AS 7501:2019



Rolling stock compliance certification





This Australian Standard[®] AS 7501 Rolling stock compliance certification was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Metro Trains Melbourne Queensland Rail Bombardier Central Queensland University TfNSW Rio Tinto Monash University Select Plant Hire Downer Group ARTC SNC-Lavalin PTA WA Specialised Force

The Standard was approved by the Development Group and the Rollingstock Standing Committee in November, 2019. On December 02, 2019 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.

Deborah Spring Exec. Chair / CEO Rail Industry Safety and Standards Board

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This Standard was prepared by the Rail Industry Safety and Standards Board (RISSB) Development Group AS 7501 Rolling stock compliance certification. Membership of this Development Group consisted of representatives from the organisations listed on the inside cover of this document.

Objective

The objective of this Standard is to provide a standard method for certifying rolling stock compliance to the issued RISSB Rolling Stock series of Australian Standard® brand standards and referenced standards.

The certification documentation is intended for use facilitating network registration of rolling stock.

While this standard was developed for RISSB Rolling Stock Standard compliance, the process is suitable for use in obtaining compliance with any Standard.

This standard has several notable changes from AS 7501:2013. Changes include but are not limited to revised responsibilities and definitions applicable to rolling stock operators, owners and independent competent persons. Changes to the overall certification process have been implemented and additional example parameters added to the data register.

Compliance

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

- 1. Requirements.
- 2. Recommendations.

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 recognise 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.

For compliance purposes, where a recommended control is not applied as written in the standard it could be incumbent on the adopter of the standard to demonstrate their actual method of controlling the risk as part of their WHS or Rail Safety National Law obligations. Similarly, it could also be incumbent on an adopter of the standard to demonstrate their method of controlling the risk to contracting entities, or interfacing organisations where the risk may be shared.

Controls in RISSB standards address known railway hazards that are addressed in an appendix.



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1 Scope and general

1.1 Scope

This document applies to new rolling stock, modified rolling stock and existing rolling stock being proposed for operation on a Network on which the class of rolling stock has not previously operated.

This document applies to existing rolling stock that is to be / has been modified and has previously operated on the network.

The document covers the design, construction and testing of rolling stock. Certification of individual units of rolling stock or those which are coupled to operate is included, but not of trains.

Operation of rolling stock in regard to network safe working rules and route standards is not covered. Rolling stock used on light rail, cane railway and monorail networks are not covered.

The scope of AS 7501 ends with the issuing of certification documentation and does not cover network registration which is managed by the RIMs.

1.2 Normative references

The following referenced documents are indispensable for the application of this Standard:

- AS/NZS ISO 31000 Risk management Principles and guidelines.
- AS 7509 Dynamic behaviour.

1.3 Terms and definitions

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

(a) **AW0**

load condition of a vehicle carrying no passengers in a serviceable condition. Also referred to as tare mass.

(b) **AW1**

AW0 plus load (or simulated load) of crew and seated passengers only.

(c) **AW2**

AWO plus load (or simulated load) of crew and includes a combination of both seated and standing passengers.

(d) AW3

AW0 plus load (or simulated load) of crew and the maximum possible number of passengers both seated and standing. Also referred to as crush load.

(e) acceptance for on-track testing certificate

the type certificate issued by the independent competent person following an assessment process on the rolling stock, and on which limitations applying to on-track testing are recorded. For more details refer to Section 11.

(f) certificate of standards compliance

the overarching certificate confirming that a unit of rolling stock has been designed, constructed and tested in accordance with the referenced standards.