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Zakonito prestrezanje (LI) - Ravnanje z zadržanimi podatki - Izročilni vmesnik za zahtevo in izročanje zadržanih podatkov

Lawful Interception (LI) - Retained data handling - Handover interface for the request and delivery of retained data

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ETSI TS 102 657 V1.27.1 (2021-04)



**Lawful Interception (LI);
Retained data handling;
Handover interface for the request and
delivery of retained data**

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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
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Foreword

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

The ASN.1 module and XML schema are also available as an electronic attachment to the original document from the ETSI site (see details in clause A.3.1.2).

Modal verbs terminology

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1 Scope

The present document is based on requirements from ETSI TS 102 656 [2].

The present document contains handover requirements and a handover specification for the data that is identified in national legislations on Retained Data.

The present document considers both the requesting of retained data and the delivery of the results.

The present document defines an electronic interface. An informative annex describes how this interface may be adapted for manual techniques. Apart from in annex I, the present document does not consider manual techniques.

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.

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

- [1] Void.
- [2] ETSI TS 102 656: "Lawful Interception (LI); Retained Data; Requirements of Law Enforcement Agencies for handling Retained Data".
- [3] 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".
- [4] ISO 3166-1: "Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes".
- [5] ISO 4217: "Codes for the representation of currencies".
- [6] ETSI TS 101 671: "Lawful Interception (LI); Handover interface for the lawful interception of telecommunications traffic".

NOTE: ETSI TS 101 671 is in status "historical" and is not maintained.

- [7] ETSI EN 300 356 (all parts): "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface".
- [8] ETSI TS 100 974: "Digital cellular telecommunications system (Phase 2+); Mobile Application Part (MAP) specification (3GPP TS 09.02)".
- [9] ETSI TS 124 008: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; Mobile radio interface Layer 3 specification; Core network protocols; Stage 3 (3GPP TS 24.008)".
- [10] Void.
- [11] ETSI TS 133 108: "Universal Mobile Telecommunications System (UMTS); LTE; Digital cellular telecommunications system (Phase 2+) (GSM); 3G security; Handover interface for Lawful Interception (LI) (3GPP TS 33.108)".

- [12] ETSI TS 101 109 (V7.2.0): "Digital cellular telecommunications system (Phase 2+); Universal Geographical Area Description (GAD) (3GPP TS 03.32 version 7.2.0 Release 1998)".
- [13] FIPS PUB 186-4: "Digital Signature Standard (DSS)".
- [14] IETF RFC 7230: "Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing".
- [15] IETF RFC 2818: "HTTP Over TLS".
- [16] ETSI TS 123 040: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; Technical realization of the Short Message Service (SMS) (3GPP TS 23.040)".
- [17] IETF RFC 793: "Transmission Control Protocol".
- [18] IETF RFC 5681: "TCP Congestion Control".
- NOTE: IETF RFC 5681 obsoletes IETF RFC 2581: "TCP Congestion Control".
- [19] IETF RFC 6298: "Computing TCP's Retransmission Timer".
- NOTE: IETF RFC 6298 obsoletes IETF RFC 2988: "Computing TCP's Retransmission Timer".
- [20] IETF RFC 1122: "Requirements for Internet Hosts - Communication Layers".
- [21] IETF RFC 791: "Internet Protocol".
- [22] ETSI ES 282 002: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN Emulation Sub-system (PES); Functional architecture".
- [23] Void.
- [24] IETF RFC 5322: "Internet Message Format".
- NOTE: IETF RFC 5322 obsoletes IETF RFC 2822: "Internet Message Format".
- [25] ETSI TS 123 228: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Stage 2 (3GPP TS 23.228)".
- [26] IETF RFC 3261: "SIP: Session Initiation Protocol".
- [27] IETF RFC 4506: "XDR: External Data Representation Standard".
- [28] ISO 13616-1:2020: "Financial services -- International Bank Account Number (IBAN) -- Part 1: Structure of the IBAN".
- [29] ISO 9362:2014: "Banking -- Banking Telecommunication Messages -- Business Identifier Code (BIC)".
- [30] Void.
- [31] ETSI TS 125 413: "Universal Mobile Telecommunications System (UMTS); UTRAN Iu interface Radio Access Network Application Part (RANAP) signalling (3GPP TS 25.413)".
- [32] ETSI TS 129 274: "Universal Mobile Telecommunications System (UMTS); LTE; 5G; 3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunnelling Protocol for Control plane (GTPv2-C); Stage 3 (3GPP TS 29.274)".
- [33] ETSI TS 129 061: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN) (3GPP TS 29.061)".

