



Rolling Stock Acceptance Procedure

SM-20-00046300

Metro Body of Knowledge (MBoK)

Version:	6.0
Status:	Final
Document owner:	Executive Director, EDA
System:	Health and Safety Management System
Applicable to:	Sydney Metro
Issue date:	7/11/2024
Next review date:	7/11/2026

Document Approval:

Name	Position	Date	Signature
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1. Purpose

The purpose of this procedure is to ensure that all infrastructure construction and maintenance rolling stock operating on Sydney Metro controlled network(s) meet [SM-20-00046618 Minimum Rolling Stock Requirements Standard](#) to ensure compatibility with the network and its infrastructure as required by Sydney Metro's accreditation with the Office of National Rail Safety Regulator (ONRSR).

Note: Operation of running fleets (e.g. Sydney Metro Northwest and City & Southwest) are separate and are subject to accreditation by our contracted operator(s).

1.1 Definitions

All terminology in this Procedure is taken to mean the generally accepted or dictionary definition. Other terms and jargon specific to this Procedure are defined within the [SM-17-00000203 Sydney Metro glossary](#).

1.2 Accountabilities

The Deputy Executive Director – Project Engineering and Design is accountable for this Procedure including approving the document, ensuring it is implemented, monitoring its effectiveness, and performing a formal document review.

The Executive Director, Health and Safety is responsible for the System under which this Procedure and its associated documents reside.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this Procedure are implemented within their area of responsibility.

Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this Procedure.

2. Rolling Stock Acceptance

Sydney Metro as the Rail Infrastructure Manager (RIM) has a rolling stock acceptance process to ensure that all rolling stock operating on Sydney Metro controlled network(s) meets [SM-20-00046618 Minimum Rolling Stock Requirements Standard](#) to ensure compatibility with the network as required by Sydney Metro's accreditation with the Office of National Rail Safety Regulator (ONRSR).

Before rolling stock is permitted onto a Sydney Metro controlled rail network for the first time or following modification that alters a vehicles compliance to the agreed specifications or its mode of operation, the RSO intending to introduce the rail vehicle must apply to, and receive acceptance from, Sydney Metro for the use of that vehicle on the network. Acceptance will also include the context in which the vehicle will be used, such as location, possessions, traction power or other relevant railway constraints around the vehicles(s) at their time of use.

Sydney Metro will engage an organisation that has appropriate accreditation under the RSNL to operate rolling stock where there is a need for rolling stock to be used in the delivery of Sydney Metro's program of works. These requirements are applied to appointed contractors through Sydney Metro's "General Specification - Health and Safety Management".

However, it should be noted that final review and approval of any rolling stock for operation on the Sydney Metro Network rests with Sydney Metro's Deputy Executive Director – Project Engineering and Design or their nominated Sydney Metro representative.

2.1 Requirements for Rolling Stock Operators

The RSO has responsibility for engaging and interfacing with the RIM for the network upon which they intend to operate rolling stock. The RSO will be required to engage an Independent Competent Person (ICP) to undertake Rolling Stock Compliance Certification. Guidance on the factors to be considered in selecting a suitably ICP can be found in AS 7501. The ICP will be accepted in that role with the RSO based on the RSO's accreditation to operate rolling stock on Sydney Metro as well as specific vehicle type, designated as one of the following:

- Road Rail vehicle;
- Track based vehicle;
- Trolley or trailer; and/or
- Locomotive.

Where Sydney Metro is the RIM for works, the RSO and Sydney Metro will agree on an appropriate ICP to endorse the completed certification documentation including certifying the rolling stocks compliance with (or variation from) [SM-20-00046618 Minimum Rolling Stock Requirements Standard](#) using [SM-20-00046299 Minimum Rolling Stock Requirements Assessment Template](#). Which has now been digitalised in Aquipa, an online asset management tool.

RSO must submit completed Form - Rail Safety Worker ICP Competency Assessment with document evidence for Sydney Metro's review for any ICP they wish to select.

It should be noted that final review and approval of an ICP to provide services to any RSO rests with Sydney Metro's Deputy Executive Director – Project Engineering and Design.

The process for Sydney Metro's acceptance of an ICP is as shown in the following flowchart, figure 1 below.

