

## NOTICE TO RAIL TRANSPORT OPERATORS

RSA-2014-03

Date Issued: 20 August 2014

### SUBJECT

## Operational interfaces between Rail Infrastructure Managers and Rolling Stock Operators – mixed and dual gauge turnouts

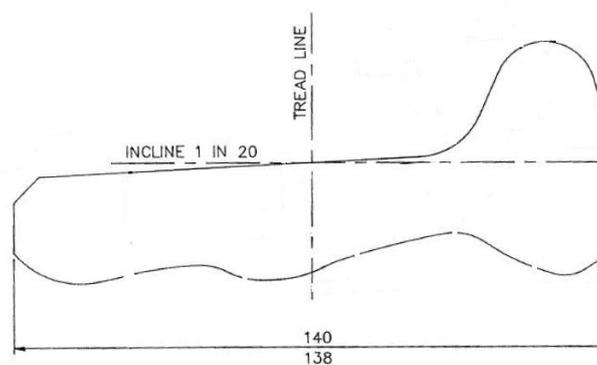
### ISSUE

On 11 July 2014 a standard gauge interstate passenger train derailed in a facing movement while attempting to negotiate the diverge leg of a Type 37 mixed gauge (1435mm / 1600mm) turnout.

The derailment occurred at the wheel transfer area approximately midway along the point blade of the turnout. The train wheelsets had a rim width of 127mm.

Due to the design of the wheel transfer area of some mixed and dual gauge turnouts, rolling stock with wheelsets of 127mm rim width are at higher risk of derailment than wheelsets of 140mm rim width.

Similar mixed gauge and dual gauge (1435mm / 1600mm) turnouts are used elsewhere on Australian rail networks.



ANZR1 Wheel Tread Profile

Both Rail Infrastructure Managers (RIMs) and Rolling Stock Operators (RSOs) have rail safety duties under the Rail Safety National Law and obligations to manage, so far as is reasonably practicable, the safety of the operator's railway operations. These duties include:

- Ensuring they have an appropriate documented set of engineering standards and procedures, and operational systems, safety standards and procedures to cover the following, and, if relevant, the interface between any 2 or more of the following:
  - a) rail infrastructure
  - b) rolling stock
  - c) operational systems.

- Managing the risks associated with their railway operations, including at the rolling stock / track infrastructure interface (including the wheel / rail interface) which may be managed jointly through track access agreements or similar type agreements.
- Ensuring they have procedures for ensuring that changes that may affect the safety of railway operations are identified and managed, including consultation with all affected parties.

As a result of this occurrence, and pending the outcome of formal investigations into the incident, the ONRSR recommends all relevant RIMs and RSOs operating standard gauge rolling stock over mixed gauge and dual gauge turnouts undertake the following:

1. RSOs to contact any relevant RIM of the network they operate on that has dual gauge operations to determine if your rolling stock operates over mixed gauge and dual gauge turnouts.
  - a. RSOs to ensure they are operating in accordance with the route access standards and track access agreement (or similar documents) as defined by the RIM.
  - b. RSOs to check their rolling stock fleet to ensure they are operating the correct wheelsets (in particular, wheel rim widths and wheel profiles) in accordance with the RIM's requirements.
  - c. RSOs to ensure no changes are made to the operational configuration of their rolling stock such as changes in operational routes, introduction of new or modified rolling stock or changes to wheelset configuration (in particular, wheel rim widths and wheel profiles) without first confirming that the changes will continue to meet all requirements of the RIM.
2. RIMs to review the design of the wheel transfer areas of all mixed gauge turnouts. The review should focus on:
  - a. Turnout designs similar to Type 37 mixed gauge turnouts (including Type 27, Type 28 and Type 38 mixed gauge turnouts).
  - b. Ensuring wheel transfer designs are suitable for the operation of all rolling stock including the operation of wheelsets with 127mm rim widths.
3. RIMs to notify all RSOs affected by any relevant changes implemented as a result of undertaking step 2 above.
4. RIMs with mixed gauge turnouts similar to Type 37 mixed gauge turnouts (including Type 27, Type 28 and Type 38 mixed gauge turnouts) to inspect and adjust the turnouts as required to ensure the correct wheel transfer.

Additional information and updates regarding this safety alert may be provided in the future based on the outcomes of investigations currently underway.

For further information please contact Geoff Bell, Infrastructure Safety Engineer within the Victorian Branch of the ONRSR via e-mail [geoff.bell@onrsr.com.au](mailto:geoff.bell@onrsr.com.au) or phone (03) 9655 8954.

**THIS ADVICE IS EFFECTIVE IMMEDIATELY**

Peter Doggett  
**Executive Director National Operations**