ATIS-1000049

ATIS Standard on -

End-to-End NGN GETS Call Flows

As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global ICT companies to advance the industry's most pressing business priorities. ATIS' nearly 200 member companies are currently working to address the All-IP transition, 5G, network functions virtualization, big data analytics, cloud services, device solutions, emergency services, M2M, cyber security, network evolution, quality of service, billing support, operations, and much more. These priorities follow a fast-track development lifecycle — from design and innovation through standards, specifications, requirements, business use cases, software toolkits, open source solutions, and interoperability testing.

ATIS is accredited by the American National Standards Institute (ANSI). The organization is the North American Organizational Partner for the 3rd Generation Partnership Project (3GPP), a founding Partner of the oneM2M global initiative, a member of the International Telecommunication Union (ITU), as well as a member of the Inter-American Telecommunication Commission (CITEL). For more information, visit www.atis.org.

Notice of Disclaimer & Limitation of Liability

The information provided in this document is directed solely to professionals who have the appropriate degree of experience to understand and interpret its contents in accordance with generally accepted engineering or other professional standards and applicable regulations. No recommendation as to products or vendors is made or should be implied.

NO REPRESENTATION OR WARRANTY IS MADE THAT THE INFORMATION IS TECHNICALLY ACCURATE OR SUFFICIENT OR CONFORMS TO ANY STATUTE, GOVERNMENTAL RULE OR REGULATION, AND FURTHER, NO REPRESENTATION OR WARRANTY IS MADE OFMERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. ATIS SHALL NOT BE LIABLE, BEYOND THE AMOUNT OF ANY SUM RECEIVED IN PAYMENT BY ATIS FOR THIS DOCUMENT, AND IN NO EVENT SHALL ATIS BE LIABLE FOR LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. ATIS EXPRESSLY ADVISES THAT ANY AND ALL USE OF NOR RELIANCE UPON THE INFORMATION PROVIDED IN THIS DOCUMENT IS AT THE RISK OF THE USER.

NOTE - The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to whether use of an invention covered by patent rights will be required, and if any such use is required no position is taken regarding the validity of this claim or any patent rights in connection therewith. Please refer to https://www.atis.org/policy/patent-assurances/ to determine if any statement has been filed by a patent holder indicating a willingness to grant a license either without compensation or on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain a license.

Published by

Alliance for Telecommunications Industry Solutions
1200 G Street, NW, Suite 500
Washington, DC 20005

ATIS-1000049

ATIS Standard on

End-to-End NGN Gets Call Flows

Alliance for Telecommunications Industry Solutions

Approved August 2011 (Revised April 2, 2024)

Abstract

This Standard describes end-to-end call/session flows for various wireline and wireless access technologies, in addition to the IMS Core Network call/session flows in support of NGN GETS [Emergency Telecommunications Service (ETS)]. These call/session flows illustrate how an NGN GETS call/session can be processed, and address call/session set up, termination, and on-going activities of the call/session for the various NGN GETS service types and access technologies. The call/session flows are based on various wireline and wireless Standards/Specifications.

Foreword

The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Packet Technologies and Systems Committee (PTSC) develops and recommends standards and technical reports related to services, architectures, and signaling, in addition to related subjects under consideration in other North American and international standards bodies. PTSC coordinates and develops standards and technical reports relevant to telecommunications networks in the U.S., reviews and prepares contributions on such matters for submission to U.S. ITU-T and U.S. ITU-R Study Groups or other standards organizations, and reviews for acceptability or per contra the positions of other countries in related standards development and takes or recommends appropriate actions.

The mandatory requirements are designated by the word *shall* and *must,* 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. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

> NOTE - The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to whether use of an invention covered by patent rights will be required, and if any such use is required no position is taken regarding the validity of this claim or any patent rights in connection therewith. Please refer to [https://www.atis.org/policy/patent-assurances/] to determine if any statement has been filed by a patent holder indicating a willingness to grant a license either without compensation or on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain a license.

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

At the time of consensus on this document, PTSC, which was responsible for its development, had the following leadership:

M. Dolly, PTSC Chair (AT&T)

V. Shaikh, PTSC Vice-Chair (Peraton Labs)

Table of Contents

Table of Figures

ATIS Standard on –

End-to-End NGN GETS Call Flows

1 Scope, Purpose, & Application

This Standard describes end-to-end call/session flows for various wireline and wireless access technologies, in addition to the IMS Core Network call/session flows in support of NGN GETS [Emergency Telecommunications Service (ETS)]. These call/session flows illustrate how an NGN GETS call/session can be processed, and address call/session set-up, termination, and on-going activities of the call/session for the various NGN GETS service types and access technologies. The call/session flows are based on various wireline and wireless Standards/Specifications. This Standard describes call/session flows for the following:

- Wireline access technologies:
  - Digital Subscriber Line (DSL)
  - Fiber
  - Cable
  - Ethernet.
- Wireless access technologies:
  - Evolved Universal Terrestrial Radio Access Network (E-UTRAN)
  - Universal Terrestrial Radio Access Network (UTRAN)
  - High Rate Packet Data (HRPD)
  - evolved High Rate Packet Data (eHRPD)
  - Worldwide Interoperability for Microwave Access (WiMAX).

The material in this Standard is meant to provide a high-level illustrative description and is not intended to be exhaustive. If inconsistencies are found between this material and NGN GETS (ETS) requirements contained within other Standards/Specifications, the requirements in those Standards/Specifications take precedence.

2 Normative References

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

3GPP[1]

[TS 22.011] 3GPP TS 22.011, *Service Accessibility* (Release 10).

[TS 22.153] 3GPP TS 22.153, *Multimedia Priority Service (MPS)* (Release 10).

[TS 23.002] 3GPP TS 23.002, *Network Architecture* (Release 10).

[TS 23.060] 3GPP TS 23.060, *General Packet Radio Service (GPRS); Service description; Stage 2* (Release 10).

[1] These documents are available from the Third Generation Partnership Project (3GPP) at < http://www.3gpp.org/specs/specs.htm >.