

Lawful Interception References

Version 3.00

- This document is a guide to Lawful Interception Material available over the Internet.
- Any comments or amendments please to Charles Brookson at cbrookson@iee.org

LAWFUL INTERCEPTION REFERENCES

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Area	Title	Description	www address	Notes
1 STANDARDS				
1.1 3GPP(1) Release 2000	3G TS 33.106 Lawful Interception Requirements	3rd Generation Lawful Interception Requirements for Release 2000 specifications due 1Q 2001 - moves 3G into the Internet world.	ftp://ftp.3gpp.org/TSG_SA/WG3_Security/TSGS3_15_Washington/Docs/	In draft form. Not yet approved. See Document S3-000543
	33.107 V 3.0.0: Lawful interception architecture and functions	Lawful interception architecture and functions	www.3gpp.org	Not yet written.
1.2 3GPP(1) Release 1999	33.106 V 3.1.0: Lawful interception requirements	3rd Generation Lawful Interception requirements for 3G Release 99 - in a circuit switched environment.	http://webapp.etsi.org/pda/home.asp?wki_id=8684	Approved version R99.
	33.107 V 3.0.0: Lawful interception architecture and functions	As above.	http://webapp.etsi.org/pda/home.asp?wki_id=9758	Approved version R99.

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Area	Title	Description	www address	Notes
1.3 ETSI TSEC-LI	TR101.331	ETSI Lawful Interception Group Telecommunications Security Definition of user requirements for lawful interception of telecommunications; Requirements of the law enforcement agencies: Part 1: General approach	www.etsi.org	Standard not approved. See SEC Committee on ESTI site for details.
	ETSI ES 201 158 V1.1.2 (1998-05)	The requirements for legal interception (see reference) provide for a set of general requirements for the interception of telecommunications by law enforcement and state security agencies. These requirements will be used as a basis for the technical work. In their present form, however, they are not suitable for immediate implementation in telecommunications systems and require transformation to technically useful statements or requirements prior to standardisation. This transformation process will consist of three steps: Step 1: Define user	http://webapp.etsi.org/pda/home.asp?wki_id=4341	

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Area	Title	Description	www address	Notes
		requirements Step 2: Define network requirements Step 3: Define handover interface(s) This ETR covers step 2 above.		
	ES 201 671: "Handover Interface for the lawful interception of telecommunications traffic".	This ETSI Standard describes the Handover interface for Lawful Interception between Network Operators/Service Providers/Access Providers and Law Enforcement Agencies. The interface will support the delivery of 64 kbit/s speech and data. TC remarks: This document will be the first of a set of interface descriptions. Other documents, which describe other network technologies, will follow as separate parts. This document, as well as the following ones, will be in line with the requirements of the Law Enforcement Agencies, as given in ETR 331, and the requirements for the network functions, as given in DE/SEC-002311.	http://webapp.etsi.org/pda/home.asp?wki_id=5973	

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Area	Title	Description	www address	Notes
1.4 INTELLIGENT NETWORKS	ETSI EG 201 781 V1.1.1 (2000-07)	<p>The scope of this ETSI Guide is to cover the standardisation of functions to allow lawful interception of services running in on IN platform. These functions probably need to be defined in the SSP and SCP, including the information flow between these entities. Alternatives will, however, be investigated. As specific parts of the information flow are confidential, security aspects need to be addressed. Reference documents: ETR 330, ETR 331, ES 201 158.</p>	http://webapp.etsi.org/pda/home.asp?wiki_id=7242	
1.5 ELECTRONIC SIGNATURES	ETSI ES 201 733 V1.1.3 (2000-05)	<p>To study the requirements for standardisation of digital signatures in telecommunications applications. The study will determine which areas of digital signature standardisation should be concentrated on for the requirements of the different European member states, taking account of the emerging national positions on data security, electronic commerce, lawful interception and trusted third parties' requirements.</p>	http://webapp.etsi.org/pda/home.asp?wiki_id=8179	

