

# Rolling Stock Authorisation

## for the Queensland Rail Network

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# 1. Access Requirements

Rail transport operators (including Queensland Rail business divisions and third party operators) proposing to operate trains on the Queensland Rail network must apply for access to Queensland Rail Network Business and must obtain an agreement prior to any operation occurring.

As part of the access application process, the interface risks posed by the operation of a particular train service on the network are jointly assessed and managed through the interface risk management plan (IRMP).

So that only rolling stock and rolling stock configurations that comply with the terms of the IRMP operate on the rail infrastructure, all rolling stock and all rolling stock configurations must be authorised by Queensland Rail Network Business prior to operation on the Queensland Rail network.

When individual items of rolling stock are authorised, they are entered into the Vizirail rolling stock database and the operator (or their nominated representative) advised.

The operator must not use the rolling stock until they receive confirmation of the authorisation from Queensland Rail Network Business.

Train service operations are authorised by Queensland Rail Network Business issuing a Train Route Acceptance or an Authority to Travel and no operations will be permitted unless one of these documents has been issued.

Operators are responsible for all of their rolling stock used on the Queensland Rail network being covered by a rail safety management system approved under their rail safety accreditation and for their rolling stock being designed and constructed to the requirements of the agreed interface standards.

To obtain authorisation of:

- rolling stock, the operator must demonstrate to Queensland Rail Network Business that the rolling stock has been designed, constructed or modified and appropriately tested to comply with the agreed interface standards in its IRMP
- rolling stock configurations, the operator must demonstrate to Queensland Rail Network Business that the rolling stock has been configured and operates in a manner that complies with the agreed interface standards in its IRMP

To demonstrate this compliance, the operator must certify in writing:

- the compliance of the rolling stock with the agreed interface standards identified in the IRMP including any non-compliances
- the compliance of the rolling stock configurations with the agreed interface standards identified in the IRMP including any non-compliances

and must have an auditable process in place to verify the certification.

Rolling stock and rolling stock configurations assessed and certified as above, will then be authorised by Queensland Rail Network Business for operation by the operator on the Queensland Rail network.

Operators must have an appropriate maintenance regime in place such that their rolling stock and rolling stock configurations remain compliant with the certificates issued above during all service conditions.

For operations involving travel on infrastructure owned or managed by anyone other than Queensland Rail, the operator must also obtain approval from the other rail infrastructure manager.

## 2. Interface Standards

The interface standards describe the required features and characteristics of operators' rolling stock only as far as is required for the safe and effective interface with the Queensland Rail network.

The interface standards for the Queensland Rail network are defined in Queensland Rail document SAF/STD/0145/INF Interface Standards.

The applicability of SAF/STD/0145/INF to the proposed rolling stock and its operation is assessed during the interface risk assessment.

Additional interface standards may be identified during the interface risk assessment particularly if the rolling stock, rolling stock configurations or proposed operations are outside the scope of SAF/STD/0145/INF.

The applicable interface standards are then agreed and documented in the IRMP together with any additional controls to address interface risks.

Any non-compliances with the agreed interface standards are identified in the compliance certificates and whether the rolling stock can be operated to an acceptable level of risk by implementing alternative controls is assessed and the alternative control measures agreed in the IRMP.

## 3. Rolling Stock Certification

Before any rail vehicle will be allowed onto the Queensland Rail network for the first time, or after modifications that alter the vehicle's compliance to the agreed interface standards (eg axle loads, weight distribution, physical profile), the operator must certify the rolling stock by producing a Certificate of Interface Compliance signed by an agreed competent person.

In addition to the Certificate of Interface Compliance, Queensland Rail Network Business may require the operator to provide it with documentation demonstrating the rolling stock is in compliance with the interface standards agreed in the IRMP. Such documentation may include a compliance plan, certificate of design conformance, certificate of construction conformance, certificate of type testing conformance and reports on trials and/or commissioning tests.

Where Queensland Rail Network Business is not satisfied, on the basis of the documentation provided by the operator, that the rolling stock complies with the terms of the agreed IRMP, Queensland Rail Network Business may reject the rolling stock.

Where two or more items of rolling stock are permanently coupled and operated as an identifiable set (eg 3-car EMU), the Certificate of Interface Compliance may be issued for the set.

While separate classes of rolling stock should have separate certificates, multiple vehicles of the same class may be included in a single certificate.

The Certificate of Interface Compliance must:

- have a unique identifying number
- identify the operator
- identify the class and identification numbers of each vehicle (or set) covered by the certificate
- include a validity date (and expiry date where relevant)
- specify non-compliances to the agreed interface standards or unverified characteristics

and must also document the following interface performance characteristics of the rolling stock:

- vehicle type
- track gauge
- vehicle tare mass (ie no load, fuel, sand etc.)
- vehicle gross mass
- vehicle length over coupling centres
- number of axles
- maximum axle load
- maximum operating speed empty
- maximum operating speed loaded
- drawgear type
- structure rating
- rolling stock outline with which it complies
- general arrangement drawing with principal dimensions including all axle spacings and loads
- brake type
- notes

A Certificate of Interface Compliance may be issued at any time during the life of the rolling stock and would normally remain valid until the rolling stock is subject to a change that affects its compliance status. Such a change may include (but not be limited to) results of type testing, commissioning, modifications, conversion, reclassification, inadequate maintenance or withdrawal. It is the operator's responsibility to advise Queensland Rail Network Business of any such changes.

