ATIS-0700029

ATIS Standard on -

Real Time Text Mobile Device Behavior

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Abstract

This Standard specifies certain aspects of the mobile device behavior for handling Real Time Text (RTT) to facilitate communication between mobile devices (including emergency services) across multiple Commercial Mobile Service Providers (CMSPs).

Foreword

As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global information and communications technology (ICT) companies to advance the industry's most-pressing business priorities. ATIS serves the public through improved understanding between carriers, customers, and manufacturers.

This standard was developed jointly between ESIF, PTSC, and WTSC.

The Emergency Services Interconnection Forum (ESIF) provides a forum to facilitate the identification and resolution of technical and/or operational issues related to the interconnection of wireline, wireless, cable, satellites, Internet, and emergency services networks.

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 Wireless Technologies and Systems Committee (WTSC) develops and recommends standards and technical reports related to wireless and/or mobile services and systems, including service descriptions and wireless technologies. WTSC develops and recommends positions on related subjects under consideration in other North American, regional, and international standards bodies.

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

At the time of initiation or issuance of the letter ballot for this document, the committees responsible for its development had the following leadership:

S. Sherwood, ESIF Chair (Verizon)
R. Hixon, ESIF First Vice-Chair (NENA)
R. Marshall, ESIF Second Vice-Chair (Comtech)

M. Dolly, PTSC Chair (AT&T)
V. Shaikh, PTSC Vice-Chair (Applied Communication Sciences)

D. Zelmer, WTSC Chair (AT&T)
M. Younge, WTSC Vice-Chair (T-Mobile)

DeWayne Sennett, Technical Editor (AT&T)

The IP Multimedia Subsystem (IMS) Emergency Procedures for IMS Origination and Emergency Services IP Network (ESInet) (IMSESINET) joint project group was responsible for the development of this document.

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1 Scope, Purpose, & Application

1.1 Scope

The scope of this Standard is to specify a base level of Mobile Device Behavior for supporting Real Time Text (RTT) capabilities when accessing Voice over Long Term Evolution (VoLTE) networks[1]. The Standard includes the minimum behavior of the mobile device needed for performing RTT user-to-user communication within and between VoLTE Commercial Mobile Service Providers (CMSPs).

The scope of this Standard covers RTT implementations, as specified in IETF RFC 4103 [Ref 5] and as described in ATIS-1000068 [Ref 1] and ATIS-0700030 [Ref 6], for both emergency and non-emergency communications via CMSP networks.

The mobile devices that support real time text capabilities as defined in this standard are referred to as RTT-capable mobile devices.

1.2 Purpose

The purpose of this Standard is to specify certain aspects of mobile device behavior to facilitate RTT conversations between mobile devices across CMSPs.

1.3 Application

This Standard is applicable to CMSPs, CMSP network infrastructure vendors, and mobile device manufacturers. It may be applicable for RTT support by Public Safety Answering Points (PSAPs) and Telecommunications Relay Services (TRS) providers as well.

2 References

2.1 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.

[Ref 1] ATIS-1000068, *Technical Report on Support of TTY Service over IP using Global Text Telephony*; October, 2015.[2]

[Ref 2] GSMA IR.92, *GSM Association IMS Profile for Voice and SMS*; Version 9.0; 08 April 2015.[3]

[Ref 3] 3GPP TS 23.226, *Global Text Telephony (GTT); Stage 2*.[4]

[Ref 4] ITU-T T.140, *Protocol for Multimedia Application Text Conversion*, February 1998; including Addendum 1, *Marking of missing characters*, February 2000.[5]

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[1] The support of RTT over Wi-Fi is for further study.

[2] This document is available from the Alliance for Telecommunications Industry Solutions (ATIS) at: < http://www.atis.org >.

[3] This document is available from the GSM Association (GSMA) at: < http://www.gsma.com >.

[4] This document is available from the 3rd Generation Partnership Project (3GPP) at: < http://www.3gpp.org/ >.