RISSB's Work Plan 2024 – 2025

Increasing our focus on product adoption and implementation

Prepared by:

Rail Industry Safety & Standards Board
Level 6, 200 Creek Street, Spring Hill Qld 4000
PO Box 518, Spring Hill Qld 4004
info@rissb.com.au

RISSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

INTRODUCTION

Over the financial year 2024 - 2025, RISSB will be delivering projects in its Work Plan that support industry priorities, innovation and change initiatives and projects that support national rail reforms. This years Plan includes **30 projects** that will assist the industry to more productive, safer and more sustainable.

Our Work Plan is formulated from a robust set of criteria including feedback from members, stakeholders and governments, key safety risks from RISSB's Australian Rail Risks Model (ARRM), national interests and regulatory priorities, major incident investigations outcomes and RISSB product usage statistics.

We will continue to collaboratively develop and support the application of RISSB's products to enable industry to move towards greater harmonisation and interoperability, promoting productivity, sustainability and safety for the rail industry.

The outcomes of this year's Work Plan is supported by an increased focus on product adoption and implementation.

NATIONAL PRIORITIES

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	NARP Aligned	Important information
AS 7489 - Seats and Internal Appointments (NRAP)	This Standard provides best practice and performance-based outcomes in the design, manufacture and maintenance of seating and internal appointments in passenger rail services.		✓		✓		✓	AS 7489 supports harmonisation as investments in new-generation rolling stock increase significantly. The common standards removes potential barriers for contractors and suppliers, and improved efficiency.
AS 7501 - Rolling Stock Compliance Certification	This Standard provides a common method for certifying rolling stock. It also provides a generic process for assessing rolling stock compliance with the referenced Standards, which are the rolling stock operators (RSOs) nominated rolling stock standards and the relevant rail infrastructure managers (RIMs) nominated interface standards/requirements.	✓	✓			✓	✓	AS 7501 was considered for review as part of the "Streamlining Rolling Stock Registration" project. The review will also consider: • Requirements for the certification process of rolling stock fitted with ZE technologies • Pending change requests.
Medical Standards Risk Assessments	This document provides example risk assessments for rail safety worker roles in compliance with the Medical Standards.		✓	✓			✓	The National Standard for Health Assessment of Rail Safety Workers is expected to be delivered by the National Transport Commission (NTC) in 2024. NTC has requested that RISSB develop examples of RISK assessments for the industry. The joint project will improve safety outcomes for all rail safety workers.
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 the day and night and consideration of environmental factors affecting its visibility.		✓	✓				This is a review based on the Office of the National Rail Safety Regulator (ONRSR) Code of Practice and Monash Report. A project related to community and public safety risks at level crossings.

SUSTAINABILITY

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	NARP Aligned	Important information
AS 7655 - Wayside Electrical Charging Interface for Low Emissions Rolling Stock	This new Standard aims to develop electrical charging interface requirements for battery-electric rolling stock (primarily locomotives but also including battery tenders and autonomous single vehicles).	✓	✓		✓	✓		**AS 7655** is the first sustainability focused product developed by RISSB. The product will standardise the charging interfaces for battery operated Rolling Stock.
AS 7637 - Hydrology and Hydraulics	This Standard specifies the requirements for adequate planning and design procedures and the development of a Flood Management Plan and Emergency Response Plan to mitigate flood risk to railway infrastructure, rail traffic, and personnel.		✓	✓	✓	✓		Flood damage to railway infrastructure is a significant safety risk. The review of this Standard will assess whether it still meets the requirements of the Australian railway industry and consider current research in hydrology and hydraulics, particularly given recent flooding events in Australia.
CoP - Key Performance Indicators for Corridor Infrastructure Maintenance	This CoP will provide Key Performance Indicators (KPIs) for Railway Infrastructure. This will include a KPI framework with lists of widely adopted KPIs for managing its performance.	✓	✓		✓			As railway infrastructure and its components have a long life span, their management requires a long-term sustainable strategy. Ongoing technical and economic assessments are necessary to optimise the performance of railway infrastructure. The CoP will allow for effective management of assets within the agreed objectives and standards, measuring and monitoring KPI.
AS 7632 - Railway Infrastructure – Signage	This Standard describes requirements for the whole-of-life management of railway operational signage.							The review has been prioritised as part of the NTC harmonisation project to reduce the burden on drivers. It is also essential for the NLCSC agenda. The targeted review will also consider changes made to sighting standards recently completed.

