



**Lawful Interception (LI);
Handover Interface and
Service-Specific Details (SSD) for IP delivery;
Part 7: Service-specific details for Mobile Services**

STANDARD PREVIEW
Full text of this standard is available at
<https://standards.iteh.ai/catalog/standards/sls/4a17-82fa-4c9021ce1030/etsi-ts-102-232-7-v3-6-1-2019-04>

Reference

RTS/LI-00167-7

Keywords

handover, IP, lawful interception, mobile, security

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:
<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at <https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:
<https://portal.etsi.org/People/CommiteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2019.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M™ logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners.

GSM® and the GSM logo are trademarks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	5
Foreword.....	5
Modal verbs terminology.....	5
Introduction	5
1 Scope	6
2 References	7
2.1 Normative references	7
2.2 Informative references.....	7
3 Definition of terms, symbols and abbreviations.....	8
3.1 Terms.....	8
3.2 Symbols.....	8
3.3 Abbreviations	8
4 General	9
4.1 Approach	9
4.2 Reference model.....	9
5 3GPP handover Headers, data exchange and networks.....	9
5.1 Approach	9
5.2 Structures.....	9
6 3GPP handover Intercept Related Information (IRI) and Content of Communication (CC).....	10
6.1 Definition of IRI events and CC.....	10
6.2 IRI format.....	10
6.3 CC format.....	10
7 CDMA2000 Headers, data exchange and networks.....	10
7.1 Approach	10
7.2 Structures.....	11
8 CDMA2000 Communication-Identifying Information (CII), Call-Identifying Information and Call Content (CC).....	11
9 EPS Headers, data exchange and networks.....	11
9.1 Approach	11
9.2 Structures.....	11
10 EPS Intercept Related Information (IRI) and Content of Communication (CC)	12
10.1 Definition of IRI events and CC.....	12
10.2 IRI format.....	12
10.3 CC format.....	12
11 IMS Conference Intercept Related Information (IRI) and Content of Communication (CC).....	12
11.1 Definition of IRI events and CC.....	12
11.2 IRI format.....	12
11.3 CC format.....	12
12 IMS-based VoIP Intercept Related Information (IRI) and Content of Communication (CC)	13
12.1 Definition of IRI events and CC.....	13
12.2 IRI format.....	13
12.3 CC format.....	13
13 Proximity Services Intercept Related Information (IRI)	13
13.1 Definition of IRI.....	13
13.2 IRI format.....	13
14 Group Communications System Enablers Intercept Related Information (IRI) and Content of Communication (CC).....	13

14.1	Definition of IRI events and CC.....	13
14.2	IRI format.....	14
14.3	CC format.....	14
15	IRI and CC for services defined in 3GPP TS 33.128.....	14
15.1	Definition of IRI events and CC.....	14
15.2	IRI and CC format.....	14
Annex A (normative): ASN.1 for IRI and CC		15
A.1	Note on integrating ASN.1 structures	15
A.1.1	Header field mappings.....	15
A.1.2	CIN allocation	17
Annex B (informative): Change request history.....		18
History		19

iTeh STANDARD PREVIEW
 (standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/a651421d-23eb-4a17-82fa-4c9021ce1030/etsi-ts-102-232-7-v3.6.1-2019-04>

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Lawful Interception (LI).

The present document is part 7 of a multi-part deliverable. Full details of the entire series can be found in part 1 [2].

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The ETSI TS 102 232 [i.1] series of standards aims to provide a common delivery interface for lawfully-intercepted material from a wide range of services. The aim of the present document is to increase the range of services to which the ETSI TS 102 232 [i.1] interface applies, by including services from 3GPP TS 33.108 [3] and ANSI/J-STD-025-B [4] within the ETSI TS 102 232 [i.1] delivery framework.

1 Scope

Introduction

The present document specifies an approach for the handover of the lawfully-intercepted information that is defined in the two standards: 3GPP TS 33.108 [3] and ANSI/J-STD-025-B [4]. The present document uses the handover techniques defined in ETSI TS 102 232-1 [2]. In this way, the present document allows additional services to be delivered through a common interface.

