

General Feedback

The NTC Paper (National Transport Commission 2026, Options to harmonise rolling stock testing and test locations – Discussion Paper) has presented the rail industry issues and opportunities quite well.

The Paper is somewhat vague as to how harmonisation could be achieved often making statements which justify the current lack of harmony between RIM's requirements. There is a saying in the industry "the laws of physics do not change at a State border".

The current industry rolling stock standards (AS7500 series) appears to be ignored the Paper. The Paper predominantly focussed on the RIM's standards which are numerous, often line/corridor specific and in total control by the Rail Network Owner (RIM).

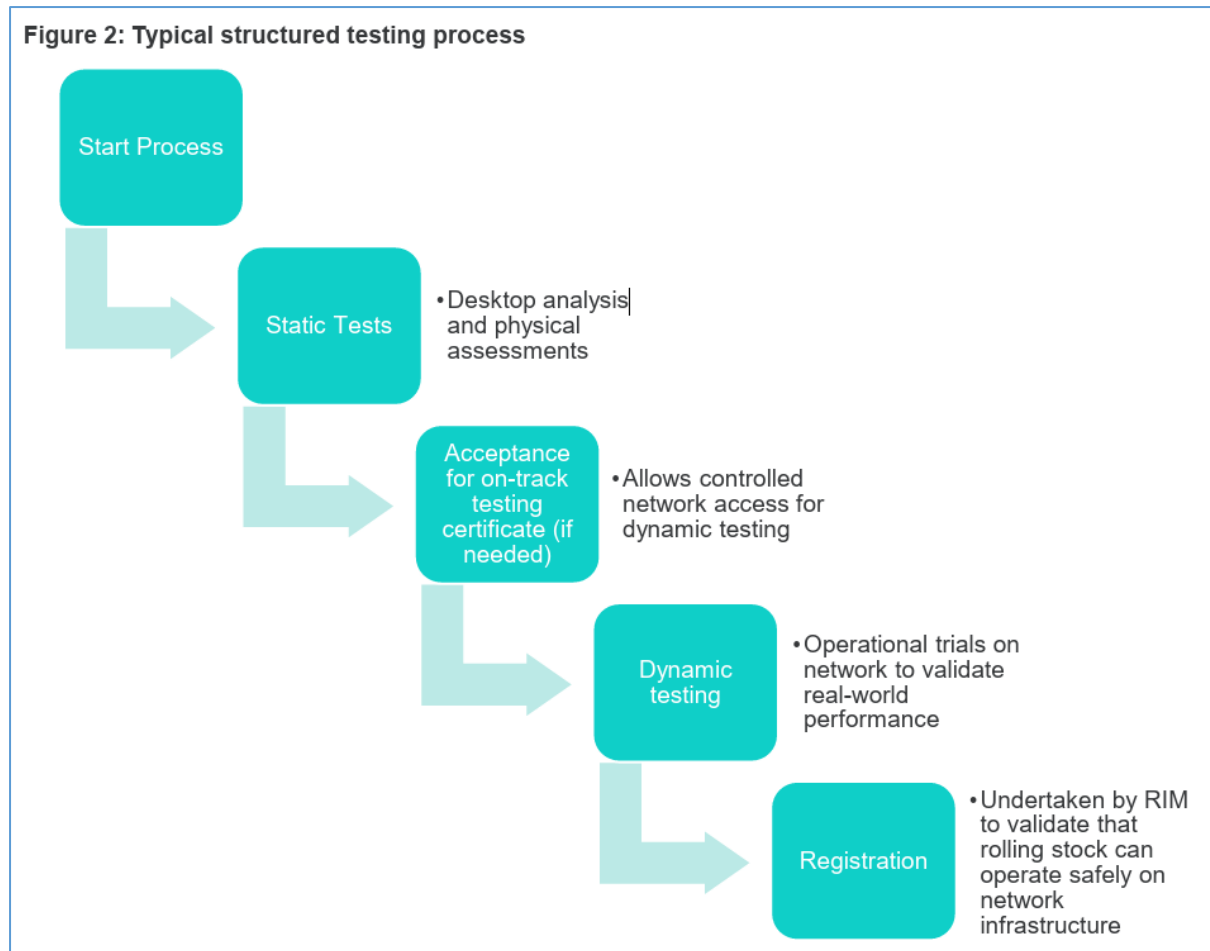
The rail industry standards hierarchy is a fundamental issue.

Track testing location(s) and the range of tests completed at these locations should be mutually accepted by RIM's be it current locations or future locations.

