

TM Forum Open APIs Conformance Certification



Company Name:

Tata Communications Transformation Services UK Ltd

Product Name and Release Version:

Neo AutomataTM – Cognitive NOCv3.1.1

TM Forum Open API Name and Release Version:

TMF921 – Intent Management v5.0.0

Date: 8/10/2026

1. What Product or Solution does your API support?

[Neo Automata™](#) is a comprehensive automation platform that enables cognitive, intent-driven network operations and seamless integration across connectivity domains.

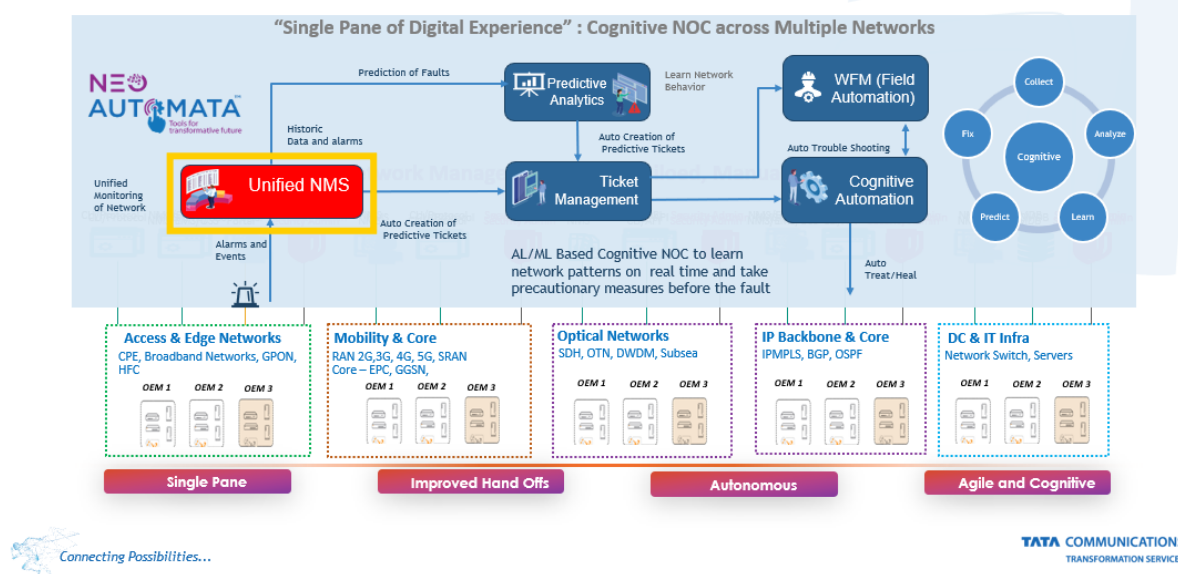
[Cognitive NOC](#) is a suite within Neo Automata™ that delivers predictive and autonomous network operations capabilities, supporting the progression towards zero-touch operations and fully autonomous networks.

Unified NMS (UNMS) is the umbrella network management suite within Cognitive NOC, providing fault, inventory, performance, security, and network reconciliation capabilities. TMF921 enables the Network Reconciliation Agent to exchange intent and provide normalized network-state feeds to an AI Agent for governed analysis, decision support, and remediation.

COGNITIVE NOC PLATFORM

[CORRELATION OF FAULT DATA & AUTOMATED DETECTION]

It is a transformative, AI/ML-driven solution offering a Single Pane of Glass for unified network monitoring and operations. It enables real-time visibility, proactive management, and data-driven decisions. The result is enhanced reliability, optimized utilization, and scalable, future-proof IT operations.



2. Overview of Certified API

TMF921 – Intent Management API in Unified NMS (UNMS) provides a standard aligned interface for expressing, creating, retrieving, updating, and tracking network intents throughout their lifecycle. Within UNMS, the API supports interactions between the Network Reconciliation Agent and intent consumers or providers while maintaining a consistent representation of the desired network outcome.

The loosely coupled interface provides a single integration point for intent submission, intent-state retrieval, lifecycle updates, and event-driven status exchange. This allows UNMS components, reconciliation workflows, and AI-enabled operational services to collaborate without tight dependency on internal implementations.

The API supports intent lifecycle operations including intent creation, query, update, deletion, state tracking, and notification. Reconciliation outputs can include observed-state evidence, detected variance, affected resources or services, confidence and priority indicators, and the recommended next action for the AI Agent.

The multi-tenant architecture provides tenant isolation, configurable policies, secure role-based access, and scalable adoption across large network environments.

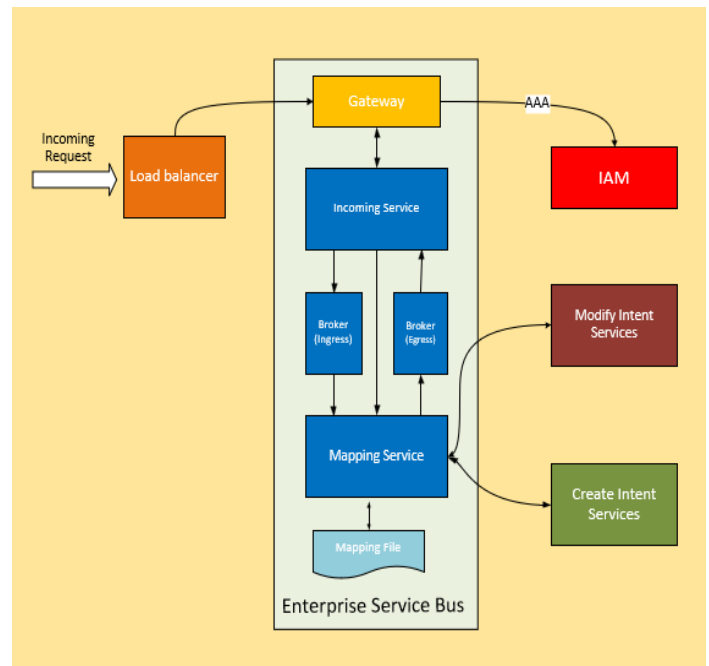
Built on principles of interoperability, loose coupling, security, auditability, and policy-based control, TMF921 enables UNMS to manage desired outcomes consistently while allowing the Network Reconciliation Agent and AI Agent to collaborate with traceable evidence and controlled execution.

3. Architectural View

TMF921 Intent Management API in Unified NMS (UNMS) architecture follows a loosely coupled, service-oriented model aligned with TM Forum Open Digital Architecture principles. TMF921 acts as the standards-based contract between intent producers, UNMS, the Network Reconciliation Agent, and AI-enabled operational consumers.

An intent submitted or updated through TMF921 is consumed by the UNMS Network Reconciliation Agent, which translates the desired outcome into validation checks against discovered inventory, topology, configuration, and operational data. It then sends the AI Agent a structured, evidence-backed feed covering the intent, observed state, deviations, affected resources, and recommended action. The AI Agent correlates and prioritises the findings and proposes remediation. Execution is permitted only through applicable policy and approval controls, with status and outcomes recorded to ensure reliable, end-to-end traceability.

- Standalone Microservices are created as part of Enterprise Service Bus.
- Incoming requests are mapped with API mappings.
- Outgoing responses are then mapped back for outgoing field mappings.
- Through the mappings, underlying interfaces are enabled supporting Open API standards.
- Example: Regardless of any legacy interface, services will start supporting standard Services using Open APIs.



4. Test Results

Click here to view the test results: [TCS-NeoAutomata-TMF921-v5-HTMLResults.html](#)