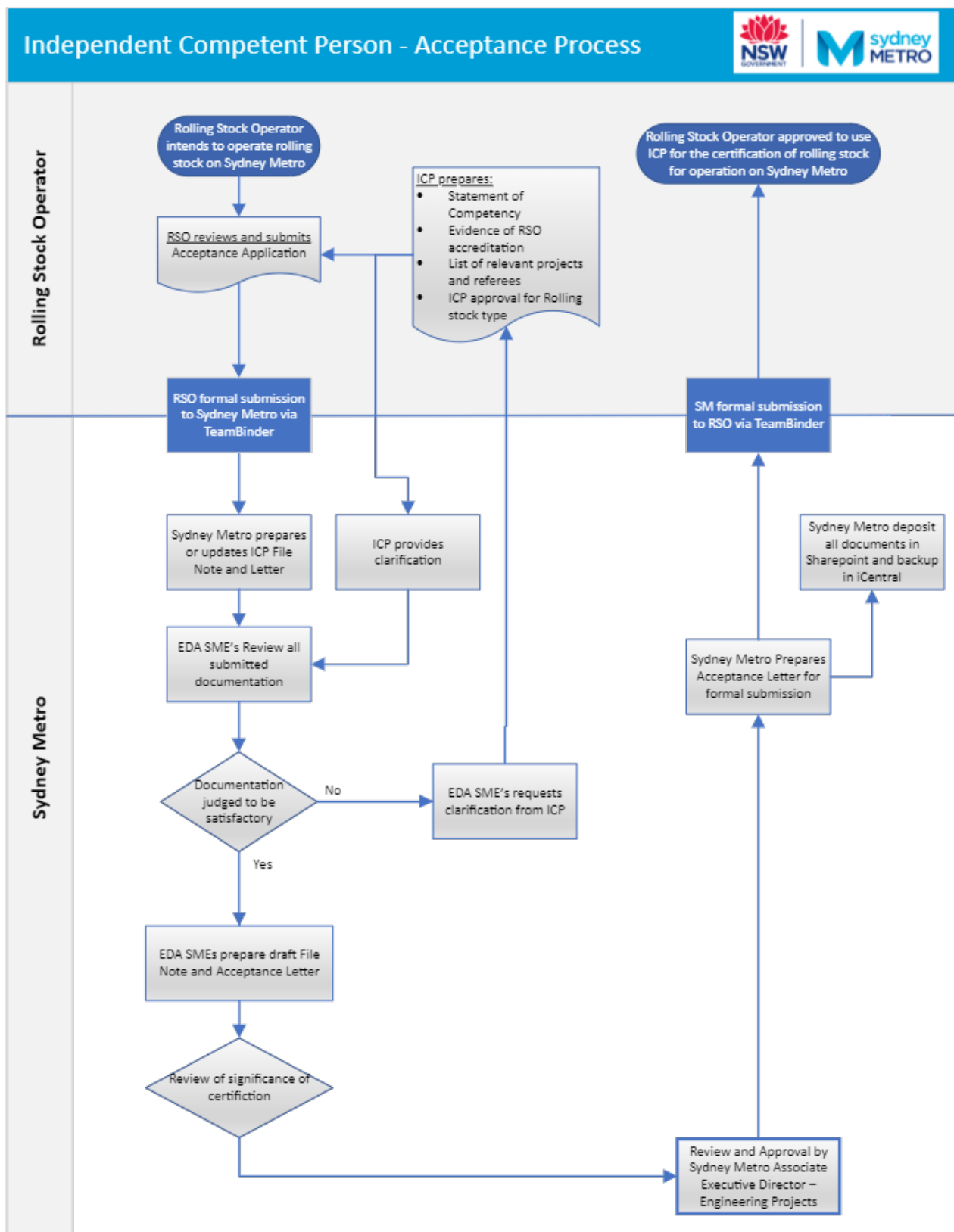


Figure 1: ICP Approval Process

2.1.1 Summary of Rolling Stock Operators responsibilities

Responsibilities of the responsible RSO intending to operate rolling stock on Sydney Metro controlled network:

