AS 7660:2017

Australian STANDARD®

Radio communication in the rail corridor

RISSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Train Control Systems Standard

This Australian Standard® AS 7660 Radio communication in the rail corridor was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Pacific National	PTA WA	Accell Pty Ltd
John Holland	Queensland Rail	ARTC
ONRSR	T/NSW (ASA)	

The Standard was approved by the Development Group and the Train Control Standing Committee in January, 2017. On January 30, 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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Document control

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Approval

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Rail Industry Safety and Standards Board	30/01/2017

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1 Introduction

1.1 Purpose

Mobile communication in the rail corridor is essential for the safe and efficient operation of the railway. This standard defines requirements for radio communication systems that will –

(a) mitigate the risk associated with identified hazards;

(a) facilitate compliance with the Rail Safety National Law;

(b) provide a consistent national set of requirements for rolling stock equipment; and

(c) identify the roles of Rail Infrastructure Managers and Rolling Stock Operators in providing, operating, maintaining and removing mobile communication systems.

There is a legal obligation on Rail Transport Operators to ensure safe operation of the railway. While each Rail Transport Operator will satisfy this obligation in accordance with their own safety management system, some aspects of communication require coordination and consistency between Rail Transport Operators.

Rail Infrastructure Managers responsible for some track sections may interact with multiple Rolling Stock Operators. Rolling Stock Operators might, in turn, be interacting with several Rail Infrastructure Managers. With the potential for rolling stock, train crews, operators and maintainers to work on many different sections of track, and with more than one Rail Infrastructure Manager, a consistent operation of wireless communication systems is very important. Use of consistent technology is desirable but the rate of technology change and the independent approach of Rail Infrastructure Managers means this is will not always be achieved.

1.2 Scope

This standard sets out a set of basic requirements for wireless communication between those whose work is in or associated with the rail corridor. It applies to wireless communication between Network Controllers, train crews and persons working in the Rail Corridor.

This standard does not deal with communication within a railway station, except to the extent that the communication is directly with train crew. The standard does not deal with communication where all parties are in fixed locations: where wireless communication may be used for expediency but is not essential.

At the time of publication, a cross industry group is considering the issue of communications on parallel lines including interoperability of such. That material will be included in a future update to the standard.

This standard applies to new wireless communication systems and associated infrastructure; it is not retrospective in its application.

1.3 Compliance

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

(a) Mandatory requirements.

(b) Recommended requirements.