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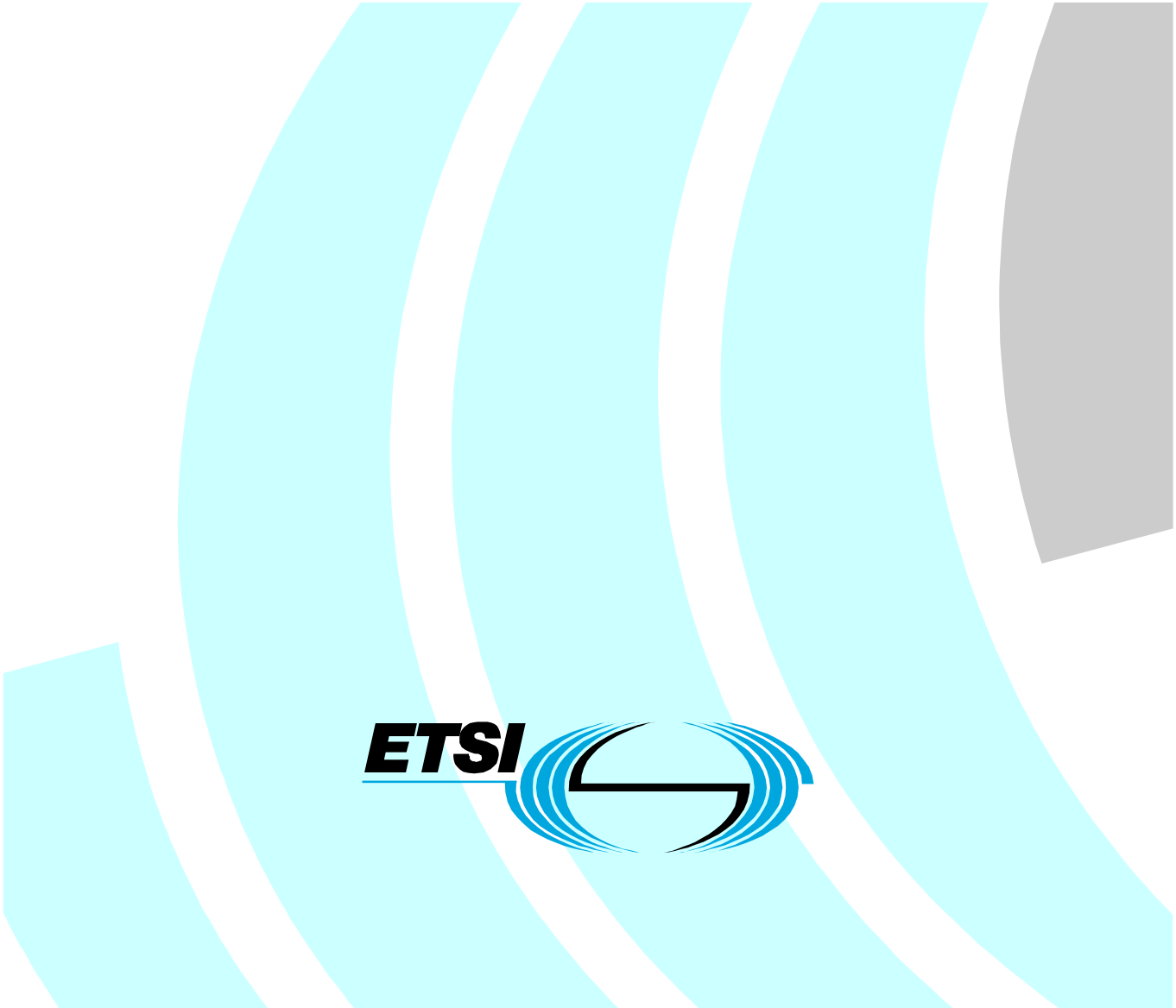
Technical Report

ASN.1 Object Identifiers in Lawful Interception Specifications



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Contents

Intellectual Property Rights 4
Foreword 4
1 Scope 5
2 References 5
3 Definitions and abbreviations 5
3.1 Definitions 5
3.2 Abbreviations 6
4 Structure of the ETSI domain 6
4.1 Tree Structure 6
4.2 Description of the ETSI Domain 6
Annex A: Change Request history 12
History 13

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Lawful Interception (LI).