- Undertake and/or confirm necessary testing and design review has been completed for rolling stock;
- Complete [SM-20-00046218 Application for Rolling Stock Registration Form](#), [SM-20-00046299 Minimum Rolling Stock Requirements Assessment Template](#) and relevant AMB information packs where appropriate with reference to [SM-20-00046618 Minimum Rolling Stock Requirements Standard](#). This has now been digitalised in Aquipa, an online asset management tool, with all applications to be sent through via Aquipa.
 - Note that an alternative ICP vehicle inspection checklist may be accepted in place of the AMB information pack with the approval of Sydney Metro, provided that the alternative document provides at least an equivalent level of information as in the latest AMB information pack;
- Have an ICP review and approve the application and supporting documentation including identification of restrictions on SM operations. The RSO shall ensure the nominated ICP is competent for the rolling stock they are certifying in accordance with the Letter of Competence provided by Sydney Metro.
- The ICP rolling stock assessment must include 'active statements' of compliance or restrictions to operation on Sydney Metro to mitigate any non-compliances; The restrictions list is a 'live' document that Sydney Metro can add to should Sydney Metro, RSO or ICP identify that a new or novel restriction is required. The restrictions list can be found in Aquipa during ICP vehicle application.
- Apply to Sydney Metro for acceptance of new rolling stock or update to acceptance (following change to rolling stock configuration, change of use, or expiration of previous acceptance period of 12 months);
- Any changes to applications to address minor errors in certification will not extend the original certification expiry date.
- Undertake other duties as required of an RSO under the RSNL.

2.1.2 Applying for acceptance for rolling stock

To apply for new rolling stock acceptance, the responsible RSO shall submit the application along with all the necessary supporting information via Aquipa, at least 20 working days prior to the initial intended date for operation of the rolling stock.

Rolling stock acceptance is for rolling stock type compatibility with the Sydney Metro network only. Rolling stock acceptance for operation on the Sydney Metro network requires that rolling stock continue to be maintained fit for purpose, in accordance with its current configuration.

Note: This process must be repeated where the acceptance for a piece of rolling stock has expired, the configuration has been modified, or the context of the rolling stock's operation varies from the existing acceptance or conditions.

2.1.3 Applying for acceptance for modified rolling stock

If after acceptance, rolling stock is to be modified such that the rolling stock's performance will be impacted, or where the operating conditions are to be changed, then the responsible Rolling Stock Operator must notify Sydney Metro, flag and re-apply for acceptance via Aquipa. [SM-20-00046218 Application for Rolling Stock Registration Form](#).

This applies to modifications including but not limited to the following:

- any modification that may affect the rigidity of rolling stock;
- suspension, loading or load distribution of the vehicle;
- vehicle outline, profile or gauge;
- drive, braking or adhesion performance.

2.2 Acceptance of Rolling Stock by Sydney Metro

Applications for Rolling Stock Acceptance received by Sydney Metro will be managed using the process below. It should be noted that any rolling stock certification granted will be for a maximum period of 12 months from date of certification, after which time it will need to be reassessed and re-certified.

Any non-compliance with Sydney Metro Minimum Rolling Stock requirements must be mitigated by an operational restriction placed on that vehicle's certification. The list of Sydney Metro Operational Restrictions can be found in Aquipa. It is the ICP's responsibility to ensure that the most appropriate operational restriction is identified during the rolling stock assessment and included in the application for certification. The ICP may also identify new restrictions for particular items of rolling stock or particular methods of working, and those new restrictions should be communicated to Sydney Metro whereby they can be added to the operation restriction in Aquipa.

It is the RSO's responsibility to ensure that the identified operational restrictions are adhered to during the day-to-day use of the rolling stock on the Sydney Metro network.

Sydney Metro will conduct regular audits of the RSO's enforcement of any operational restrictions identified for particular items of rolling stock and the consists and convoys that they operate within, noting the following definitions, taken from the Sydney Metro Rail Operating Conditions Standard:

- Consist – An approved listed order of rolling stock items coupled together to make up a complete rail vehicle.
- Convey – A group of track vehicle not coupled but travelling closely together

