

Product Type Approval Certificate

Provisional and Restricted

This certificate is issued to:

Supplier name and

address:

Siemens

160 Herrings Road Macquarie Park NSW 2113

In respect of:

Manufacturer: Siemens

Place of manufacture: Sydney, Australia

Traffic Management System (TMS) as defined in "DSPPRG-**Product description:**

TFNSW-NWW-SG-RPT-000003 Type Approval Report Siemens

TMS version 1.0":

1. Generic architecture

2. Requirements and interfaces

3. System and their configurations

Use approved for: 1. To be used only for the purposes of TMS Site Acceptance

Testing and System Integration Testing configuration 0.3A

under track possession arrangements.

Conditions of approval:

1. This product/system type approval is based on "DSPPRG-TFNSW-NWW-SG-RPT-000003 Type Approval Report Siemens TMS version 1.0".

2. This is a generic product/system type approval. The suitability of the type approved product/system for the proposed site specific application must be assessed and assured as detailed below using applicable TfNSW TAO framework and

TfNSW standards:

a. Configuration specific cyber security assessment and controls

- b. Configuration specific hazards and their mitigations
- c. Site or application specific requirements and interfaces
- d. Other systems or products require for the site or application specific implementation.
- 3. This type approval is based on the progressive assurance artefacts. Not all requirements and interfaces are fully implemented and assured at this point in time. Therefore, the

- site-specific application must include assessment for usage of unassured functions and interfaces.
- 4. Usage of type approved product/system must be in accordance with TfNSW standards, the RIM's operational standards and procedures, the manufacturer's specifications and the product/system conditions set by TfNSW AMB.
- Conclusions about suitability for use under conditions other than what is specified in this approval are not made. Reliance on this approval by any other organisation other than TfNSW is entirely at that organisation's own risk.
- 6. The vendor or Asset Steward O&M must advise TfNSW AMB of any changes made to the product/system as soon as possible which may alter its identification, performance or functional or interface or maintenance characteristics, risks and assurance, form, fit, or processes required for correct usage so that this approval can be reviewed.
- The cyber security of the type approved product/system and overall system with the proposed site specific configuration must be assessed and comply with all requirements mandated in applicable legislations, regulations and TfNSW standards.
- 8. The vendor and Asset Steward O&M must maintain and update the cyber security mitigations against the changing asset configurations and identified vulnerabilities as mandated in applicable legislations, regulations and TfNSW standards.
- DSP to review the cyber security risk associated with the VLAN tagging open issue for SIT Control Mode and determine the appropriate controls if required (Siemens SAR constraint TMS TCOND-TRR1-003)
- Release 4 Dispatch Layer (R4 DL) functionality cannot be used for any integration / dynamic testing activities as the R4 DL functionalities and interfaces have not completed verification and validation (Siemens SAR constraint TMS-TCOND-TRR1-004).
- 11. DSP to review the impacts on SIT Control Mode if changing the ETCS Train Running Number (TRN) is required. There is still a pending technical observation on the TMS RBC window display required to verify correct translation of certain TRN from the RBC to the TD (Siemens SAR constraint TMS-TCOND-TRR1-008).
- 12. There should be assurance for the "HF negative transfer" between the existing TMS and Siemens TMS. If there is no such assurance and "HF negative transfer" is identified as the root cause of the problem, delays should be attributed to the Siemens TMS.
- 13. The content, depth and breadth of "DSPPRG-TFNSW-NWW-SG-RPT-000003 Type Approval Report Siemens TMS version 1.0" is not at the levels which AMB is expecting. Therefore, this provisional type approval is approved conditionally so that the report will be updated according to AMB's expectations by November 1st, 2024 or earlier. Otherwise, the type approval will be withdrawn. However, AMB acknowledges that this does not present any additional risk for this type approval based on the following:

| | There are existing approved artefacts such as RAM reports, independent assessments and certifications, RVTM and risk assessments. |
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| | b. The provisional configuration detailed in "DSPPRG-TFNSW-NWW-SG-RPT-000003 Type Approval Report Siemens TMS version 1.0" is for testing only. Testing will be conducted under possessions with non-revenue services. |
| | There will be site specific system and safety assurances including cyber security provided by the project. |
| Limitations: | This product/system must not be used for the revenue service. |
| | This product/system must not be used outside of the First Deployment Area (FDA) as detailed in "DSPPRG-TFNSW- NWW-SG-RPT-000003 Type Approval Report Siemens TMS version 1.0". |

Evaluating rail transport operator

| Name: | Rocky Tsang |
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| Position: | A/Director Signals and Control Systems |
| | Asset Management Branch |
| | Safety, Environment, Regulation |
| Signature: | Certy Ly |
| Date: | 03/09/2024 |

Product approval pack reference number: fA16111395