1 Scope

The present document gives an overview over the relevant Object IDentifiers (OID) used in Lawful Intercept specifications of ETSI and other specifications from ITU-T and ISO.

2 References

For the purposes of this Technical Report (TR), the following references apply:

[1] ETSI EG 200 351: "ETSI object identifier tree; Rules and registration procedures".

[2] ETSI ES 201 671: "Telecommunications security; Lawful Interception (LI); Handover Interface for the lawful interception of telecommunications traffic".

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

[4] ETSI TS 133 108: "Universal Mobile Telecommunications System (UMTS); 3G security; Handover interface for Lawful Interception (LI) (3GPP TS 33.108)".

[5] ETSI TS 102 232: "Lawful Interception (LI); Handover specification for IP delivery".

[6] ETSI TS 102 233: "Lawful Interception (LI); Service specific details for E-mail services".

[7] ETSI TS 102 234: "Lawful Interception (LI); Service-specific details for internet access services".

[8] ETSI TS 102 815: "Lawful Interception (LI); Service-specific details for Layer 2 Lawful Interception".

[9] ITU-T Recommendation X.880 (1994): "Information technology - Remote Operations: Concepts, model and notation".

[10] ETSI TS 101 909-20-1: "Digital Broadband Cable Access to the Public Telecommunications Network; IP Multimedia Time Critical Services; Part 20: Lawful Interception; Sub-part 1: CMS based Voice Telephony Services".

[11] ETSI TS 101 909-20-2: "Digital Broadband Cable Access to the Public Telecommunications Network; IP Multimedia Time Critical Services; Part 20: Lawful Interception; Sub-part 2: Streamed multimedia services".

[12] ETSI EN 301 040: "Terrestrial Trunked Radio (TETRA); Security; Lawful Interception (LI) interface".

3 Definitions and abbreviations

3.1 Definitions

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

common domain: set of objects, which are part of the definition of a protocol or a set of related protocols

information object: well-defined piece of information, definition, or specification, which requires a name in order to, identify its use in an instance of communication

object identifier: value (distinguishable from all other such values), which is associated with an information object

NOTE: An object identifier consists of a sequence of integers. Each integer represents a node in the object identifier tree. So, each successive integer can be thought of as a selection of an end of a branch of the tree. The branch is traversed to get to the next level in the tree.

3.2 Abbreviations

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

ASN.1	Abstract Syntax Notation One
LI	Lawful Interception
OID	Object IDentifier
ROSE	Remote Operation Service Element

4 Structure of the ETSI domain

4.1 Tree Structure

Figure 1 contains the structure for the ETSI domain with the included Lawful Intercept (LI) domain and ASN.1 moduls from other Lawful Interception specifications.

ETSI/TC LI shall act as the formal registration authority for the Lawful Intercept domain, except for the "threeGPP(4)" subdomain which is administrated by 3GPP/SA3-LI, ETSI/TC AT-D is responsible for the "TS 101 909 [10] (1909)" subdomain and ETSI/EP TETRA is responsible for the "EN 301 040 [12] (1040)" subdomain.

4.2 Description of the ETSI Domain

The tables A.1.1 to A.1.3 on the following pages contain the OIDs of the ETSI domain. The entries in the last column in the tables point to the specification where the modules can be found.

For information, in addition to those OIDs defined within ETSI/TC LI, table A.2.1 contains the OIDs for the ROSE operations. Because of the imports, the ASN.1 modules of ROSE must be included when syntax checking or compiling the LI specific ASN.1 modules.