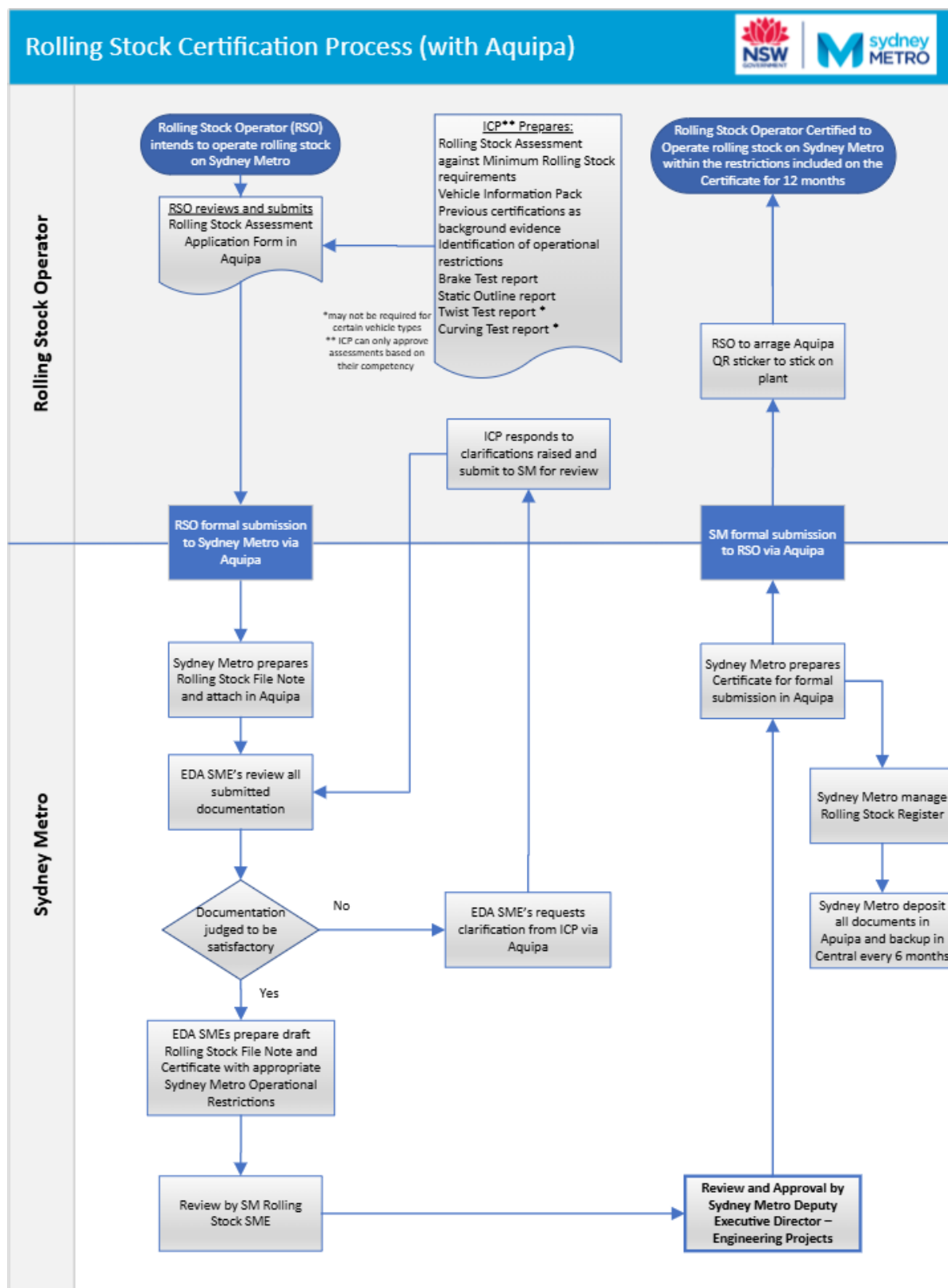


Figure 2: Rolling stock certification process

2.2.1 Requirements for individual undertaking assessment

The review and acceptance of rolling stock will be performed by individuals who are suitably capable and competent to do so, noting that Final Technical Authority and Approval of certification will rest with a Sydney

Metro employee, namely the Sydney Metro Deputy Executive Director – Project Engineering and Design or their nominated Sydney Metro representative.

In identifying individuals to undertake this task Sydney Metro requires the following:

- qualifications and experience which satisfy the criteria for membership of a relevant professional engineering body;
- current engineering competence assessment through Sydney Metro's Engineering Competence Assessment or Technical Partner's Competency Assessment processes with a suitable competency level for the vehicles being assessed (Depending upon the complexity of the specific rolling stock vehicle);
- experience in assessing rolling stock against standards;
- demonstrated experience and knowledge of the Sydney Metro requirements, including rolling stock, track, gauge and trackside installations;
- demonstrated experience and knowledge of rail safety national law and associated legislation;
- be deemed a competent Rail Safety Worker by Sydney Metro with demonstrated experience and knowledge of the requirements of Australian and industry standards;
- knowledge of risk management;
- knowledge and experience in the testing and commissioning of rolling stock; and
- knowledge of railway operations and rail-based construction activities.