KEY INDUSTRY SAFETY PRIORITIES

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	NARP Aligned	Important information
CoP - Rail Transport of Dangerous Goods	This CoP informs rail transport operators in the logistics chain of the requirements for the safe transport of DG on rail.		✓	✓				With incidents internationally, there is a need to focus on the transportation of DG by rail. This CoP will bring together guidance on managing DG transport risks, end-to-end from transfer from manufacturing facilities, formulation of DG in train consists / vehicle combinations, shunting DG wagons in rail terminals, and offloading.
AS 7502 - Road Rail Vehicles	This Standard sets the core requirements for the safe design, construction, testing, maintenance, modifications and decommissioning of road rail vehicles.	✓	✓	✓				Safe operation of the RRV remained a key focus after two fatalities in 2013. The Standard was developed and introduced as key risk control. Reviewing the Standard will ensure that the requirements introduced to mitigate the risk remain effective. Mitigating RRV incidents remains a key focus for the industry with further reported incidents in the last five years.
CoP - Driver Only Operations	This CoP will provide principles and practices for the safe implementation and maintenance of Driver Only Operations. The document will provide a consistent approach using a reserve SFAIRP methodology to identify key controls necessary for implementation.		✓	✓				This Code aims to provide guidance on how hazards and risks associated with DOO are managed safe so far as is reasonably practicable (SFAIRP), with consideration of recent fatalities in the Australian Railway Industry. This includes the requirement for a rail transport operator (RTO) to demonstrate due diligence in developing and applying a risk methodology that confirms rail traffic operating as DOO are safe SFAIRP, or reverse SFAIRP where operation changes are made to introduce DOO.

KEY INDUSTRY SAFETY PRIORITIES

CoP - Vigilance Timing Cycle	This CoP provides a prescriptive method for determining vigilance timing cycles on rolling stock.	✓ ✓	There is an industry need to provide a prescriptive method for determining appropriate vigilance timing cycles, considering interoperability, i.e., operation across multiple RIMs, human factor concerns for rail traffic crew, performance characteristics of rolling stock, and best practices. A finding from an ATSB report, this will deliver increased safety benefits to the industry.
GL - Monitoring Fatigue Risk Management Programs	The objective is to guide RTOs in monitoring their management of fatigue-related risk within fatigue risk management systems and procedures.	✓ ✓	The Guideline will support RTOs in effectively monitoring and maintaining their fatigue risk management program. This document provides guidance to determine the compliance and effectiveness of the Fatigue Risk Management Program (FRMP).
AS 7520.1 Body Structural Requirements – Locomotive	This Standard describes the requirements for the structural strength of railway locomotive bodies	✓ ✓	This targeted Review will address findings from the ATSB report (Wallen Incident) to improve crashworthiness. These updates will improve driver safety outcomes. The Standard will: a) Prescribe the minimum structural integrity level of the vehicle body to ensure safe performance under normal operating conditions and extreme operating conditions b) Minimize risks to train crew and members of the general public in the event of collisions or derailments.

KEY INDUSTRY SAFETY PRIORITIES

AS 7522 - Access and Egress	This Standard describes requirements for access and egress of workers and passengers on locomotives, freight, passenger, and infrastructure maintenance (track machines) rolling stock.	✓	✓		The main purpose of the requirements is to provide safe, efficient, equitable and dignified access and egress, and to minimise risks to passengers and workers associated with access and egress, emergency evacuations, and requirements for people with disabilities. This targeted review address findings from the ATSB report (Wallen Incident) to improve access and egress. In addition, it will consider change requests related to crew cars, which is also a finding from another ATSB report. These updates will improve safety outcomes for drivers.
ANRP 6001 - Overrun of the Limit of Authority	This product prescribes the rules for dealing with an overrun of the limit of authority in the Network.	✓	✓		This is a targeted review based on the findings from the ATSB investigation (RO-2019-022) on Jumperkine fatality. The updates will improve safety outcomes for the industry.
National Rule framework: Degraded Operation Rule 4	This product will prescribe the rules to control the event of rail traffic exceeding the limit of authority.	✓	✓		This is a targeted review based on the findings from the ATSB investigation (RO-2019-022). The updates will improve safety outcomes for the industry.
Operational Concept for the Australian Rail Network	This product sets out the fundamental operating principles for the Australian Railways on which the operational publications (network safety rules) were developed.	✓	✓	✓	This targeted review will update the document to be aligned with the current structure in place for Rules publication.

