers surveying systems for railways as defined under AS 7630 'Railway Infrastructure - Track Classification'.

This Standard is intended to cover railway survey systems based on -

- (a) the current National Geospatial Reference Systems (NGRS) for Australia and New Zealand; and
- (b) non-NGRSs

This Standard covers railway survey system requirements and promotes current good practice.

This Standard is not specifically intended to cover urban on-street tramway, or light rail networks, cane railways, or heritage railways operating on a private reservation, but items from this Standard may be applied to such systems as deemed appropriate by the relevant Rail Infrastructure Manager (RIM).

1.3 Compliance

There are two types of control contained within Australian Standards developed by RISSB:

- (a) Mandatory requirements.
- (b) Recommended requirements.

Each of these types of control address hazards that are deemed to require controls based on existing Australian and International Codes of Practice and Standards.

A **mandatory** requirement is a requirement that the Standard provides as the only way of treating the hazard.

Mandatory requirements are identified within the text by the term 'shall'.

A **recommended** requirement is one where the Standard recognises that there are limitations to the universal application of the requirement and that there may be circumstances where the control cannot be applied or that other controls may be appropriate or satisfactory, subject to agreement with the Rail Infrastructure Manager (RIM), Rolling Stock Operator (RSO), and/or Rail Safety Regulator.