ATIS-0700005.a

ATIS Standard on -

SUPPLEMENT A TO ATIS-0700005,
LAWFULLY AUTHORIZED ELECTRONIC SURVEILLANCE (LAES) FOR 3GPP IMS-BASED VOIP AND OTHER MULTIMEDIA SERVICES

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SUPPLEMENT A TO ATIS-0700005, LAWFULLY AUTHORIZED ELECTRONIC SURVEILLANCE (LAES) FOR 3GPP IMS-BASED VOIP AND OTHER MULTIMEDIA SERVICES

Alliance for Telecommunications Industry Solutions

Approved August 2010

Abstract

This is a supplement to the ATIS Standard that defines an interface between a Telecommunications Service Provider and a Law Enforcement Agency for the reporting of Lawfully Authorized Electronic Surveillance for 3GPP IMS-based Voice-over-IP and other multimedia services (ATIS-0700005).

> NOTE – An update to ATIS-0700005, Annex B, *IMS-3GPP VOIP Abstract Syntax Notation*, has also been formatted as a separate file and electronically packaged with this Standard.

FOREWORD

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. 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. This is a supplement to ATIS Standard ATIS-0700005, entitled *Lawfully Authorized Electronic Surveillance (LAES) for 3GPP IMS-based VoIP and other Multimedia Services*.

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. The word *may* denotes a optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

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

The WTSC Lawful Interception (LI) Subcommittee, which was responsible for the development of this Supplement, had the following members:

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TABLE OF CONTENTS

ATIS Standard on –

Supplement A to ATIS-0700005,
Lawfully Authorized Electronic Surveillance (LAES) for 3GPP IMS-based VoIP and other Multimedia Services

1 INTRODUCTION

1.1 Background

The ATIS Standard ATIS-0700005, published in 2007, identified the United States requirements for Lawful Intercept (LI) in defining an interface between a Telecommunications Service Provider (TSP) and a Law Enforcement Agency (LEA) for the reporting of LAES for 3GPP IMS-based VoIP and other 3GPP IMS-based multimedia services. This document is a Supplement to that Standard.

1.2 Scope & Purpose

This Supplement provides clarifications and corrections to ATIS-0700005, *LAES for 3GPP IMS-based VoIP and other Multimedia Services*. Clauses 2 and 3 of this Supplement specify the related changes.

Upon publication, this Supplement shall be used in conjunction with ATIS-0700005, and supersedes the applicable portions of ATIS-0700005.

2 CLARIFICATIONS, CORRECTIONS, & ENHANCEMENTS

2.1 Normative Reference

The Normative References in clause 2.2 are modified to include a reference to ATIS-1000678.b.2010, *Supplement B for LAES for Voice over Packet Technologies in Wireline Telecommunications Networks*:

> [678]   ATIS-1000678.2006, *LAES for Voice over Packet Technologies in Wireline Telecommunications Networks, Version 2*; ATIS-1000678.a.2007, *Supplement for LAES for Voice over Packet Technologies in Wireline Telecommunications Networks*; and ATIS-1000678.b.2010, *Supplement B for LAES for Voice over Packet Technologies in Wireline Telecommunications Networks*.

2.2 CII Dialed Digit Extraction Event Reporting

Clause 4.4.1.2, *CII Dialed Digit Extraction Event Reporting*, is modified as shown below:

> In IMS-based VoIP, when the intercept subject dials or signals digits in the VoIP content stream after the session is connected to another TSP's service for processing and routing, the TSP shall isolate and report to the LEA the dialed or signaled digits, when reasonably available, as CII to the LEA. The TSP that reports the CII dialed digit extraction information is not obligated to assure that the connection is with another TSP's service. The TSP shall support a dialed digit extraction

capability, with a toggle feature that can activate/deactivate this capability (per lawful authorization) and report the dialed or signaled digits, when reasonably available, as CII. See Annex F of [678] for additional information. The following message is used for the Dialed Digit Extraction (DDE) event reporting:

♦ DialedDigitExtraction

NOTE 1 - The CII Dialed Digit Extraction event reporting is not required for other IMS-based multimedia services.

NOTE 2 - The session that is connected to another TSP's service for processing and routing, may be provided by the same TSP.