As the certificate is about compliance with standards, an expiry date would not normally be relevant except for one off movements of damaged or otherwise out of use rolling stock.

The rolling stock operator, as part of their own processes, may obtain certification against various rolling stock or other standards but operation on the network requires certification only against the interface standards. Contractual issues between the operator and its suppliers, or other deficiencies in the vehicle not related to the interface are an operator issue and out of scope for the process of authorising a vehicle to operate on the network. The operator is responsible for above rail issues and can impose its own restrictions if necessary.

## 4. Rolling Stock Configuration Certification

Before any train will be allowed onto the Queensland Rail network for the first time, or after modifications that alter the train's compliance to the agreed interface standards (eg length, weight, braking distances, types of rolling stock), the operator must certify the configurations of rolling stock in the train by producing a Rolling Stock Configuration Certificate of Compliance signed by an agreed competent person.

In addition to the Rolling Stock Configuration Certificate of Compliance, Queensland Rail Network Business may require the operator to provide it with documentation demonstrating the rolling stock configurations are in compliance with the interface standards agreed in the IRMP. Such documentation may include a compliance plan, certificate of design conformance, certificate of type testing conformance and reports on trials and/or commissioning tests.

Where Queensland Rail Network Business is not satisfied, on the basis of the documentation provided by the operator, that the rolling stock configurations comply with the terms of the agreed IRMP, Queensland Rail Network Business may reject the rolling stock configurations.

The Rolling Stock Configuration Certificate of Compliance may cover multiple configurations of the nominated rolling stock.

The Rolling Stock Configuration Certificate of Compliance must:

- have a unique identifying number
- identify the operator
- nominate the proposed route/s
- identify each configuration covered by the certificate (ie vehicle classes and order)
- include a validity date (and expiry date where relevant)
- specify non-compliances to the agreed interface standards or unverified characteristics

and must also document the following interface performance characteristics of the train considering all rolling stock configurations:

- train type
- maximum train gross mass (excluding locomotives)
- maximum comparison train length
- maximum operating speed empty
- maximum operating speed loaded
- maximum axle load
- does train convey out-of-gauge loads or rolling stock

- marshalling restrictions (eg any limitations on the number or order of vehicles, the position of locomotives within the train)
- notes

A Rolling Stock Configuration Certificate of Compliance may be issued at any time during the life of the train service and would normally remain valid until the train is subject to a rolling stock configuration change that affects its compliance status. Such a change may include (but not be limited to) results of testing, rolling stock changes, increased train length, inadequate maintenance or withdrawal. It is the operator's responsibility to advise Queensland Rail Network Business of any such changes.

When determining rolling stock configurations, operators should consider emergency and contingency situations. Such situations may include (but not be limited to) additional vehicle locomotives, rolling stock with brakes cut out and traction motors cut out.

## 5. Certifier

The Rolling Stock Certificate of Interface Compliance and Rolling Stock Configuration Certificate of Compliance must be signed by a person who has the competence to assess the operator's rolling stock validation process, has the authority to sign the certificates on behalf of the operator and is agreed between the operator and Queensland Rail.

The operator must have an auditable rolling stock validation process to verify that rolling stock and rolling stock configurations have been designed and constructed by people competent to perform that work and that sufficient verification has been conducted to confirm that the rolling stock and rolling stock configurations have been designed and constructed competently.

The operator shall submit the name of the proposed certifier to Queensland Rail Network Business together with details showing how the operator satisfies the above requirements.

Queensland Rail Network Business will then advise the operator of the acceptance or rejection of the proposed nomination.

## 6. Authorisation

Before a train is authorised for operation on the Queensland Rail network:

- (a) a rolling stock certificate of interface compliance must be produced by the operator and accepted by Queensland Rail Network Business.
- (b) a rolling stock configuration certificate of compliance must be produced by the operator and accepted by Queensland Rail Network Business
- (c) other controls listed in the interface risk management plan relevant to the proposed operation must also be implemented and access requirements must be agreed including operating plans, load tables etc.

Queensland Rail Network Business will authorise the rolling stock items by recording details in the Vizirail rolling stock database and advising the operator (or their nominated representative). Authorisation for the operation of rolling stock configurations is documented by an Authority to Travel or a Train Route Acceptance.

Some vehicles such as new or modified vehicles may require testing on track to verify compliance with interface standards. Queensland Rail Network Business may authorise these vehicles to operate on the network on the basis of existing certification, test plans etc. for a limited time or for only limited operation. While these vehicles will be listed in the Vizirail system as authorised, Queensland Rail Network Business will require outstanding interface issues to be addressed prior to inclusion of these vehicles in normal services under a Train Route Acceptance (TRA). Until this is completed the vehicle will need an Authority to Travel (ATT) to operate on the network.

## 7. Train Route Acceptance

A Train Route Acceptance is the documented authority for a train to operate and is issued as an attachment to Schedule 4 of the access agreement.