UMTS/GPRS and EPS - 3GPP TS 33.108

The scope of the present document includes the handover of lawfully-intercepted information from the following parts of 3GPP TS 33.108 [3]:

- Intercept Related Information (IRI) **and the** Content of Communication (CC) from the mobile circuit-switched domain (3GPP TS 33.108 [3], clause 5).
- IRI and CC from the mobile packet-switched domain (3GPP TS 33.108 [3], clause 6).
- IRI and CC from the multi-media domain (3GPP TS 33.108 [3], clause 7).
- IRI and CC from the EPS domain (3GPP TS 33.108 [3], clause 10).
- IRI and CC from the IMS Conference domain (3GPP TS 33.108 [3], clause 11).
- IRI and CC from the IMS-based VoIP domain (3GPP TS 33.108 [3], clause 12).
- IRI from the Proximity Services domain (3GPP TS 33.108 [3], clause 13).
- IRI and CC from the Group Communication System Enablers domain (3GPP TS 33.108 [3], clause 14).

The present document does not override or supersede any specifications or requirements in 3GPP TS 33.108 [3].

CDMA2000 - ANSI/J-STD-025-B

The scope of the present document includes the handover of lawfully-intercepted information from the following parts of ANSI/J-STD-025-B [4]:

- Call identifying information from the mobile circuit-switched domain (ANSI/J-STD-025-B [4], clause 5.4). Call Content (CC) from the mobile circuit-switched domain is not covered by the present document.
- Communication identifying information (CII) and CC from the mobile packet-switched domain (ANSI/J-STD-025-B [4], clause 5.5).

The present document does not override or supersede any specifications or requirements in ANSI/J-STD-025-B [4].

3GPP TS 33.128

The scope of the present document includes the handover of lawfully-intercepted information in accordance with 3GPP TS 33.128 [6]

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 101 671: "Lawful Interception (LI); Handover interface for the lawful interception of telecommunications traffic".

NOTE: Periodically ETSI TS 101 671 is published as ETSI ES 201 671. A reference to the latest version of the TS as above reflects the latest stable content from ETSI/TC LI.

- [2] ETSI TS 102 232-1: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 1: Handover specification for IP delivery".
- [3] ETSI TS 133 108: "Universal Mobile Telecommunications System (UMTS); LTE; 3G security; Handover interface for Lawful Interception (LI) (3GPP TS 33.108)".
- [4] TIA/ATIS ANSI/J-STD-025-B (July 2006): "Lawfully Authorized Electronic Surveillance", as amended by ANSI/J-STD-025-B-1 (September 2006): "Lawfully Authorized Electronic Surveillance (LAES) Addendum 1 - Addition of Mobile Equipment Identifier (MEID)" and by ANSI/J-STD-025-B-2 (April 2007): "Lawfully Authorized Electronic Surveillance (LAES) - Addendum 2 - Support for Carrier Identity".
- [5] Public Law 103-414: "Communications Assistance for Law Enforcement Act (CALEA)", US 103rd Congress, 108 STAT. 4279 (October 25, 1994).
- [6] ETSI TS 133 128: "LTE; 5G; Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Security; Protocol and procedures for Lawful Interception (LI); Stage 3".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 102 232 (all parts): "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery".

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the terms given in ETSI TS 102 232-1 [2], ETSI TS 101 671 [1] and the following apply:

call-identifying information: ANSI/J-STD-025-B [4] states that this term is defined in CALEA Section 102 (2) [5] to be "dialling or signalling information that identifies the origin, direction, destination, or termination of each communication generated or received by a subscriber by means of any equipment, facility, or service of a TSP"

NOTE: This term is always used in expanded format.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ASN.1	Abstract Syntax Notation One
ATIS	Alliance for Telecommunications Industry Solutions
CC	Content of Communication

NOTE: This abbreviation is also used by ANSI for the same concept, called "Call Content".

CC-PDU	Content of Communication Protocol Data Unit
CII	Communication-Identifying Information
CIN	Communications Identity Number
CONFLIC	Conference LI Correlation
CR	Change Request
CS	Circuit Switched
EPS	Evolved Packet System
GCSE	Group Communications System Enablers
GCSELIC	Group Communications System Enablers LI Correlation
GPRS	General Packet Radio Service
IMS	IP Multimedia Subsystem
IP	Internet Protocol
IRI	Intercept Related Information
LAES	Lawfully Authorized Electronic Surveillance (Committee of ATIS)
LI	Lawful Interception
LTE	Long Term Evolution (of UMTS)
MF	Mediation Function (at CSP)
PDU	Protocol Data Unit
ProSe	Proximity Services
PS	Packet Switched
PTSC	Packet Technologies and Systems Committee (Committee of ATIS)
TC	Technical Committee
TIA	Telecommunications Industry Association
TS	Technical Specification
uLIC	UMTS LI Correlation
UMTS	Universal Mobile Telecommunication System
VOIPLIC	Voice Over IP LI Correlation

4 General

4.1 Approach

The present document forms part 7 of the ETSI TS 102 232 [i.1] family of standards, in that it is a service-specific component of the ETSI TS 102 232-1 [2] framework.

3GPP TS 33.108 [3] and ANSI/J-STD-025-B [4] define the interception behaviour that leads to IRI, Communication-Identifying Information (CII) or call-identifying information events on the handover interface, for both the packet data domain and circuit switched domain.

4.2 Reference model

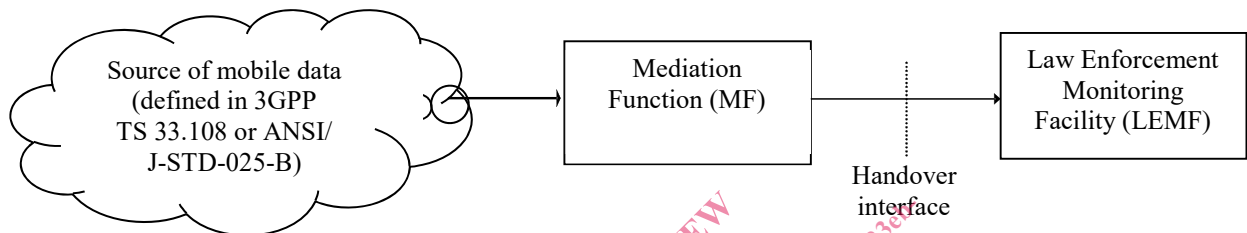


Figure 1: Reference model

5 3GPP handover Headers, data exchange and networks

5.1 Approach

ETSI TS 102 232-1 [2] describes a technique for data exchange, and specifies the headers that shall be associated with the results of interception. The present document follows ETSI TS 102 232-1 [2] regarding headers, data exchange and networks demonstrates how the header fields in ETSI TS 102 232-1 [2] can be populated in a direct and straightforward manner using the interception information available in 3GPP TS 33.108 [3] and 3GPP TS 33.128 [6].

5.2 Structures

IRI events from 3GPP TS 33.108 [3], for both circuit and packet switched services, are sent using the uMITSIRI element of IRIContents.

CC from CS domain delivery in IP are sent using the CSvoice-CC-PDU element of CCContent, which is the CSvoice-CC-PDU from 3GPP TS 33.108 [3], containing cSvoiceLIC-header and payload.

CC from packet switched services are sent using the uMTSCC element CCContent, which is an OCTET STRING.

Alternatively, subject to national agreement, CC from packet switched services are sent using the uMTSCC-CC-PDU element of CCContent, which is the CC-PDU from 3GPP TS 33.108 [3], containing the uLIC-header and payload.

CC and IRI PDUs formatted according to 3GPP TS 33.128 [6] are sent using the threeGPP33128DefinedCC and threeGPP33128DefinedIRI elements of CCContent and IRIContents respectively.