2.2.2 New Applications

Applications for rolling stock acceptance that have not previously been registered in the Sydney Metro Rolling Stock Register (managed within Aquipa) will be managed using the following steps:

1. The nominated Sydney Metro reviewer will review the Rolling Stock Requirements Assessment submitted by the RSO along with the evidence provided. As a minimum, assessments must include a valid Brake Test report and a valid Static Outline report. Where appropriate, dependent on the type of rolling stock being assessed, the submission should also include a Twist Test report, Stability Test report and/or a Curving Test report. The Assessment must also indicate all operational restrictions placed on the rolling stock to manage any non-conformances with Sydney Metro Minimum Rolling Stock Requirements. The actions taken by the Sydney Metro reviewer will be recorded in a file note for the Rolling Stock Type.
2. Review comments/conditions noted by the RSO in the application and supplied documentation.
3. Review the tasks the rolling stock will undertake to determine its intended use and location of rolling stock. This must include any secondary tasks that the machine may undertake, such as towing other equipment.
4. Make determination of Acceptance/Acceptance with conditions/Reject and record outcome of determination using the unique [SM Rolling Stock File Note \(Template SM-21-00407836\)](#) for the rolling stock being assessed.
5. Record the expiry date of the Acceptance in the Register (must not exceed the Certification validity period, usually 1 year).
6. Uniquely identify will be assigned by Aquipa.

7. Record basic vehicle information such as asset number or Vehicle Identification Number (VIN) number, and any conditions associated with the approval (where approved) can be found in Aquipa.
8. Vehicle status and detail can be viewed through Aquipa from RSO Aquipa user interface.
9. As a formal backup / filing mechanism, copy all relevant certification documents in Aquipa to be uploaded to iCentral every 6 months and at completion of project.

2.2.3 Updated application for existing rolling stock

Where rolling stock has previously been registered in the Sydney Metro Rolling Stock Register (managed within Aquipa) and requires an updated application to be submitted (either as a result of the current Rolling Stock Acceptance Certificate having expired or following modification to the rolling stock or change of use) the application will be managed using the following steps in Aquipa:

1. Any reapplication must include recent completion of the service brake test, park brake tests and recertification checklist;
2. Find vehicle number in the Rolling stock register (managed within Aquipa) (by rego number, asset number or VIN number depending on what information is provided in the application).
3. Open most recent Rolling Stock acceptance File Note for editing;
4. Check through RSO supplied documents for any changes:
 - (a) If changes impacting on the rolling stocks interface with network occurred:
 - i. Review assessment completed by RSO and make determination regarding acceptance;
 - ii. Update and up-issue the Rolling Stock Acceptance Certificate (within Aquipa Sydney Metro compliant green tick) to reflect new Sydney Metro Conditions, including new dates, and any new Restrictions or Limitations to be placed on the Rolling Stock;
 - iii. Update and up-issue the Rolling Stock Type File Note with the actions taken (Specifically the changes from the previous submission).
 - (b) If no changes occurred since last application:
 - iv. Update the Rolling Stock Acceptance Certificate (managed within Aquipa) with date of issue and the new expiry date (which must not exceed Certificate validity period, usually 1 year);
 - i. Update the Rolling Stock Type File Note with the actions taken (Specifically stating that there are no technical or operational changes from the previous submission).

2.2.4 Operating Waivers

Operating Waivers are issued for special vehicles to operate on Sydney Metro network with restricting conditions to ensure safe operations. Waivers as issued for once off access, short period, oversize, or unique vehicle types, etc. Process specified in 2.2.2 for new application is followed, however the plant will usually have special operating conditions which are noted in the Operating Waiver issued to the RSO.

2.2.5 Provisional Acceptance

Provisional Acceptance ('recertification') is temporarily accepting vehicles to operate on the Sydney Metro network.

To qualify for provisional acceptance, this vehicle must:

- Not be a mobile elevated work platforms (MEWP) or a truck-mounted elevated work platforms (EWP) – these vehicles remain subject to the full certification process currently be undertaken by Sydney Metro in accordance with SM-20-00046618 (Minimum rolling stock requirements);
- Be currently accepted by the Asset Management Branch (AMB) for use on the Sydney Trains network; and
- Must be a vehicle that:
 - A. Was previously accepted for Sydney Metro City & Southwest (C&SW), City section; or
 - B. Is identical to vehicles previously accepted for C&SW.