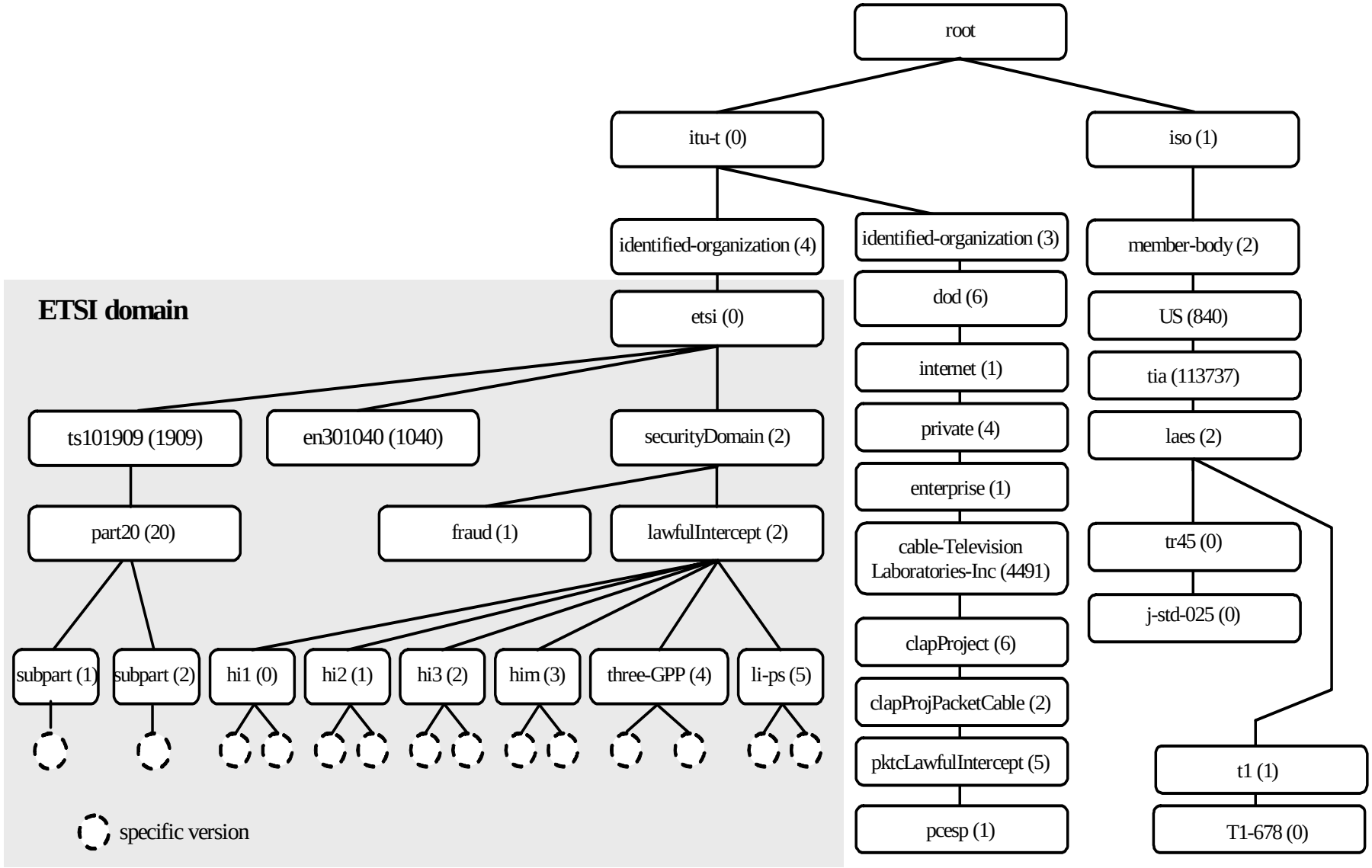

Figure 1: Tree Structure of ETSI Domain

NOTE: There are other Standards which contain ASN.1 modules for interception (see http://portal.etsi.org/li/status.asp)

