

Australian Standard[®]

Railway safety management

Part 5: Operational systems



This Australian Standard® was prepared by Committee ME-079, Railway Safety. It was approved on behalf of the Council of Standards Australia on 17 October 2006. This Standard was published on 10 November 2006.

The following are represented on Committee ME-079:

- Association of Railway Preservation Groups
 - Australasian Railway Association
 - Australian Chamber of Commerce and Industry
 - Australian Transport Safety Bureau
 - Commonwealth Department of Transport and Regional Services
 - Council of Tramway Museums of Australia
 - Department of Infrastructure, Vic.
 - Department of Infrastructure, Energy and Resources, Tas.
 - Department of Infrastructure, Planning and Environment, NT
 - Department of Transport Energy and Infrastructure, SA
 - Engineers Australia
 - Independent Safety and Reliability Regulator, NSW
 - National Transport Commission
 - Queensland Transport
 - Rail, Tram & Bus Union
 - WA Department of Planning and Infrastructure
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Railway safety management

Part 5: Operational systems

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-079, Railway Safety in conjunction with AS 4292.1 to provide a means of demonstrating compliance with that Standard in the relevant technical area. It supersedes AS 4292.5, *Railway safety management, Part 5: Operational systems*.

This Standard is part of a series of Standards on railway safety as follows:

AS

4292	Railway safety management
4292.1	Part 1: General and interstate requirements
4292.2	Part 2: Track, civil and electrical infrastructure
4292.3	Part 3: Rolling stock
4292.4	Part 4: Signalling and telecommunications systems and equipment
4292.5	Part 5: Operational systems (this standard)
4292.7	Part 7: Railway safety investigations

The principal changes from the previous edition are as follows:

- (a) Reference to maintenance issues has been added to Section 3.
- (b) Clauses on verification and validation have been added to Sections 3 and 4.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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FOREWORD

A means of complying with this Standard may be by an organization entering into a commitment to conform to a code of practice which has been deemed by the relevant authority to comply in respect of the organization's type of operation. The National Code of Practice for Australian Rail Operations includes a range of codes applicable to specific railway activities such as tramways, tourist/heritage, short haul and advanced technology railways, as well as main line and heavy haul operations.

STANDARDS AUSTRALIA

Australian Standard
Railway safety management

Part 5: Operational Systems

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements and provides guidelines for preparing or adopting engineering and operating systems safety standards and procedures to comply with the relevant requirements of AS 4292.1, in respect of design, installation, operation and maintenance of operational systems.

The Standard provides broad, high level principles intended to foster uniformity in railway operational systems ranging from the sophisticated controls required for high volume, high speed heavy rail systems to low volume heavy rail systems and to the special needs of light rail. The breadth of these principles invites them to be interpreted to cover all of the control environments currently existing or likely to develop in the foreseeable future in Australia whilst at the same time ensuring that the essential elements of safe and uniform practice are incorporated within those environments.

1.2 APPLICATION

This Standard sets technical requirements to be considered for inclusion in engineering systems safety Standards forming part of a railway safety management system prepared in accordance with AS 4292.1. It also addresses requirements for an interface coordination plan which specifies the information which must pass across the interfaces between the various functional areas of railway organizations to enable these standards and procedures to be implemented, and to ensure compatibility between those functional areas.

It is recognized however, that additional or alternative matters and requirements may need to be considered for each railway application. The applicability of each element of these guidelines should be determined by the level of risk it imposes on each operation (see Clause 1.8). In applying this Standard the following matters should be taken into account:

- (a) The role of the railway.
- (b) The function in the organization of the person, corporation, contractor or supplier who is applying the Standard.
- (c) The commercial agreements between owners, operators and functional areas.
- (d) The promotion of commercial and technological innovation.
- (e) Existing safety procedures and practices.
- (f) The need to determine which life cycle phases (see Clause 1.6) are applicable to an organization.

NOTE: Attention is drawn to the Foreword which describes a means of complying with this Standard.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard: