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| **Source:** | TM Forum | **Meeting Date**: | | 28-May-2024 |
| **Teams:** | TM Forum Autonomous Network Technical Architecture, OpenAPI, ODA Production | | | |
| **Title:** | **Liaison** TMF24-0001 Response IETF NMOP LS to TMF on TMF724A Incident Management API Profile | | | |
| **Date sent:** | 16-Jul-2024 | | | |
| **LIAISON STATEMENT** | | | | |
| **To:**  IETF Network Operations Working Groups  #120 <https://www.ietf.org/meeting/upcoming/>  See Annex B for details.  Liaison: TMF24-0001 | | | | |
| **Deadline:** | None | | | |
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**IETF NMOP Chairs,**

***TMF 724A Incident Management***

Thank you for your liaison IETF NMOP LS to TMF on TMF724A Incident Management API Profile.

We have noted your announcement of planned activities:

* A terminology document for anomaly and incident management [2]
* A YANG model for network incident management [

And the request for a copy of

* TMF724A Incident Management API Profile (attached to this LS)

Note Open Apache 2.0 specification for supporting REST API are in the Production table TMF724 at this link: [60+ Open APIs tried, tested and de-risked - TM Forum](https://www.tmforum.org/oda/open-apis/table/historic).

This document was developed by the Autonomous Networks Technical Architecture (AN TA) team in conjunction with the Open API team. It is based on ITIL standards and definitions. The AN TA team would be happy to meet virtually and or correspond to maintain alignment between IETF RFCs and this document. We agree it will be valuable to coordinate ongoing efforts in both the IETF and TMF to ensure that produced specifications are complementary. Specifically, in aligning around ITIL terms and the lifecycle operations which might be implemented in multiple Interface technologies.

In Annex A to this letter, we provide an informal mapping of TMF724A to Yang which may be of interest as it shows that the alignment could be quite close.

***Anomaly detection and incident management***

TM Forum’s AI Closed Loop Automation team working in this area and have published TMF919A Anomaly Management API Suite Profile v2.0.0 (attached to this LS). Current work is on API specifications.

***Controllers and modelling***

TM Forum’s Open Digital Architecture (ODA) Production team is monitoring the Activities of the NMOP group and are specifically interested in the Modelling work and Model driven approach to integration. The focus is on practical integration of current marketplace product into our ODA Digital Architecture based on our Business process and Information Model Frameworks as used in our ODA Component specifications. See this link: [TM Forum - ODA Component Directory](https://www.tmforum.org/oda/directory/components-map)

Suggested Goal: To make integration of IETF controller/ACTN Topology work with TM Forum ODA Component work for BSS/OSS lower cost and more agile

To pursue such goal TM Forum believes it would be advantageous to establish information exchange meetings with IETF covering:

*Modelling*

* RFC3535 Overview of the 2002 IAB Network Management Workshop
* RFC9315 Intent-Based Networking - Concepts and Definitions
* RFC8345 A YANG Data Model for Network Topologies
* RFC8453 Framework for Abstraction and Control of TE Networks (ACTN)
* TM Forum GB922 Information Framework Model
* TR255A Connectivity Patterns for Virtualization Management v4.0.1
* TMF686 Topology Management API
* TMF920A Topology Discovery Service Management API Component Suite Profile v2.0.0
* Relationship with ONF 512.4 and ITU G7711
* Ontologies

*Model Transformation Model Driven Architecture*

* IETF slides-116-nmrg-weaving-yang-into-a-network-data-fabric-00

**Team Contacts**

|  |  |
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| Anomaly Management | Emmanuel Otchere Huawei, Mathews Thomas IBM |
| Controllers and Modelling | Brad Peters NBN Co |
| Chief Architect: | Dave Milham, TM Forum |

Adrienne Walcott

Liaison Manager, TM Forum

Enclosed

TMF724A Incident Management API Profile v1.0.0

TMF919A Anomaly Management API Suite Profile v2.0.0

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**Annex A: Recommendation on Alignment of Yang/REST CONF and TM Resource REST Resource models in TMF 724**

In TMF724, there are three REST resources with paths:

* /tmf-api/Incident/v5/incident
* /tmf-api/Incident/v5/diagnoseIncident
* /tmf-api/Incident/v5/resolveIncident

The first is a simple REST Collection pattern where the items are incidents. The other two are REST Controller patterns, which TMF630 refers to as a Task resource.

The three RPCs in the YANG model for Incident:

* incident-acknowledge
* incident-diagnose
* incident-resolve

The first is accomplished with a PATCH to update ackState in an Incident. The other two are POSTs to the corresponding Task resources.

Mapping summary in this table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **YANG** | | **TMF724** | | | | | |
| Data | RPC | Role | Operation | Resource Path | | Description | |
| incident | acknowledge | Producer | PATCH | | /tmf-api/Incident/v5/incident | | Update ackState in existing *Incident* |
| diagnose | Producer | POST | | /tmf-api/Incident/v5/diagnoseIncident | | Create a task resource |
| resolve | Producer | POST | | /tmf-api/Incident/v5/resolveIncident | | Create a task resource |
| notification | Producer | POST | | /tmf-api/Incident/v5/hub | | Create an event subscription |
| Consumer | POST | | /client/listener | | Callback to subscriber |

**Annex B: Formal Distribution List for this response:**

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