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1.6 GSM STANDARDS	GSM 01.33: "Lawful Interception requirements for GSM".	Traditional GSM and includes GPRS.		
	ETSI TS 101 507 V7.3.0 (1999-11)	GSM 02.33:" Lawful Interception - stage 1".	http://webapp.etsi.org/pda/home.asp?wki_id=6482	
	ETSI TS 101 509 V7.1.0 (1999-11)	GSM 03.33: "Lawful Interception - stage 2".	http://webapp.etsi.org/pda/home.asp?wki_id=5329	
1.7 TETRA	ETSI EN 301 040 V2.0.0 (1999-06)	To define an interface to allow Lawful Interception of all TETRA traffic and signalling. The requirements and stage 1 definitions are to be included in this edition	http://webapp.etsi.org/pda/home.asp?wki_id=5279	
	ETSI EG 201 040 V1.1.1 (1998-04)	To prepare a report on the development of the TETRA LI interface	http://webapp.etsi.org/pda/home.asp?wki_id=6255	

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Area	Title	Description	www address	Notes
1.8 TIPHON	ETSI TR 101 750 V1.1.1 (1999-11)	<p>Draft interception specifications for Multimedia Internet.</p> <p>Liaison and studies into the impact of lawful interception on TIPHON and TIPHON access networks. This shall include the following specific tasks: Review of IUR, CALEA and ETR 331 to assess applicability to TIPHON and report findings to TC-SEC-L1 in addition to EP-TIPHON; Review of TIPHON access networks to determine capability to support L1 requirement; Act as primary liaison with TC-SEC-L1 during development of packet data handover interface ensuring that it is suited to TIPHON.</p>	http://webapp.etsi.org/pda/home.asp?wki_id=7794	
1.9 GSM ASSOCIATION	SG.09 Ver. 3.1.0	The GSM Association Document specifying operator requirements, reflecting various shared National Requirements.	https://infocentre.gsm.org/cgi-bin/prdind.cgi?SG	This is a restricted web site only open to those within the GSM Association.

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2 MANUFACTURER SITES				
2.1 ACCURIS	Lawful Interception Solutions	Accuris Ltd Eastpoint Business Park Dublin 3 Ireland Tel: +353 1 887 5000 Fax: +353 1 887 510	www.accuris.ie	
2.2 COMVERSE	Lawful Interception products	Comverse Infosys Inc. is a world leader in the development, manufacturing and marketing of digital recording and monitoring systems with two primary applications: legal interception and monitoring systems for telecom operators and law enforcement agencies; and digital recording, logging, and quality monitoring systems for financial institutions, customer service centres, telemarketing centres and other call centres	http://www.cominfosys.com/	
2.3 Teletron	Teletron Ltd. 6 Halapid St. Petach Tikva 49250 Israel Tel. Voice: 972-3-924-1004 FAX: 972-3-923-3317	Teletron is a high-tech company dedicated to serve the intelligence and law enforcement community by providing leading edge technology and the state-of the-art solutions in the field of electronic surveillance. It focuses its efforts in the field of voice and facsimile monitoring and	http://www.teletron.co.il/	

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		recording. The company designs, develops and produces turnkey systems for intelligence and governmental agencies.		
2.4 NewNet	NewNet CDCmanager	Communications Assistance for Law Enforcement Act (CALEA)Compliant Centralised Call Data Channel Manager	http://www.newnet.com/products/cdcmanager/overview.cfm	
2.5 AQSACOM	Lawful Interception products		www.aqsacom.com	
2.6 PENLINK	Lincoln	LINCOLN is fully compliant with CALEA-based J-STD-025 messaging protocols, including the approved "punch list" items that are currently being tested by switch manufacturers.	http://www.penlink.com/	

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3 OTHER LINKS				
3.1 CRYPTOME.ORG		Archive of news articles etc	www.cryptome.org	
3.2 EFF	Electronic Frontier Foundation 1550 Bryant Street, Suite 725 San Francisco CA 94103 USA	"Surveillance: Communications Assistance to Law Enforcement Act(CALEA, 47 USC 1001) & Digital Telephony Wiretapping" Archive	http://www.eff.org/pub/Privacy/Digital_Telephony_FBI/index.html	The Electronic Frontier Foundation! EFF is a non-profit, non-partisan organisation working in the public interest to protect fundamental civil liberties, including privacy and freedom of expression in the arena of computers and the Internet. EFF was founded in 1990, and is based in San Francisco, California, with a satellite office in Washington, DC.
3.3 UK Crypto	UK Crypto archives	The group, supported by a mailing list, is comprised of people with a professional interest in the formulation and content of UK government policy on the provision, use and control of encryption products and services in the UK. It was formed in response to the 1996 announcement of UK policy on the provision of encryption services on telecommunications networks.	http://www.chiarke.greenend.org.uk/mailman/listinfo/ukcrypto	