- [34] ETSI TS 129 118: "Universal Mobile Telecommunications System (UMTS); LTE; Mobility Management Entity (MME) - Visitor Location Register (VLR) SGs interface specification (3GPP TS 29.118)".
- [35] ETSI TS 123 272: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; Circuit Switched (CS) fallback in Evolved Packet System (EPS); Stage 2 (3GPP TS 23.272)".
- [36] ETSI TS 133 234: "Universal Mobile Telecommunications System (UMTS); LTE; 3G security; Wireless Local Area Network (WLAN) interworking security (3GPP TS 33.234)".
- [37] W3C® Recommendation 21 March 2017: "XML Path Language (XPath) 3.1".
- [38] ETSI TS 123 008: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; Organization of subscriber data (3GPP TS 23.008)".
- [39] ETSI TS 124 229: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229)".
- [40] ISO 639-1:2002: "Codes for the representation of names of languages -- Part 1: Alpha-2 code".
- [41] ETSI TS 123 003: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; 5G; Numbering, addressing and identification (3GPP TS 23.003)".
- [42] ETSI TS 138 413: "5G; NG-RAN; NG Application Protocol (NGAP) (3GPP TS 38.413)".
- [43] ETSI TS 129 571: "5G; 5G system; Common Data Types for Service Based Interfaces; Stage 3 (3GPP TS 29.571)".
- [44] ETSI TS 136 413: "LTE; Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 Application Protocol (S1AP) (3GPP TS 36.413)".
- [45] ETSI TS 123 501: "5G; System architecture for the 5G System (5GS) (3GPP TS 23.501)".
- [46] ETSI TS 132 291: "5G; Telecommunication management; Charging management; 5G system, Charging service; Stage 3 (3GPP TS 32.291)".
- [47] ETSI TS 132 255: "5G; Telecommunication management; Charging management; 5G Data connectivity domain charging; Stage 2 (3GPP TS 32.255)".
- [48] ETSI TS 129 520: "5G; 5G System; Network Data Analytics Services; Stage 3 (3GPP TS 29.520)".
- [49] ETSI TS 132 251: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; Telecommunication management; Charging management; Packet Switched (PS) domain charging (3GPP TS 32.251)".
- [50] ETSI TS 137 340: "Universal Mobile Telecommunications System (UMTS); LTE; 5G; NR; Multi-connectivity; Overall description; Stage-2 (3GPP TS 37.340)".
- [51] Recommendation ITU-T Q.850: "Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN user part".
- [52] Recommendation ITU-T E.164: "The international public telecommunication numbering plan".
- [53] GSMA SGP.02: "Remote Provisioning Architecture for Embedded UICC Technical Specification".
- [54] Recommendation ITU-T G.984.1: "Gigabit-capable passive optical networks (GPON): General characteristics".

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.

Not applicable.

3 Definition of terms, symbols and abbreviations

3.1 Terms

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

Authorized Organization (AO): any authority legally authorized to request or receive retained data e.g. a Law Enforcement Agency

Handover Interface A (HI-A): administrative handover interface comprising requests for information and their responses

Handover Interface B (HI-B): data handover interface comprising the retained data transmission of information

issuing authority: any entity possessing the necessary jurisdiction and authority pursuant to law to compel a service provider to deliver retained subscriber information or traffic data specified in a query

lawful authorization: permission granted to an Authorized Organization under certain conditions to request specified telecommunications retained data and requiring co-operation from a network operator/service provider/access provider

NOTE: Typically, this refers to a warrant or order issued by a lawfully authorized body.

location information: information relating to the geographic, physical or logical location of an identity relating to an interception subject

number: any address (E.164, IP, email, URI) used for routing in a network or in a service on a user level or network/service level

receiving authority: any entity possessing the necessary authority pursuant to law and the technical means to receive retained subscriber information or traffic data delivered by a service provider

request: legal requirement for a Communications Service Provider (CSP) to disclose retained data in accordance with relevant national law

response to request of information: response from the CSP to the authorized organization acknowledging or rejecting a request for information

retained data record: set of data elements for a specific subscriber/user related to a specific service transaction

service transaction: instance of a service given by a CSP to a subscriber/user

service transaction record: set of data elements describing a service transaction (details to be determined)

transmission of information: transmission of retained data from the CSP to the receiving authority

3.2 Symbols

Void.

3.3 Abbreviations

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

| | |
|--------|--|
| ACK | ACKnowledge |
| ADSL | Asymmetric Digital Subscriber Line |
| AMF | Access and Mobility management Function |
| AMFID | AMF Identifier |
| AO | Authorized Organization |
| APN | Access Point Name |
| ASCII | American Standard Code for Information Interchange |
| ASN | Abstract Syntax Notation |
| BER | Basic Encoding Rules |
| BIC | Business Identifier Code |
| CAN | Connectivity Access Network |
| CGI | Cell Global Identity |
| CHF | CHarging Function |
| CPE | Customer Premises Equipment |
| CS | Circuit Switched |
| CSP | Communications Service Provider |
| CSPID | CSP Identifier |
| DR | Data Retention |
| DSA | Digital Signature Algorithm |
| DSL | Digital Subscriber Line |
| DSS | Digital Signature Standard |
| DVD | Digital Versatile Disc or Digital Video Disc |
| eCGI | e-UTRAN Cell Global ID |
| EID | Embedded (UICC) Identifier |
| EMS | Enhanced Messaging Service |
| EN-DC | E-UTRA-NR Dual Connectivity |
| EPC | Enhanced Packet Core |
| EPS | Evolved Packet System |
| eUICC | embedded UICC |
| FFS | For Further Study |
| FIPS | Federal Information Processing Standard |
| GCI | Global Cable Identifier |
| GGSN | Gateway GPRS Support Node |
| GLI | Global Line Identifier |
| GPRS | General Packet Radio Service |
| GPSI | Generic Public Subscription Identifier |
| GSM | Global System for Mobile communications |
| GW | GateWay |
| HI | Handover Interface |
| HI-A | Handover Interface A |
| HI-B | Handover Interface B |
| HTTP | HyperText Transfer Protocol |
| HTTPS | HyperText Transfer Protocol over Secure Socket Layer |
| IANA | Internet Assigned Numbers Authority |
| IBAN | International Banking Account Number |
| ICCID | Integrated Circuit Card ID |
| ID | IDentifier |
| IE | Information Element |
| IEI | Information Element Identifier |
| IMAP | Internet Message Access Protocol |
| IMEI | International Mobile Equipment Identity |
| IMEISV | IMEI Software Version |
| IMPI | IP Multimedia Private Identity |