RISSB's Work Plan 2025 – 2026

Prioritising standards development and implementation to support national rail reform

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RISSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

INTRODUCTION

The RISSB Work Plan for the 2025–2026 financial year reflects a strategically coordinated effort to meet the evolving needs of the Australian rail industry. Building on national momentum for reform and continuous improvement, this year's Plan features 32 projects that have been selected to support interoperability, harmonisation, safety, sustainability, and productivity across the network.

RISSB's project selection process is underpinned by a robust set of criteria, including:

- Alignment with national priorities and regulatory reforms, particularly those identified through the National Rail Action Plan (NRAP) and associated initiatives
- Informed by key safety risks identified through the Australian Rail Risk Model (ARRM)
- Recommendations stemming from ATSB investigations, incident trends, and industry learnings
- Feedback from members, governments, and key stakeholders across the rail sector

The 2025–2026 Work Plan is structured into four key categories, each reflecting a distinct area of strategic importance:

- National Priorities – Projects aligned with national reform objectives, designed to improve system-wide interoperability, harmonisation, and regulatory consistency
- Safety – Standards that directly address critical safety risks, improve operational safety practices, and incorporate lessons learned from investigations and industry analysis
- Sustainability – Reviews focused on ensuring RISSB products support the rail sector's transition to zero-emission technologies, enhanced energy storage systems, and environmentally responsible operations
- Product Maintenance – Targeted updates and reviews to ensure that existing RISSB standards remain relevant, usable, and technically accurate in a rapidly evolving rail environment.

Note: On 11 August 2025, the Infrastructure and Transport Ministers Meeting (ITMM) approved a governance model for rail that will see a new RISSB play a stronger and more definitive role within the National Rail Standards Framework by supporting the development of mandatory standards, lead harmonised standards and support industry where local standards are required.

The FY 2026 Work Plan is subject to change as we build and transition to a new RISSB and in response to emerging national priorities.

Acknowledgement of Country

RISSB is a geographically diverse organisation. We acknowledge the Traditional Owners of Country throughout Australia. We recognise their cultures, histories and diversity and their continuing connection to the lands, waters and communities; and Elders past and present.

National Priorities

This section of the Work Plan presents standards development and review projects that are strategically aligned with the National Rail Action Plan (NRAP) and related national transport reform initiatives. The focus is on supporting interoperability, harmonisation, and productivity across the rail network.

Projects under this category respond to clear national policy directives and aim to deliver measurable outcomes for the industry through the development and enhancement of standards that support national consistency.

They reflect a commitment to collaboration with government bodies and industry stakeholders in delivering reforms that have wide-reaching benefits for safety, efficiency, and the passenger and freight experience across the Australian rail network.

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	Important information
GL – Prioritisation Methodology for Harmonised Standards	The guide will provide a scalable and transparent prioritisation methodology for harmonised rail standards (the general term standards include standards, codes, rules and ways of working) that will ensure the NRAP priorities are addressed.	●	●	●	●	●	A project developed to facilitate the selection and prioritisation of Harmonised standards under NRAP.
AS 7531 – Lighting & Visibility	This standard provides technical requirements for interior and exterior rolling stock lighting and visibility. This includes the conspicuity of rolling stock during both day and night, as well as consideration of environmental factors that affect its visibility.		●	●			Review based on the ONRSR Code of Practice and Monash IRT research report. A significant project focused on community, public safety and level crossing safety.

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	Important information
AS 7711 – Signalling Principles	This Standard specifies the principles for railway signalling systems. This Standard is applicable to systems of safeworking that rely upon train detection systems. Train detection systems include track circuits, axle counters, treadles and train-borne positioning systems. This Standard is not generally applicable to systems of safeworking that do not rely upon train detection systems, such as staff and ticket, electric staff and train order working.	●	●	●	●		This Standard has been the benchmark for signalling principles since 2017. This review will assess whether these principles can be applied to new Safe working systems, such as ETCS and CBTC. This work will be aligned with NTC's mandatory standards work for ETCS interoperability and will consider whether this standard can be updated to incorporate these new technologies, or whether new, dedicated standards will be required.
AS 7718 – Signal Design Process Management	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 review will consider a change request and assess whether these principles can be applied to new safeworking systems, such as ETCS and CBTC, and update them as necessary. This review will ensure alignment with NTC's mandatory standards work for ETCS interoperability.
AS 7716 – Signalling Testing Process	The purpose of this Standard is to outline the requirements that describe the types of testing and methods for testing typical signalling apparatus and systems that form part of the signalling systems in Australian railway corridors.	●	●	●	●		This review will be conducted in conjunction with the review of AS 7717. New systems, such as ETCS and CBTC, will be considered, along with several change requests. This review will ensure alignment with NTC's mandatory standards work for ETCS interoperability.