In addition to the above the vehicle must have :

- A current complying inspection report (recertification checklist), and
- Current complying brake test results.

Provisional acceptance assumes the vehicle :

- Complies with the Narrow Non-Electric Outline (based on AMB acceptance).
- Sydney Metro restrictions equivalent to the AMB restrictions will be applied.
- All relevant previous C&SW restrictions will be automatically applied.

A sample of ten percent of vehicles qualifying for provisional acceptance must be subjected to the full certification process. These vehicles may be randomly selected or nominated for full certification based on the complexity of their configuration or any concerns over the application.

All vehicles provisionally accepted will remain subject to a full acceptance review prior to the provisional acceptance expiry date.

The provisional acceptance will be for a period of four (4) months or until the brake test expiry date (whichever is sooner).

2.2.6 Rolling stock certification following an incident

Where an item of rolling stock is involved in an incident while operating on Sydney Metro, the process of assessing that rolling stock before re-commencing works will be as follows.

An incident is where the rolling stock caused, or was involved in, an event outside of its normal operating conditions or design that did, or may have, caused injury to persons, damage to property or delay to construction.

Return to operational service, either following a significant incident as defined in [SM-17-00000040 Health and Safety Incident Reporting and Investigation Standard](#) or an incident where the rolling stock is repaired and returned to service, will not extend the original certification validity period granted at the time of the rolling stock's current certification.

Non-Significant incident examples	Significant incident examples
• ONRSR Category C reportable incidents • An incident that had an actual or potential consequence of C4-C6 on the SM-19-00028213 Sydney Metro Risk Matrix	• ONRSR Category A reportable incidents • An incident that had an actual or potential consequence of C1-C3 on the SM-19-00028213 Sydney Metro Risk Matrix
Note: when in doubt contact Sydney Metro	