It defines the train service details including authorised route, authorised rolling stock, authorised rolling stock configurations, maximum comparison train length, maximum train load and any other conditions related to the operation of the train service.

## 8. Authority to Travel

An Authority to Travel is the documented authority for a train to operate outside of its Train Route Acceptance or other agreed operating conditions in the IRMP and is issued in accordance with the access agreement.

It defines the train service details including authorised route, authorised rolling stock, authorised rolling stock configurations, maximum comparison train length, maximum train load and any other conditions related to the operation of the train service.

An Authority to Travel normally has a short validity period and is intended to cover one off or short term operations.

## **Attachments**

- 1. Rolling Stock Certificate of Interface Compliance - Typical Format**
- 2. Rolling Stock Configuration Certificate of Compliance - Typical Format**



## Rolling Stock - Certificate of Interface Compliance

Certificate No: \_\_\_\_\_  
Operator: \_\_\_\_\_  
Rolling Stock Class \_\_\_\_\_  
Rolling Stock Number(s) \_\_\_\_\_  
Validity Date: \_\_\_\_\_  
Expiry Date (where applicable): \_\_\_\_\_

On the basis of certifications by other competent parties and such verifications and validations I considered necessary; I certify that the rolling stock nominated on this certificate has been competently designed, constructed and tested as meeting the requirements of the interface standards agreed with Queensland Rail through the Interface Risk Management Plan except for any non-compliances or unverified characteristics listed below.

I further certify that the performance characteristics shown on this certificate are correct.

This certificate has been issued on the basis of the following documents:

Interface Risk Management Plan: \_\_\_\_\_  
Compliance Plan \_\_\_\_\_  
Certificate of Design Conformance: \_\_\_\_\_  
Certificate of Construction Conformance: \_\_\_\_\_  
Certificate of Type Testing Conformance: \_\_\_\_\_  
Other: \_\_\_\_\_

**CERTIFIED BY:** \_\_\_\_\_  
**TITLE / QUALIFICATIONS:** \_\_\_\_\_  
**SIGNATURE:** \_\_\_\_\_  
**DATE:** \_\_\_\_\_

**Compliance Status:** (List all non-compliances or unverified characteristics. If none, insert the word 'Compliant')

**Performance Characteristics**

- Vehicle Type \_\_\_\_\_
- Track Gauge \_\_\_\_\_
- Vehicle Tare Mass (no load, fuel, sand etc.) \_\_\_\_\_
- Vehicle Gross Mass \_\_\_\_\_
- Vehicle length over coupling centres \_\_\_\_\_
- Number of axles \_\_\_\_\_
- Maximum Axle Load \_\_\_\_\_
- Maximum operating speed empty \_\_\_\_\_
- Maximum operating speed loaded \_\_\_\_\_
- Drawgear type \_\_\_\_\_
- Structure Rating \_\_\_\_\_
- Rolling stock outline with which it complies \_\_\_\_\_
- General arrangement drawing with principal dimensions including axle spacings and loads \_\_\_\_\_
- Brake Type \_\_\_\_\_

Dwg No: \_\_\_\_\_ Attached / Not attached

**Notes** (leave blank if none)

## Rolling Stock Configurations - Certificate of Compliance

Certificate No: \_\_\_\_\_

Operator: \_\_\_\_\_

Route: \_\_\_\_\_

Rolling Stock Configurations (classes and order of vehicles)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Validity Date: \_\_\_\_\_

Expiry Date (where applicable): \_\_\_\_\_

On the basis of certifications by other competent parties and such verifications and validations I considered necessary; I certify that the rolling stock configurations nominated on this certificate have been competently designed and tested as meeting the requirements of the interface standards agreed with Queensland Rail through the Interface Risk Management Plan except for any non-compliances or unverified characteristics listed below.

I further certify that the performance characteristics shown on this certificate are correct.

This certificate has been issued on the basis of the following documents:

Interface Risk Management Plan: \_\_\_\_\_

Compliance Plan: \_\_\_\_\_

Certificate of Design Conformance: \_\_\_\_\_

Certificate of Type Testing Conformance: \_\_\_\_\_

Load Table: \_\_\_\_\_

Other: \_\_\_\_\_

**CERTIFIED BY:** \_\_\_\_\_

**TITLE / QUALIFICATIONS:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**Compliance Status:** (List all non-compliances or unverified characteristics. If none, insert the word 'Compliant')

**Performance Characteristics**

- Train type \_\_\_\_\_
- Maximum gross train mass \_\_\_\_\_  
(excluding hauling locomotives)
- Maximum comparison train length \_\_\_\_\_  
(including hauling locomotives)
- Maximum operating speed empty \_\_\_\_\_
- Maximum operating speed loaded \_\_\_\_\_
- Maximum axle load \_\_\_\_\_
- Does train convey out-of-gauge loads or rolling stock \_\_\_\_\_ (Yes/No)  
(If yes, provide details below)
- Marshalling restrictions (eg any limitations on the number or order of vehicles, the position of locomotives within the train) \_\_\_\_\_

**Notes** (leave blank if none)