

AS 7718:2017



Signal Design Process Management



Train Control Systems Standard



This Australian Standard® AS 7718 Signal Design Process Management was prepared by a RISSB Development Group consisting of representatives from the following organisations:

ARTC

ASA

AECOM

Brookfield Rail

Rio Tinto

QR

ARTC

The Standard was approved by the Development Group and the Train Control Standing Committee in December, 2016. On January 25, 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 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.



Paul Daly
Chief Executive Officer
Rail Industry Safety and Standards Board

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1 Introduction

1.1 Purpose

The objective of this standard is to provide the Australian rail industry with a set of mandatory and recommended requirements for the signalling design management process. The main purpose is to promote a consistent approach to the signalling design process across the Australian rail industry.

This comprehensive process, if well implemented will substantially reduce the issues when developing the design as all aspects are considered in this process which will lead to –

- (a) shortening of the implementation period;
- (b) reduce the need for redesign;
- (c) enable transferability of people;
- (d) having a standard process;
- (e) reduction in errors;
- (f) potential reduction in costs.

The standard is intended to –

- (a) provide a uniform basis for compliance with AS 7702 Railway Safety Management;
- (b) be able to cover differing rail operations across Australia;
- (c) identify the risks (hazards) being controlled;
- (d) ensure that the standards survive a change in RIM.

1.2 Scope

This Standard specifies the process for the production of signalling designs for use on the rail networks. This document describes the process for complete signalling system design from concept through detailed design, construction, installation, test and commissioning and final as-built documentation. It describes a process which can be part of a wider engineering project, or which can be implemented as a stand-alone signalling engineering activity.

An overview of the system design process is provided in Appendix A.

This Standard is intended to be used by Infrastructure Managers, Operators and Suppliers of railway systems.

1.3 Exclusions

The standard includes all processes although some projects will not require every process. This will be subject to agreement between RIM, client and standards authority.

1.4 Compliance

There are two types of control contained within RISSB Standards:

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

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