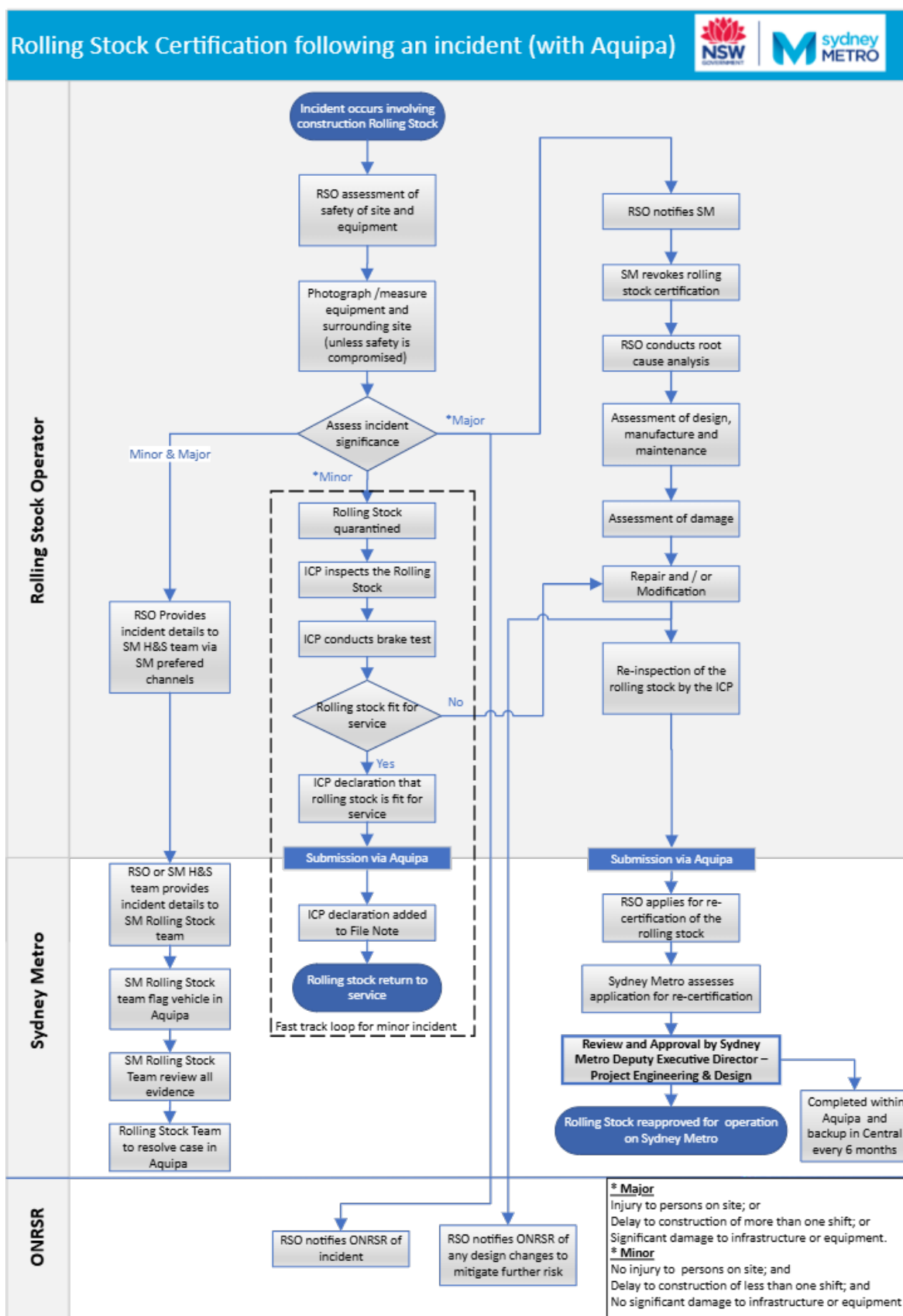


Figure 3: Rolling stock certification following an incident

2.3 Compliance and Assurance

In order to ensure that the process is effectively implemented and maintained, Sydney Metro will undertake the following compliance and assurance activities.

- Periodic surveillance on rail sites to ensure that rolling stock on site has the necessary certification and acceptance for use and being operated/used in line with the current Rolling Stock Acceptance Certificate. Vehicle details are to be captured in Surveillance Reports and File Notes, to enable checking against the Accepted Vehicle register to monitor compliance, particularly with restrictions placed on the rolling stock.
- Periodic reporting of the outcomes of the assessment and acceptance process including number of rolling stock Certificates issued, commonly applied waivers or restrictions, time taken to process applications and other information of interest to the Director – Engineering.
- Periodic independent audit of the Sydney Metro Rolling Stock Acceptance process to ensure the process remains effective and is applied consistently as well as the identification of any improvements.

Sydney Metro should also encourage constructive feedback from RSO's, ICPs and other stakeholders involved in the process to improve its effectiveness and value.

2.4 Changes to Restrictions

Changes to restrictions, either from Sydney Metro or external parties that have been approved by Sydney Metro, shall be managed with Aquipa and be accessible by stakeholders with an Aquipa account (e.g. ICP and RSOs).

3. Related documents and references

Related documents and references

1. SM-20-00046300 Procedure – Rolling Stock Acceptance (this document)
2. [SM-20-00046618 Standard – Minimum Rolling Stock Requirements](#)
3. [SM-20-00046218 Application for Rolling Stock Registration Form](#)
4. [SM-20-00046299 Minimum Rolling Stock Requirements Assessment Template](#)
5. [SM-21-00407836 Rolling stock acceptance – File note template](#)
6. [SM-21-00407837 Rolling stock acceptance – Certificate template](#)
7. [SM-20-00046222 Rolling Stock Register Template](#)
8. [SM-21-00407838 SMCSW Accepted Infrastructure Rolling Stock Register](#)
9. [SM-21-00408623 File note template of ICP acceptance](#)
10. [SM-21-00408622 ICP Acceptance Letter Template](#)
11. [SM-17-00000203 Sydney Metro glossary](#)
12. [SM-18-00039121 City & Southwest Rail Safety Accreditation Strategy](#)
13. [SM-21-00290294 Standard - Rail Operating Conditions](#)
14. [SM-21-00290289 CSW – Rolling Stock Acceptance Procedure Template Status](#)
15. Standard AS7501 (For the definition of an Independent Competent Person - ICP)

4. Superseded documents

Superseded documents

SM-20-00046300 Ver1.0

5. Document history

Version	Date of approval	Notes
1.0	24 April 2020	New IMS document.
2.0	27 August 2021	Substantial revisions due to improvements in the SMA process
3.0	1 Dec 2021	Substantial revisions due to improvements in the SMA process
4.0	19 December 2022	Scheduled review
5.0	19 December 2023	Scheduled review minor update – Andrew Ho
6.0	7 Nov 2024	Scheduled review – Aquipa