Table 1: OIDs of the ETSI domain

Object Identifier								Specification
itu-t (0)	identified-organizations(4)	etsi(0)	securityDomain(2)					TR 102 503 V.1.1.1
				fraud(1)				ES 201 671 [2], V1.1.1 annex A.4
				lawfulIntercept(2)				ES 201 671 [2], V1.1.1 annex A.4
					hi1(0)	notification Operations (1)	version1(1) version2(2) version3(3) version4(4) version5(5)	ES 201 671 [2], V1.1.1 annex A.4 ES 201 671 [2], V2.1.1 annex D.4 TS 101 671 [3], V2.9.1 annex D.4 TS 101 671 [3,] V2.11.1 annex D.4 TS 101 671 [3], V2.12.1 annex D.4
					hi2(1)	version1(1) version2(2) version3(3) version4(4) version5(5) version6(6) version7(7) version8(8) version9(9)		ES 201 671 [2,] V1.1.1 annex A.5 ES 201 671 [2], V2.1.1 annex D.5 TS 101 671 [3], V2.5.1 annex D.5 TS 101 671 [3], V2.7.1 annex D.5 TS 101 671 [3], V2.9.1 annex D.5 TS 101 671 [3,] V2.10.1 annex D.5 TS 101 671 [3,] V2.11.1 annex D.5 TS 101 671 [3], V2.12.1 annex D.5 TS 101 671 [3], V2.13.1 annex D.5
					hi3(2)	circuitLI(1)	version1(1) version2(2) version3(3)	ES 201 671 [2], V1.1.1 annex A.6 ES 201 671 [2], V2.1.1 annex D.6 TS 101 671 [3], V.2.12.1 annex D.6
						TETRALI(2)	version1(1)	ES 201 671 [2], V1.1.1 annex A.7 For Further Study
						gPRSLI(3)	version1(1) version2(2) version3(3)	ES 201 671 [2], V1.1.1 annex A.8 TS 101 671 [3,] V2.10.1 annex D.9 TS 101 671 [3], V2.12.1 annex D.9

Object Identifier									Specification
itu-t (0)	identified-organizations(4)	etsi(0)	securityDomain(2)	lawfulIntercept(2)	hi3(2)	cclinkLI(4)	version1(1) version2(2) version3(3) version4(4)		ES 201 671 [2], V1.1.1 annex A.9 ES 201 671 [2], V2.1.1 annex D.8 TS 101 671 [3], V2.7.1 annex D.8 TS 101 671 [3], V.2.12.1 annex D.8
						gSMLI(5)			ES 201 671 [2], V2.1.1 annex D.2 For Further Study
					him(3)	version1(1) version2(2) version3(3)			ES 201 671 [2], V1.1.1 annex A.3 ES 201 671 [2], V2.1.1 annex D.3 TS 101 671 [3], V2.12.1 annex D.3
					threeGPP(4)	hi2(1)	version-1(1) version-2(2)		TS 133 108 [4], V5.0.0 annex B.3 TS 33 108 [4], V6.0.0 annex B.3
							r5(5)	version-3(3) version-4(4)	TS 133 108 [4], V5.7.0 annex B.3 TS 133 108 [4], V5.8.0 annex B.3
							r6(6)	version-3(3) version-4(4) version-5(5) version-6(6)	TS 33 108 [4], V6.5.0 annex B.3 TS 33 108 [4], V6.6.0 annex B.3 TS 33 108 [4], V6.7.0 annex B.3 TS 33 108 [4], V6.8.0 annex B.3
							r7(7)	version-1(1)	TS 33 108 [4], V7.2.0 annex B.3
						hi3(2)	version-1(1)		TS 133 108 [4], V5.0.0 annex B.4
							r5(5)	version-2(2)	TS 33 108 [4], V5.9.0 annex B.4
							r6(6)	version-1(1) version-2(2) version-3(3)	TS 33 108 [4], V6.5.0 annex B.4 TS 133 108 [4], V6.7.0 annex B.4 TS 33 108 [4], V6.8.0 annex B.4
						hi2CS(3)	version-1(1) version-2(2)		TS 33 108 [4], V6.1.0 annex B.3a TS 33 108 [4], V6.6.0 annex B.3a
							r6(6)	version-3(3)	TS 33 108 [4], V6.8.0 annex B.3a
						hi3CS(4)	version1(1)		TS 33 108 [4], V6.5.0 annex B.6
							r6(6)	version2(2)	TS 33 108 [4], V6.8.0 annex B.6