KEY INDUSTRY SAFETY PRIORITIES

AS 7470 - Human Factors Integration in Engineering Design - General Requirements	This Standard supports Human Factors Integration (HFI) into the engineering design process within the Australian Rail Industry.	✓	✓		Significant investments are made in rolling stock and infrastructure projects in Australia. The systematic consideration of human capabilities and limitations as inputs to an iterative design process results in adequate integration of Human Factors in all phases of a system's development lifecycle. The review will update the standards to the current HF practices.
CoP - Rail Safety Investigations	This CoP provides procedures, tools and examples to assist accredited Rail Transport Operators (RTOs) conduct rail safety investigations in order to prevent similar occurrences.	✓	✓		Rail Safety Investigations are a means to review the effectiveness of current controls in light of an incident to understand if additional controls are needed to prevent a similar occurrence. The review of this guideline will ensure that the industry is furnished with updated approaches to investigation management. RISSB continues to provide the best rail safety investigation training for the rail industry.
GL - Derailment Investigation Analysis Guideline	This Guideline describes aspects of train operations, rolling stock, infrastructure, and human factors that could cause or contribute to a derailment and provides guidance to conduct derailment investigations.	✓	✓		Derailment investigations enables the RTOs to understand contributing factors to the derailment event and effectiveness of the controls implemented. The review of this guideline will ensure that the industry is provided with updated approaches to derailment investigations and that RISSB continues to provide the best derailment investigation training for the rail industry.
CoP - Light Rail - Management of Rail Safety Worker Competencies	This CoP provides the light rail industry with a harmonised approach to the development of competency management systems for light rail operators and maintainers.	✓		✓	✓	This is a new product for the light rail industry that defines rail safety competencies for specific rail safety workers.

HARMONISATION AND PRODUCT MAINTENANCE

Product Title	Product Scope	Interoperability	Harmonisation	Safety	Productivity	Sustainability	NARP Aligned	Important information
AS 7510.2 - Braking Systems- Part 2 Hauled Rollingstock	This Standard provides safety benefits that contribute to the prevention of collisions or derailments of railway rolling stock by providing controls for the hazards listed.		✓	✓				The Standard covers the design, construction, and maintenance of braking systems for hauled passenger and freight rolling stock. To keep the Standard current, the review considers new and emerging technologies and observed deficiencies, improving safety outcomes.
Rolling Stock Emergency Equipment (AS 7523.1, AS7523.2, AS7523.3, AS7523.4)	These Standards describe requirements for the portable emergency equipment that is carried by Locomotives.		✓	✓			✓	The main purpose of the Standard is to: • Define the types and quantity of portable emergency equipment to be carried • Define the requirements for emergency equipment (where applicable). • Define the documentation that shall be carried out relating to emergency equipment. • Define maintenance requirements for the emergency equipment. The comprehensive review will consolidate the four standards into one. 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.
AS 7520.3 - Body Structural Requirements - Passenger	This Standard describes requirements for the structural strength of railway passenger rolling stock to ensure safe performance under 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 any technological improvements internationally and safety and/or engineering improvements and consider

HARMONISATION AND PRODUCT MAINTENANCE

AS 7532 - Railway Rollingstock Audible Warning Devices	This Standard describes requirements for audible warning devices for Locomotives, Self-propelled passenger rolling stock, and Infrastructure maintenance rolling stock vehicles.	✓	✓			This Standard will be updated to align with other RISSB documents and industry research. The standard is to be updated to include LRV. The project focuses on Harmonisation and safety at Lxings.
AS 7715 - Train Detection	This Standard provides the Australian rail industry with a set of mandatory and recommended requirements for the detection of all trains/rolling stock/rail vehicles.	✓	✓			The review incorporates technological changes and additional details on the types of detection systems available. The Standard will ensure that signalling systems receive reliable, accurate, sufficient and up-to-date information regarding the position and movement of all detectable trains/rolling stock/rail vehicles necessary for the safe control of the railway. The project will also consider pending change requests, alignment to the updated AS 7505 standard, and review of the outdated normative references.
GL - SPAD Risk Management	This Guideline provides examples of good practice in preventing and mitigating the risks arising from a Signal Passed at Danger (SPAD) and to improve the understanding of SPAD risk.	✓	✓			The updated Guideline will provide information for RTOs to benchmark themselves against the good practice presented within this guideline on the management of SPAD risk. Changes will also consider industry-accepted terminology such as “proceed exceedance”.
AUSTRA - 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 & 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 leads to a fragmented approach across different projects. This project requisition was received via Standards Australia.

AS 1085.2, 3, 4, 7, 8, 10,13 Railway Track Material - Fishplates - Sleeper plates - Fishbolts and nuts - Spring washers - Dogspikes - Rail anchors - Spring fastening spikes for sleeper plates	These Standards sets out the requirements for a specific track material for use in railway tracks.	✓	The review of these standards will give the industry confidence in the product's ongoing applicability. The batch review of the 1085 series will provide backward compatibility for rail networks still operating with legacy track material. (minimal changes are expected)

E: info@rissb.com.au
PO Box 518
Spring Hill QLD 4004

RISSB.COM.AU

RISSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD