ATIS-0300208.2013**(R2018)**

Operations, Administration, Maintenance, and Provisioning (OAM&P) – Upper-Layer Protocols for Telecommunications Management Network (TMN) Interfaces, Q and X Interfaces

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ATIS-0300208.2013, *Operations, Administration, Maintenance, and Provisioning (OAM&P) – Upper-Layer Protocols for Telecommunications Management Network (TMN) Interfaces, Q and X Interfaces*

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Operations, Administration, Maintenance, and Provisioning (OAM&P) – Upper-Layer Protocols for Telecommunications Management Network (TMN) Interfaces, Q and X Interfaces

Alliance for Telecommunications Industry Solutions

Approved December 19, 2013

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Abstract

It is the intention of this standard to use and align with ITU-T Recommendation Q.812.

Foreword

The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

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ANSI guidelines specify two categories of requirements: mandatory and recommendation. The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, TMOC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of initiation or issuance of the letter ballot for this document, TMOC, which was responsible for it's development, had the following roster:

T. Barrett, TMOC Chair

S. Kiewel, TMOC Vice Chair

American National Standard for Telecommunications –

Operations, Administration, Maintenance, and Provisioning (OAM&P) – Upper-Layer Protocols for Telecommunications Management Network (TMN) Interfaces, Q and X Interfaces

Scope, Purpose, and Application

1.1 Scope

It is the intention of this standard to use and align with the relevant ITU-T Recommendation.

This alignment effort consists of adopting the following standards:

- ITU-T Recommendation Q.818, *Web services-based management services* for Q interfaces

- ITU-T Recommendation M.3030, *Telecommunications Markup Language (tML) framework* for X interfaces

- ITU-T Recommendation Q.812, *Upper layer protocol profiles for the Q and X interfaces* for both Q and X interfaces.

For the purpose of this standard, the following addition to Q.812 applies:

- For Interactive Class services (as defined by Q.812), the support of the application context defined in Annex A of ITU-T Recommendation X.701, *Systems management overview*, is required to guarantee successful establishment of an association for systems management.

Also, informative guidance on the Telecommunications Markup Language (tML) paradigm is given in Annex A.

Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ITU Recommendation X.701, *Systems management overview*.[1]

ITU-T Recommendation Q.812, *Upper layer protocol profiles for the Q and X interfaces*.[1]

ITU-T Recommendation Q.818, *Web services-based management services*.[1]

ITU-T Recommendation M.3030, *Telecommunications Markup Language (tML) framework*.[1]

TCIF-03-003, *tML Transport Profile*.[1]

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[1] This document is available from the International Telecommunications Union. < http://www.itu.int/ITU-T/ >

Annex A: Guidance on the Telecommunications Markup Language (tML) paradigm

<div align="center">(informative)</div>

A.1   Protocol profile for the tML paradigm

At the ITU-T level, Clause 13 of Q.812 states: "A protocol profile to support use of tML encoded management information is for further study".

At the American National Standard (ANS) level, this topic also has not been addressed.

However, with the Alliance for Telecommunication Industry Solutions (ATIS), a tML Transport Profile has been produced (see ATIS-0300079). Further recommendations regarding XML namespace formats and schemas will be found in ATIS-I-0000001 and ATIS-I-0000002 respectively.

A.2   Informative References

ATIS-0300079, *tML Transport Profile.* [2]

TCIF-03-003, *TML Transport Profile*

ATIS-I-0000001, *Format of ATIS Namespace,* [2]

ATIS-I-0000002, *ATIS XML Schema Development Guidelines,* [2]

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[2] This document is available from the Alliance for Telecommunications Industry Solutions (ATIS), 1200 G Street N.W., Suite 500, Washington, DC 20005. < https://www.atis.org/docstore/default.aspx >