Object Identifier									Specification
itu-t (0)	identified-organizations(4)	etsi(0)	securityDomain(2)	lawfulIntercept(2)	threeGPP(4)	him(5)	version1(1)		TS 133.108 [4], V6.5.0 annex B.5
							version2(2)		TS 133.108 [4], V7.1.0 annex B.5
					li-ps(5)	hi1(0)			TS 102 232 [5], V1.1.1 annex A.1 For Further Study
						genHeader(1)	version1(1) version2(2) version3(3)		TS 102 232 [5], V1.1.1 annex A.2 TS 102 232 [5], V1.2.1 annex A.2 TS 102 232 [5], V1.3.1 annex A.2
						email(2)	version1(1)	iRI(1) cC(2)	TS 102 233 [6], V.1.1.1 annex D TS 102 233 [6], V.1.1.1 annex D
							version2(2)	iRI(1) cC(2)	TS 102 233 [6], V.1.2.1 annex D TS 102 233 [6], V.1.2.1 annex D
						iPAccess(3)	version1(1)	iRI(1) cC(2) iRIOnly(3)	TS 102 234 [7], V1.1.1 clause 8 TS 102 234 [7], V1.1.1 clause 8 TS 102 234 [7], V1.1.1 clause 8
							version2(2)	iRI(1) cC(2) iRIOnly(3)	TS 102 234 [7], V.1.3.1 clause 8 TS 102 234 [7], V.1.3.1 clause 8 TS 102 234 [7], V.1.3.1 clause 8
							version3(3)	iRI(1) cC(2) iRIOnly(3)	TS 102 234 [7], V.1.4.1 clause 8 TS 102 234 [7], V.1.4.1 clause 8 TS 102 234 [7], V.1.4.1 clause 8
						l2Access(4)	version1(1)	iRI(1) cC(2) iRIOnly(3)	TS 102 815 [8], V1.1.1 clause 8.2 TS 102 815 [8], V1.1.1 clause 8.2 TS 102 815 [8], V1.1.1 clause 8.2
							version2(2)	iRI(1) cC(2) iRIOnly(3)	TS 102 815 [8], V1.2.1 clause 8.2 TS 102 815 [8], V1.2.1 clause 8.2 TS 102 815 [8], V1.2.1 clause 8.2

Table 2: OIDs of the ETSI/TC AT-D domain (in preparation of the publication of the standard)

Object Identifier									Specification
itu-t (0)	identified-organizations(4)	etsi(0)	ts101909 (1909)	part20 (20)	subpart1 (1)	intercept(0)			TS 101 909-20-1 [10]
					subpart2 (2)	intercept(0)			TS 101 909-20-2 [11]

Table 3: OIDs of the ETSI/EP TETRA domain

Object Identifier					Specification
itu-t (0)	identified-organizations(4)	etsi(0)	en301040 (1040)	interceptVersion (0)	EN 301 040 [12], V2.0.5 annex E

Table 4: Object Identifier of ROSE

Object Identifier				Specification
joint-iso-itu-t(2)	remote-operations(4)	informationObjects(5)	version1(0)	ITU-T Recommendation X.880 [9], annex A

Annex A:
Change Request history

Status of the present document ASN.1 Object Identifiers in Lawful Intercept Specifications		
Date	**Version**	**Remarks**
October 2005	1.1.1	First publication of the TR after approval by ETSI/TC LI#10 (4-6 October 2005, Sorrento); Version 1.4.1 prepared by Ralf Schmalbach (BNetzA) (rapporteur TR)

History

Document history		
V1.1.1	January 2006	Publication