Current Rolling Stock Compliance Process

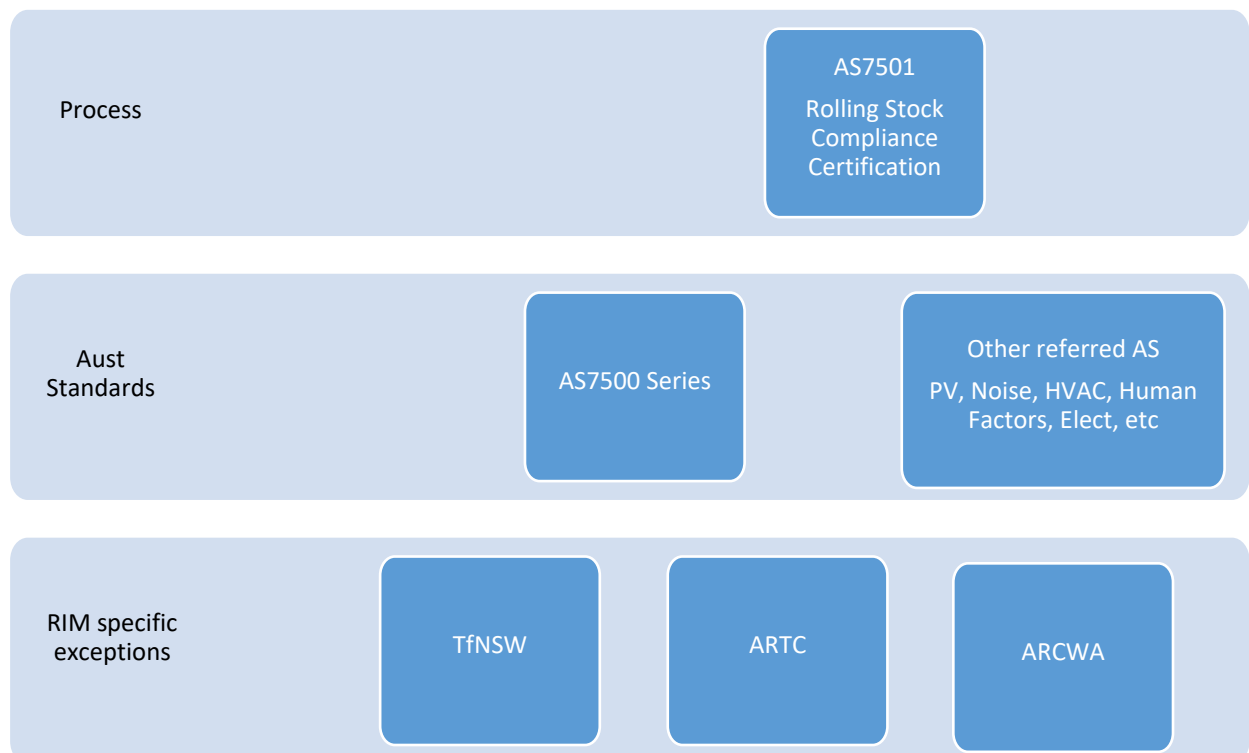
Refer to the Figure 2 below (Source: based on National Transport Commission 2026, Options to harmonise rolling stock testing and test locations – Discussion Paper).

Figure 2: Typical structured testing process



This Figure 2 commences at “Start Process” which is a total oversimplification of the process to gain rolling stock compliance and then RIM Registration.

I suggest a hierarchy of standards as follows:



AS7501 Rolling Stock Compliance Certification provides a process that a RSO can comply with any and all relevant Standards (AS, RIM or other) via the use of an independent competent person (ICP). The ICP is required to be an experienced and competent person and is usually an experienced engineer with a relevant rail related discipline. Such engineers acting as an ICP should be registered by Engineers Australia.

A suite of Australian Standards currently exist which the RSO and ICP would consider and deem their relevancy to the specific rolling stock under design or modification. AS7501 provides a process for the RSO and ICP to assess the rolling stock within a Standards Compliance Register over the 3 phases of the project, that is, design, manufacture and test/commission. Under AS7501 the Standards Compliance Register also indicates which requirements are either mandatory or recommended as per the AS being assessed. The process includes a derogation process to mitigate any non-compliances to the AS in question.

The necessary rolling stock tests would be determined within the AS7501 framework.

NTC Discussion Paper Table 1 “Indicative harmonisation difficulty ratings” presents the RIMs testing requirements. This Table reflects the inconsistency and lack of mutual recognition between the RIMs. Understanding that each RIM is mitigating its Network risks in isolation has been the fundamental problem of the rail industry for decades. It is time the Governments structure their various RIM’s as per the recommended hierarchy above and accept the use of Australian Standards to mitigate their rail network risks. Other than in very specific and special rail corridors where fundamental network configuration differences exist the RIMs should use the Australian Standards as their interface and risk mitigation process. Adopting such a hierarchy would force the RIM’s to adjust their mindset that their standards are not preeminent.

The question raised in Section 2 “Question 3: In rolling stock approvals, there are three stages: certification, registration and network approval”. I am not sure there should be a distinction between registration and network approval. Surely once an item of rolling stock is registered it is approved for the network on which it was registered.

The use of simulation models/tools to verify dynamic performance was not well presented or discussed in the NTC Paper. What specific simulation tools would be accepted to verify which test requirements? How much do these tools cost? Who would be certified as competent to use such simulation tools? Would a reduced scope of on-track testing be required and accepted by RIMs to verify simulations?

Section 4 of the Paper discussed options for harmonisation.

Presented the following

“Testing requirements could be harmonised through establishing:

- a test requirements matrix
- harmonised acceptance criteria
- standardised test methodologies and documentation

- shared and recognised test locations
- consolidated Australian standards with documented variations in test requirements for RIMs”

It is highly recommended that these actions be completed by the RIM's as a matter of priority and the outcomes be used to revise the relevant Australian Standards and withdraw the associated RIM Standards. Further Table 1: Indicative harmonisation difficulty ratings – the items shown as low and medium harmonisation difficulty should be resolved between the RIM's as a matter of the highest priority. This process should surely take months and not years.

Resolution to these items would also simplify the development of a Single Application Form for rolling stock.

Conclusion

The NTC Paper has been useful to present the issues and opportunities to harmonising testing requirements and test locations for rolling stock. However, the harmonisation difficulty rating for those items shown as high harmonisation difficulty does not present a clear path to resolve these issues. Dynamic tests and track locations where such testing could be conducted was not presented in any detail. For example, are there current track sections where RIMs would be satisfied for dynamic tests be conducted and results mutually recognised or is there an expectation by NTC and RIMs that special test tracks would need to be constructed.