TM Forum Open APIs
Conformance Certification

Company Name:

Tata Communications Transformation Services UK Ltd

Product Name and Release Version:

Neo Automata™ – *Cognitive NOC v3.1.1*

TM Forum Open API Name and Release Version:

TMF656 Service Problem Management v5.0.0

Date: 02/06 /2026

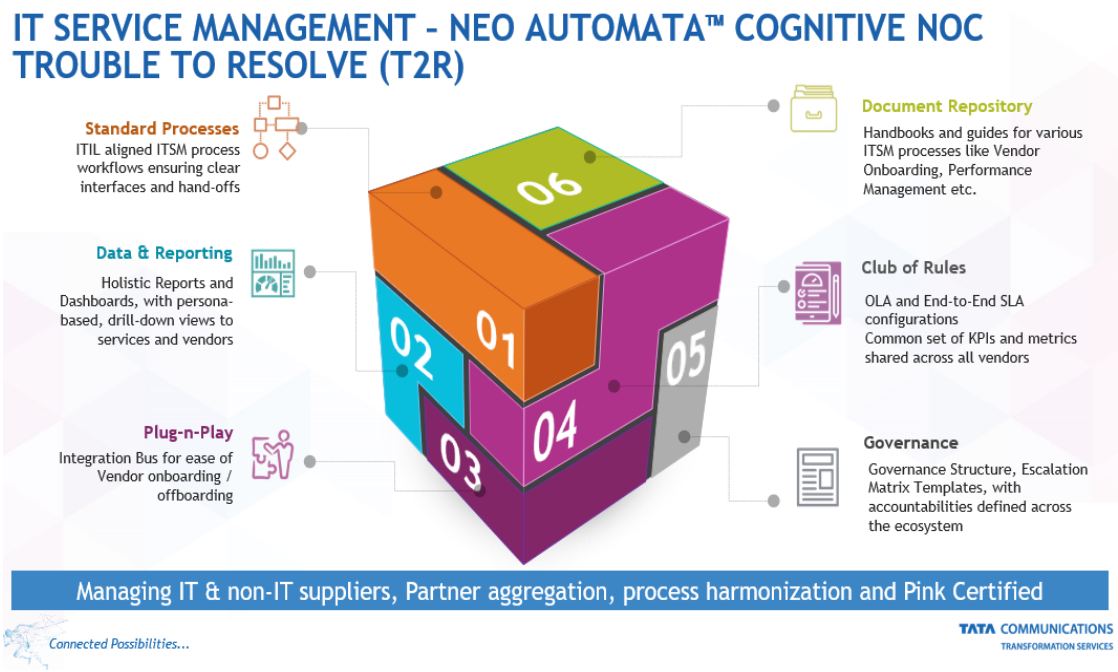
1. What Product or Solution does your API support?

Neo Automata™ is a Comprehensive Automation Platform for enabling Networks with Cognitive Intelligence and Seamless Integration across all the connectivity domains.

Cognitive NOC is a collection of tool suits within Neo Automata umbrella suite focussed to gain deeper and predictive insights across network operations towards Zero Touch, towards Fully Autonomous Networks.

Trouble To Resolve (T2R) is one of the modules of Cognitive NOC that provides ITIL-aligned Incident, Change, Problem, and Asset Management capabilities.

T2R supports standardized Service Problem Management by enabling creation, tracking, correlation, and lifecycle management of service problems across internal and B2B operational interfaces.



2. Overview of Certified API

The T2R TMF656 Service Problem Management API aligns with TM Forum's Open Digital Architecture principles by providing a standardized interface for creating, tracking, updating, and managing service problems across provider and partner ecosystems.

Leveraging TM Forum Open API standards, multi-tenant design, and event-driven notifications, it enables service providers and partners to exchange service problem information in a compliant, interoperable manner across assurance, service management, CRM, and B2B ecosystems.

Its loosely coupled interface is designed for submitting, retrieving, searching, and updating service problem records. It acts as a single standards-based entry point for clients and systems, supporting structured lifecycle management and integration with enterprise workflows in multi-tenant environments.

The API supports key lifecycle operations such as creating new service problems, retrieving problem details and status, searching existing problems using filters, updating attributes and state, and maintaining full history and auditability of changes.

Our multi-tenant architecture ensures tenant isolation, configurable data handling, secure role-based access, and scalable adoption across large organizations and partner ecosystems managing complex service assurance environments.

Advanced notification interfaces support event-driven updates such as service problem creation, attribute value changes, and status changes, enabling real-time integration with external OSS, service desks, observability platforms, and partner systems.

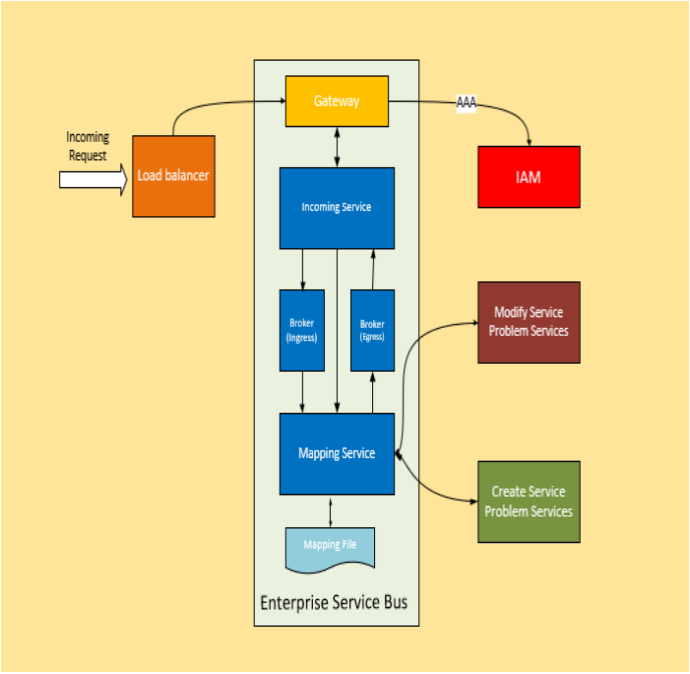
Built on principles of loose coupling, security, and compliance, the API enables assurance and operational platforms to efficiently coordinate, govern, and automate service problem management processes at scale.

3. Architectural View

The TMF656 Service Problem Management API architecture follows a loosely coupled, service-oriented design, providing a standardized integration layer aligned with TM Forum Open Digital Architecture principles for service problem exchange, correlation, and lifecycle orchestration.

It enables scalable multi-tenant operations through modular components, standards-based request and response mappings, secure API exposure, and event-driven interactions with upstream infrastructure providers, assurance tools, and downstream operational systems.

- 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 ticketing interface of customer, services will start supporting standard Services using Open APIs.



4. Test Results

Click here to view the test results: TCTS-NeoAutomata-TMF656-v5-HTMLResults.html