3 ASN.1 DEFINITIONS

Annex B, *IMS-3GPP VOIP Abstract Syntax Notation*, is modified to reflect the latest version of [678] while importing the message and parameter definitions. The complete ASN.1 definition given below shall replace the ASN.1 definition given in the Annex B of ATIS-0700005:

```
-- IMS 3GPP VoIP CII Delivery Module

IMS-3GPP-VoIP-CII-Module
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) wtsc (2)  ims-voip(0) cii-voip(0)
version-2(1)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN

IMPORTS

-- Imports from ATIS-1000678.b.2010 Module

Answer,
CCClose,
CCOpen,
Change,
Origination,
Redirection,
Release,
ServingSystem,
TerminationAttempt,
ConferencePartyChange,
Connection,
ConnectionBreak,
DialedDigitExtraction,
NetworkSignal,
SubjectSignal,
DirectSignalReporting,
MediaAndAddressReporting,
CCChange,
CCUnavailable,
UUContent

FROM T1S1-LAES-VoP-Abstract-Syntax-Module
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) t1-678(0) cii(0) common (0) version-
4(3)}

-- Imports from IMS-3GPP-VoIP-CC- Module

ims-3GPP-VoIP-CC-DeliveryHeaderModule-OID

FROM IMS-3GPP-VoIP-CC-Module
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) wtsc(2)  ims-voip(0) cc-voip(1)
version-2(1)};

-- Notations for IMS-3GPP-VoIP-CII-Module

cc-DeliveryHeaderModule-OID OBJECT IDENTIFIER ::=
{ims-3GPP-VoIP-CC-DeliveryHeaderModule-OID}

ims-3GPP-VoIP-CII-Module-OID  OBJECT IDENTIFIER ::=
```

```
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) wtsc(2)  ims-voip(0) cii-voip(0)
version-2(1)}

protocolIdentifier  OBJECT IDENTIFIER  ::=  {ims-3GPP-VoIP-CII-Module-OID}

LAESProtocol ::= CHOICE {
     enhancedProtocol      IMS-3gpp-VoIP-CII-Protocol,
     laesMessage    IMS-3gpp-VoIP-CII-Message
}

IMS-3gpp-VoIP-CII-Protocol ::= SEQUENCE {
     protocolIdentifier                          OBJECT IDENTIFIER,
     ims-3gpp-VoIP-CII-Message         IMS-3gpp-VoIP-CII-Message }

IMS-3gpp-VoIP-CII-Message ::= CHOICE {
     ims-3gpp-VoIP-answer         [1] Answer,
     ims-3gpp-VoIP-ccClose        [2] CCClose,
     ims-3gpp-VoIP-ccOpen  [3] CCOpen,
     ims-3gpp-VoIP-change         [4] Change,
     ims-3gpp-VoIP-origination    [5] Origination,
     null-6  [6] NULL,
       -- [6] reserved by [025B] for Packet Envelope
     ims-3gpp-VoIP-redirection    [7] Redirection,
     ims-3gpp-VoIP-release        [8] Release,
     ims-3gpp-VoIP-servingSystem [9] ServingSystem,
     ims-3gpp-VoIP-termAttempt    [10] TerminationAttempt,
     null-11 [11] NULL,
       -- [11] reserved by [025B] for Connection Test
     ims-3gpp-VoIP-conferencePartyChange       [12] ConferencePartyChange,
     ims-3gpp-VoIP-connection     [13] Connection,
     ims-3gpp-VoIP-connectionBreak       [14] ConnectionBreak,
     ims-3gpp-VoIP-dialedDigitExtraction      [15] DialedDigitExtraction,
     ims-3gpp-VoIP-networkSignal [16] NetworkSignal,
     ims-3gpp-VoIP-subjectSignal [17] SubjectSignal,
     ims-3gpp-VoIP-directSignalReporting      [18] DirectSignalReporting,
     ims-3gpp-VoIP-mediaAndAddressReporting   [19] MediaAndAddressReporting,
     ims-3gpp-VoIP-ccChange       [20] CCChange,
     ims-3gpp-VoIP-ccUnavailable [21] CCUnavailable,
     null-22 [22] NULL,
       -- [22] reserved  by [678] for Surveillance Status
     null-23 [23] NULL,
       -- [23] reserved by [678] for Feature Management
     ims-3gpp-VOIP-uuContent      [24] UUContent

}

Location ::= SET OF LocationInfo

LocationInfo ::= SEQUENCE
{
        locationType    [0] UTF8String,
        locationData          [1] UTF8String
}

END – of IMS-3GPP-VoIP-CII-Module
```

-- IMS 3GPP VoIP Communication Content Delivery Module

IMS-3GPP-VoIP-CC-Module
```
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) wtsc(2)  ims-voip(0) cc-voip(1)
version-2(1)}

DEFINITIONS IMPLICIT TAGS ::=
```

```
BEGIN

IMPORTS
```

-- Imports from ATIS-1000678.b.2010 Module

```
CC-APDU

FROM CCDeliveryHeaderModule
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) t1-678(0) ccdeliveryheader(1)
version-4(3)};
```

-- Notations for IMS-3GPP-VoIP-CC-Module

```
ims-3GPP-VoIP-CC-DeliveryHeaderModule-OID   OBJECT IDENTIFIER  ::=
{iso(1) member-body(2) us(840) tia(113737) laes(2) t1(1) wtsc(2)  ims-voip(0) cc-voip(1)
version-2(1)}

IMS-3GPP-VoIP-CC-APDU  ::=  CC-APDU

END  – of IMS-3GPP-VoIP-CC-Module
```