



Rethinking safety through
INCLUSION
+
WELLBEING

RAIL

ELEMENT 17J

20/10/2023

REGISTRATION OF ROLLING STOCK

PURPOSE AND SCOPE

The purpose of this procedure is to advise Laing O'Rourke personnel involved in the registration and re-registration of rolling stock of the processes to be applied during the registration phase. This Procedure needs to be read in conjunction with **Element 17F Design Management and Certification of Rolling Stock**, **Element 16A Procurement of Rolling Stock**, as well as **Element 17A Commissioning of Rolling Stock**.

This procedure applies to all items of rolling stock purchased or leased by Laing O'Rourke for the railway operations they will be engaged in and throughout Australia.

If a project is procuring Rolling Stock from a third-party supplier e.g., Subcontractor the registration process must be clearly defined in the Project Rail Safety Management Plan relevant to the railway operations and contain specific references to the forms and processes applied by the respective network owner.

1.0 PROCEDURES

This Procedure Registration of Rolling Stock sets out the criteria to be applied prior to and during the registration phase for all items of rolling stock.

Where the item of rolling stock is required to be advised to the Rail Regulator Select shall provide all details to the Rail Safety and Compliance Manager to allow for on time notification which for most items is 28 days.

Prior to the registration process Select shall have determined that the item of rolling stock meets the certification standards for that item of rolling stock and that all supporting processes and documents for the registration process have been completed accordingly.

The Rail Infrastructure Manager nominates the Independent Competent Person (ICP) to complete the task of certifying the rolling stock for use on the respective network.

Registration of rolling stock is an essential element in ensuring the criteria set by the Rail Infrastructure Manager have been fulfilled prior to the item of rolling stock being entered into service.

2.0 ROAD / RAIL VEHICLE REGISTRATION

Of particular importance is the registration requirements for items of rolling stock required to operate on the respective network owner's railway, especially for that of road / rail vehicles, in relation to the following which need to be incorporated in an engineer's report: (Example - NSW network owner's requirements but essential for other areas where Road Rail vehicles travel significant distances.)

- An assessment of the base road vehicle's suitability to meet the proposed on-track task. This needs to analyse the rolling stock outline, GVM, axle load distribution, tyre configuration
- A risk assessment to be conducted on the vehicle itself including the hi-rail braking
- An assessment of the rail equipment and mounting design for its suitability to support and guide the vehicle including:
 - Structural integrity of the equipment for the expected loading
 - Method of attachment and attachment integrity
 - Structural integrity of the vehicle chassis (due to difference in load paths of the rail guidance gear compared to the standard suspension)
 - System geometry and method of locking (e.g. over centre design)
 - Suspension design adequacy in terms of spring capacity and optimum operating range



- Wheel design for expected loading and load eccentricity, including wheel diameter, tread profile, bearing capacity.
- An assessment of ancillary equipment added to the vehicle to produce its on-track functionality including an assessment of the integrity of add-ons such as elevated work platforms, securing devices, vehicle stability for elevated and/or eccentric loading, including WHS design registration number.
- Check rail guidance and ancillary equipment design for relevant standards compliance including confirmation that the relevant components have been designed to a relevant acceptable standard (e.g. AS, ISO, UIC, AAR or equivalent)
- Inspection of the final road/rail vehicle construction to include:
 - A visual inspection of the finished vehicle for compliance with the reviewed design
 - A review of the inspection and test records for compliance with the rail infrastructure manager's standards
- Arrange for the issue of an inspection report certifying that the vehicle design and construction has been assessed and is deemed safe to operate on track which needs to include diagrammatic/photographic evidence of the vehicle and its attachments, as well as:
 - Vehicle Make/model
 - Date of manufacture
 - Date of installation
 - Vehicle VIN no.
 - Rail equipment make and serial no.
 - Add-on Equipment Make and serial no.
 - New GVM
 - Wheel load distribution
 - Structural Engineering Report

The report should clearly state what on-track function/s the vehicle was designed for.

3.0 REGISTRATION & RE-REGISTRATION OF ROLLING STOCK

Select shall obtain from the respective Rail Infrastructure Manager documents that will allow the item of rolling stock to be registered / re-registered for use on that railway.

Once all information has been obtained and entered on to the Form, tests to confirm suitability will be provided by:

- A representative from the Rail Infrastructure Manager or the appointed ICP acting for the RIM

The following tests as applicable to the RIM operating standards will be undertaken by the nominated representative with all details forwarded to the Rail Infrastructure Managers for inclusion in the RIM's register of approved rolling stock. A Train Operating Condition (TOC) waiver (or equivalent) may be issued until such time that the item can be separately listed in the Manual or the RIM's system e.g., Aquipa.

- Rolling Stock outline (where required)
- Twist (where required)
- Electrical (where required)
- Brake's
- Wheel back-to-back measurements
- Road Rail Vehicles: Non-destructive testing of rail wheels and stud axles



Details of any restrictions or conditions of operations will then be incorporated in the RIM's register of approved vehicles, with such approval carried with the track machine at all times. Stickers may be issued for road rail vehicles and again must be current and be displayed at all times.

Any operating restrictions will be incorporated in the relative operating process for the respective item of rolling stock, this will be displayed in the Rolling Stock and incorporated in the Safe Work Method Statement for the operation of the item of rolling stock

4.0 REGULATIONS, GUIDES AND STANDARDS

- Rail Safety National Law
- ONRSR Guideline Preparation of a Safety Management System
- RISSB Rolling Stock Standards
- Network owners Train Operation Condition Manual (or equivalent)
- **Element 11 Management of Change (MoC)**

5.0 FORMS, TEMPLATES AND RECORDS

The following Documents will be retained / produced in accordance with this Procedure:

- MoC Control Form
- MoC Implementation Action Plan
- Inspection and Test Plans
- Commissioning Checklists and reports
- Engineers Reports as required
- Rail Infrastructure Managers Registration
- Training records aligned to Operation and Maintenance Manuals
- Rolling Stock Assessment Report