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AS 7717 – Signal Testing & Commissioning	This Standard is intended to provide a common framework for Rail Transport Operators (RTOs) to plan and execute the inspection, testing and commissioning of new and altered signalling infrastructure. The concepts within this Standard are intended to be applied throughout any railway signalling project, both in the context of a railway signalling and control system project and during the operating life of the system.	●	●	●	●		This review will be conducted in conjunction with the review of AS 7716. New systems, such as ETCS and CBTC, will be considered, along with several change requests. This review will ensure alignment with NTC's mandatory standards work for ETCS interoperability.
AS 7471 – Australian rail – Personal protective equipment (PPE) – Minimum requirements	This Standard outlines the minimum requirements for personal protective equipment (PPE) when accessing the rail corridor. This Standard aims to establish standardisation of PPE within the Australian rail industry.	●	●	●			In line with the National Transport Commission's focus on harmonisation and reducing red tape, this review aims to provide a robust set of requirements for Personal Protective Equipment (PPE) in the rail corridor, driving standardisation across the industry.
AS 7523 – Rolling Stock Emergency Equipment (AS 7523.1, AS7523.2, AS7523.3, AS7523.4)	This document outlines the requirements for portable emergency equipment carried by rolling stock. The main purpose is to define the: - types and quantity of portable emergency equipment to be carried - requirements for emergency equipment (where applicable).		●	●			The comprehensive review will consolidate the four standards into a single standard. The project will assist with reducing the burden for train drivers and standardising the various emergency equipment. The review will facilitate harmonisation across the industry. Supports ONRSR Safety Themes.

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	- documentation requirements relating to emergency equipment. - maintenance requirements for the emergency equipment.						
AS 7501 – Rolling Stock Compliance Certification	This Standard provides a standard method for certifying rolling stock. This Standard also provides a generic process for assessing rolling stock compliance with the referenced standards, which are the RSO-nominated rolling stock standards and the relevant RIM-nominated interface standards or requirements.	●	●		●		Considered for review as part of the "Streamlining Rolling Stock Registration" project (NRAP). *While this project is currently in the workplan, it will be delivered in 2026/27 in alignment with the National Pathway Work undertaken by the NTC.*
AS 7500 – Rolling Stock Registration	Proposed a new standard to address the streamlined registration processes for industry adoption.	●	●		●		A gap was identified in the "Rolling Stock Registration White Paper" as part of the NTC project aimed at streamlining rolling stock registration (NRAP). *While this project is currently in the workplan, it will be delivered in 2026/27 in alignment with the National Pathway Work undertaken by the NTC.*
AS 7450 – Rail Systems Interoperability	This Standard aims to enhance understanding of interoperability and provide a methodology for considering interoperability when introducing new technology or implementing a change management process. Furthermore, this Standard requires consideration of	●	●		●		The standard and any other associated standards will be updated in line with the proposed legislative changes on interoperability and ONRSR implementation guidance. *While this review project commences this FY, it will be delivered in 2026/27.*

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	improving interoperability at every opportunity where a change is proposed.						
GL – Rail Systems Interoperability / Interoperability Management Plan	This document provides guidance that supports the application of AS 7450 Rail Systems Interoperability and AS 7666 Train Protection and Control (TPC) Interoperability standards. This guideline encourages collaboration and uniformity of practice.	●	●		●		The standard will be updated in line with the proposed legislative changes on interoperability and ONRSR implementation guidance. *While this review project commences this FY, it will be delivered in 2026/27.*

Key Industry Safety Priorities

The Safety section addresses critical risk areas and systemic issues identified through industry safety data, incident investigations (including those conducted by the ATSB), and RISSB's Australian Rail Risk Model (ARRM). These projects support the continuous enhancement of industry safety performance through evidence-based updates to existing standards and the development of new requirements where needed.

The selected products are focused on high-impact areas such as the structural integrity of rolling stock, management of SPADs and proceed authority exceedance events, change management in rail operations, and the safe operation of specialised vehicles. By reinforcing the foundations of rail safety management systems and embedding improved safety practices into operational standards, this work contributes to the goal of reducing incidents, protecting rail workers and the public, and ensuring a safer network for all users.

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AS 7520.3 – Body Structural requirements – Passenger	The standard outlines the requirements for the structural strength of railway passenger rolling stock, ensuring safe performance under both normal and extreme operating conditions.		●	●			The review of this standard will improve the crashworthiness requirements for railway vehicles. It will incorporate any changes associated with international technological improvements, as well as safety and/or engineering improvements, and consider the findings of ATSB investigations.
AS 7520.2 Body Structural Requirements Part 2 – Freight vehicles	The objective of AS 7520.2 is to prescribe the requirements for the minimum structural integrity level of the freight vehicle to ensure safe performance under normal and extreme operating conditions.		●	●	●		This review will consider industry papers on the structural requirements for freight vehicles, as well as several recommendations for updates, including those from ATSB investigations. The Standard will further be updated based on the recent changes to other parts of the AS 7520 series.

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	Comments / Notes
AS 7457 – Management of SPADs and Proceed Authority Exceeded Events	This Standard contains the requirements for managing signal passed at danger (SPAD) and proceed authority exceeded events as defined by the ONRSR Reporting Requirements. The purpose of this document is to ensure that risks and hazards associated with these incident types are managed consistently, reducing the likelihood of recurrence and minimising the potential consequences.		●	●			SPAD and PAE management are critical parts of a Safety Management System. This review will consider several change requests and ensure the Standard aligns with the recently updated RISSB SPAD Risk Management Guideline.
AS 7472 – Railway Operations – Management of Change	This Standard outlines the requirements that all rail organisations must apply to ensure that safety risks associated with changes to railway operations, assets, or systems are identified and eliminated or reduced.		●	●			The review of this Standard will assist all RTOs in meeting the requirements under the Rail Safety National Law and their Safety Management System. Recent ATSB investigations that identified poor change management will be reviewed, and the findings will be incorporated into this Standard.
CoP – Operation of Road-Rail Vehicles	This guideline provides all users with relevant information and guidance on RRVs and their management. This will aid the development and establishment of systems and procedures to ensure the safe and effective operation of RRVs.		●	●			Safe operation of the RRV remained a key focus after two fatalities in 2013. The guideline was developed along with AS 7502 Road Rail Vehicle and introduced as a key risk control. The guideline review follows the standard review to ensure that the requirements introduced to mitigate the risk remain effective. Mitigating RRV incidents remains a key focus for the industry & ONRSR.

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	Comments / Notes
CoP – Inspection, Maintenance and Repair of Rail Locomotive Boilers	This code of practice provides a practical guide for owners/ users/ operators to assist them to meet their statutory responsibilities on steam locomotive boilers, which might be summarised as: operating a boiler that is fit for service and presenting the minimum possible risk to any person, with the minimum possible risk to the object.		●	●			As the use of steam locomotives continues into the 21st Century, this code is intended to fill the gap left by the loss of industry experience, ensuring inspection, repair, and maintenance remain effective. The review will ensure that change requests are effectively incorporated.
AS 7510.1 – Braking Systems Part 1 – Locomotive Rolling Stock	This standard outlines minimum standards for brake performance, features and compatibility for the braking systems of Locomotives.		●	●			This review will examine recent updates to AS 7510.2, as well as any new requirements and recommendations from the industry. The Standard will be further updated with improved diagrams and drawings to meet the needs of the rail industry. Supports ONRSR Safety Themes.

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AS 7510.4 - Braking Systems Part 4 - Infrastructure Maintenance Rolling Stock	This standard outlines the minimum requirements for brake performance, features and compatibility for the braking systems of Infrastructure Maintenance Rolling Stock.		●	●			The product will be reviewed to address the change requests. Update required in alignment with the other braking system product review. Supports ONRSR Safety Themes.
AS 7510.6 – Braking Systems Part 6 – Train	This standard outlines the requirements for brake performance, features, and compatibility of the braking systems for the entire train.		●	●			This review will examine recent changes to AS 7510.2, as well as industry requests to update specific sections of the Standard. The Standard will be further updated with improved diagrams and drawings to meet the needs of the rail industry. Supports ONRSR Safety Themes.

Sustainability

This section of the Work Plan reflects the growing urgency and commitment within the rail sector to contribute to national and global sustainability goals. The projects included are guided by the RISSB White Paper "Track to Decarbonised Rolling Stock" report, which identified key standards requiring updates to accommodate zero-emission (ZE) technologies such as hydrogen, battery-electric systems, and onboard energy storage.

As the industry transitions toward lower emissions and energy-efficient operations, these standards ensure that safety, performance, and fire management considerations evolve in line with technological advancements. The inclusion of these sustainability-focused projects demonstrates RISSB's role in enabling environmentally responsible innovation, supporting the decarbonisation of rolling stock, and ensuring the industry is equipped to manage new risks and requirements introduced by emerging green technologies.

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AS 7529.1+2 – Australian Railway Rolling Stock – Fire Safety – Locomotive	The primary purpose of these requirements is to ensure a minimum level of fire safety for rail rolling stock operating in Australia. The requirements of this standard aim to minimise the fire risk to passengers and train crew, as well as the risks that a fire on such rolling stock may pose to the safety of other users of the Network.		●	●		●	The product to be reviewed for currency. Consideration will be given for the inclusion of ZE technology (such as hydrogen, battery systems). - Battery Fire – Battery system malfunction - Battery Thermal Runaway, etc. Supports ONRSR Safety Themes
AS 7527 – Rolling Stock Event Recorders	This standard describes the requirements for event recorders installed in locomotive, self-propelled passenger, and infrastructure maintenance rolling stock vehicles.		●	●		●	This review will consider additional event capture requirements for ZE vehicles, such as Battery level/status, BMS alarms, etc.

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AS 7529.3 – Australian Railway Rolling Stock – Fire Safety – Passenger	This document describes the fire safety requirements for passenger rail rolling stock. The primary purpose of these requirements is to ensure a high level of fire safety for all rolling stock operating in Australia.		●	●		●	The product to be reviewed for currency. Consideration will be given for the inclusion of ZE technology. - Battery Fire – Battery system malfunction - Battery Thermal Runaway, etc. Supports ONRSR Safety Themes
AS 7529.4 – Australian Railway Rolling Stock – Fire Safety – Track Machines	This document describes the fire safety requirements for Track machines. The requirements of this Standard aim to minimise the fire risk to track machine occupants, as well as the risks that a fire on track machines may pose to other users on the Network.		●	●		●	As a result of the emergence of new technologies, such as hydrogen and battery systems, AS 7529.4 will be reviewed and updated to ensure that the requirements for fire safety when these systems are used are specified. Supports ONRSR Safety Themes
AS 7662.1 – 25kV AC Rail Traction Electrification Systems	The objective is to develop an Australian Standard for 25 kV AC Rail Traction Electrification Systems, covering Traction Power Systems, earthing and bonding, and Overhead Wiring Systems.	●	●		●	●	This proposal relates to the creation of an Australian Standard for 25 kV AC Rail Traction Electrification Systems (covering Traction Power Systems, Earthing & Bonding and Overhead Wiring Systems). The lack of industry-wide standards results in a fragmented approach across various projects. Project requisition received via Standards Australia.

Product maintenance

This section includes essential review and update projects that ensure the RISSB standards suite remains current, relevant, and responsive to industry needs. These projects are part of a structured lifecycle management process designed to uphold the technical integrity, clarity, and practical application of existing products.

