

AS 7725:2022



Application based work on track authority systems

RiSSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Train Control Systems Standard



This Australian Standard® AS 7725 Application based work on track authority systems was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Aurizon	Ergonomie	Queensland Rail
ARTC	UGL Regional Linx	Mott Macdonald
Blue Electronics	Arup	PTA WA
TfNSW	4Tel	Sydney Trains
GB Assurance		

The Standard was approved by the Development Group and the Train Control Systems Standing Committee in May, 2022. On May 23, 2022 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.



Deb Spring
Chief Executive Officer
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 7725 Application based work on track authority systems. 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 RIMS with the requirements and recommendations for design (including functional and non-functional characteristics), procurement, and implementation of application based work on track authority systems (ABWTAS).

This Standard also provides vendors with a set of minimum requirements and functionality that would be reasonably expected of an ABWTAS.

Compliance

There are four types of provisions contained within Australian Standards developed by RISSB:

1. Requirements.
2. Recommendations.
3. Permissions.
4. Constraints.

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 or better.

Permissions – conveys consent by providing an allowable option. Permissions are identified within the text by the term 'may'.

Constraints - provided by an external source such as legislation. Constraints are identified within the text by the term 'must'.

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.

RISSB Standards address known hazards within the railway industry. Hazards, and clauses within this Standard that address those hazards, are listed in Appendix A

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1 Scope and general

1.1 Scope

This Standard applies to all rail transport operators, including light rail operators, who intend to procure and use an application based work on track authority system (ABWTAS).

This Standard covers the software and hardware used to enable the electronic communication of information relating to the safe occupation of the rail corridor.

The scope includes:

- (a) system safety risk management;
- (b) system requirements;
- (c) system integration;
- (d) change management;
- (e) test and commissioning;
- (f) maintenance;
- (g) reliability, availability, maintainability, and safety of an ABWTAS.

1.2 Exclusions

The following is deemed out of scope of this Standard:

- (a) Applications used for other purposes than applying for and using work on track authorities.
- (b) Train control systems.
- (c) Development and maintenance of safeworking systems.
- (d) Development and maintenance of communications networks.
- (e) Engineering competency.
- (f) Systems certification.
- (g) Network rules.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

- AS 7450 Rail systems interoperability
- AS 7470 Human factors integration in engineering design – General requirements
- AS 7722 EMC management

NOTE: Documents for informative purposes are listed in Appendix C Bibliography at the back of the Standard.