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3.4 CARNIVORE	Carnivore	Carnivore is a computer-based system that is designed to allow the FBI, in co-operation with an Internet Service Provider (ISP), to comply with court orders requiring the collection of certain information about emails or other electronic communications to or from a specific user targeted in an investigation.	http://www.rob-ertgraham.com/pubs/carnivore-faq.html	Example www pages only - this is a FAQ and the pages from Black Ice
3.5 ANTIVORE	Antivore	Software to defeat Carnivore - "Thank you for your interest in Antivore. ChainMail, Inc. has discontinued support for Antivore and will soon be releasing a new and improved version."	www.antivore.com and http://www.networkice.com/html/altivore.html !	Should be back soon...

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4 Legislation				
4.1 EU COUNCIL IUR	European Union Council Resolution on the Lawful Interception of Telecommunications (17. January 1995)	One of the original documents produced to specify the user requirements for Lawful Interception. Does not specify newer technologies such as the Internet or Email,	http://www.privacy.org/pi/activities/tapping/e_u_tap_resolution_1995.html see also ENFOPOL 19 on http://www.fipr.org/polarch/enfopol19.html#Top	
4.2 CALEA	Communications Assistance for Law Enforcement Act (CALEA)	CALEA was passed in 1994 in the USA as a response to rapid advances in telecommunications technology, such as the implementation of digital technology and wireless services, that have threatened the ability of law enforcement officials to conduct authorised electronic surveillance. CALEA requires telecommunications carriers to modify their equipment, facilities, and services to ensure that they are able to comply with authorised electronic surveillance.	http://www.fcc.gov/wtb/csinfo/calea.html & the FBI on http://www.askcalea.com/	

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<p>4.3 GERMAN</p>	<p>Telecommunications Traffic Interception Ordinance and Technical Directive setting relating to Requirements to the implementation of Legal Measure for the Interception of Telecommunications</p>		<p>http://www.regtp.de/tech_reg_telle/01420/01/index.html</p>	<p>In German</p>
<p>4.4 United Kingdom</p>	<p>RIP Act</p>	<p>The Regulation of Investigatory Powers (RIP) Bill was introduced in the House of Commons on 9th February 2000 and completed its Parliamentary passage on 26 July. The Bill received Royal Assent on 28 July.</p> <p>The Regulation of Investigatory Powers Act 2000 (RIPA) updates the law on the interception of communications to take account of technological change such as the growth of the Internet. It also puts other intrusive investigative techniques on a statutory footing for the very first time; provides new powers to help combat the threat posed by rising criminal use of strong encryption; and ensures that there is independent judicial oversight of the powers in the Act.</p>	<p>http://www.homeoffice.gov.uk/ripa/ripact.htm</p>	

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<p>4.5 Australia</p>	<p>TELECOMMUNICATIONS ACT 1997</p>	<p>Part 14—National interest matters 311. Simplified outline And Part 15—Co-operation with agencies 317. Simplified outline 318. Definition 319. Meaning of interception capability, special assistance capability and agency specific delivery capability 321. Purpose of Division</p>	<p>http://www.austlii.edu.au/au/legis/cth/consol_act/ta1997214/</p>	
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5 Notes

- 1) www.3gpp.org web site is open.
- 2) www.etsi.org web site has ETSI specifications, which are open to download the standards, you need to supply your Email address.
- 3) www.tiphon.org is open.

6 History

Date	Version	Comments
16 th October 2000	V1.00	First draft for comments
30 th October 2000	V2.00	One set of comments included.
15 th January 2001	V3.00	Some more comments and updating