While they may not directly address national reforms or critical safety risks, these maintenance reviews are critical in ensuring that rail organisations can continue to rely on RISSB's products for effective operations, compliance, and training. They often respond to user feedback, change requests, new operational practices, or shifts in related standards and regulations. In doing so, they contribute to the overall quality, consistency, and usability of the RISSB product library — supporting long-term rail industry productivity, safety, and harmonisation.

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AS 7507 – Rolling Stock Outlines	This Standard outlines the requirements for determining whether rolling stock conforms to the reference rolling stock outlines contained within this document. The primary purpose of the requirements is to maintain an acceptable clearance between rolling stock and fixed structures, as well as between passing trains.		●	●			The Standard will be reviewed to address several change requests that have been received, along with an update in conjunction with AS 7633.
AS 7513 – Rolling Stock Interior Environment Part 1, 3, 4	This Standard describes requirements for the interior environmental specification and performance of locomotive, passenger and infrastructure maintenance rolling stock. The primary purpose of the requirements is to ensure a safe and comfortable environment for humans on rolling stock. This Standard defines good environmental practice, incorporating requirements and recommendations from existing legislation		●	●			Rolling stock interior design has evolved since this Standard was last published, with RISSB taking this opportunity to not only update the Standards but also consolidate them into a single Standard, thereby reducing unnecessary duplication and the need for OEMs to maintain three separate Standards.

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	and other relevant sources, to be applied to Australian rail networks.						
AS 7633 – Railway Infrastructure – Clearances	This standard specifies requirements to ensure the interoperability of reference vehicles.	●	●	●			The review is aligned with the AS 7507 Rolling Stock Outlines review to ensure compatibility, and the standard remains relevant to the rail industry.
AS 7634 – Railway Infrastructure – Survey	The purpose of this Standard is to specify requirements relating to the design, construction, measurement, maintenance and monitoring of a railway survey system, to be able to support various engineering activities undertaken within, and applicable to, a modern railway environment;		●	●			This review will consider current survey practices within the rail corridor, including new technologies that improve safety whilst undertaking survey work. Additionally, the document will be updated to reflect changes in terminology.
AS 7644 – Rail Corridor Access	This Standard outlines the requirements for managing access to rail networks, including non-operational lines, in conjunction with applicable National Rules and Procedures.		●	●	●		Managing access to the rail corridor is a critical requirement for RIMs. This review will consider easements for gas, electricity, water, and telecommunications providers, as well as associated interface agreements, and new approaches in rail corridor management.
AS 7645 – Rail Corridor Management	The purpose of AS 7645 Rail Corridor Management Standard is to specify the requirements for the management of fire and vegetation hazards along the rail corridor, including risks related to fire and weeds, including noxious weeds and pest plants.		●	●	●		This review will consider updating the risk-based principles regarding fire and vegetation risks. Several change requests will also be reviewed to ensure alignment with local, state, and federal legislative requirements.

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	Comments / Notes
AS 7660 – Radio Communication in the Rail Corridor	Mobile communication in the rail corridor is essential for the safe and efficient operation of the railway. This standard outlines a set of basic requirements for wireless communication between individuals 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.		●	●			Radio communication plays a critical role in the safety of rail operations. This review aims to align this Standard with AS 7495 and update it to reflect changes in the way the rail industry manages radio communications.
AS 7721 – Lineside Signals, Indicators and Signal Signage	This standard aims to achieve a common level of safety and performance across all operators, promote good practice in human factors issues, and achieve economies of scale by encouraging a reduction in the differences between the signalling equipment and materials used in the various rail networks in Australia.		●		●		This review will consider changes to AS 7631 and AS 7632, pending change requests, as well as the consideration of new technologies and their relevance to the Standard.
AS 7722 – EMC Management	This standard defines requirements for the management of electromagnetic emissions.		●	●		●	This review will consider several change requests, as well as an overall review of the Standard for currency and suitability for the rail industry.
ANRP – Review	High-level Review of Australian Network Rules and Procedures.		●	●			A high-level review of the ANRP will focus on assessing the content to ensure that the rules remain relevant to the rail industry and the risk controls are effective. The review will consider investigation findings that may require updates to the rules.

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