

Joint ETSI TC LI and 3GPP SA3 LI meeting Povoa de Varzim, Portugal, 22 - 23 July 2004

Source: VeriSign Switzerland SA

Title: Integration and Treatment of VoIP and other IP-Enabled Services LI specifications

Spec:

Notice: *One box to be ticked!!*

The author of this document declares that the document may be stored in the public TC LI docbox.	X
The author of this document declares that the document may only be stored in the protected LI_AM docbox.	

Document for:

Decision:	X
Discussion:	X
Information:	X

Contact details: Anthony M Rutkowski <trutkowski@verisign.com>

Abstract: This contribution identifies all ongoing VoIP and other relevant IP-enabled Services LI industry standards developments and proposes a new work item initiative directed at integrating the resulting specifications into the global TS 102 232 platform, as contemplated by that standard. (Document ETSI TC LI 05litd028R3, Oxford, England, 23-25 March 2004)

1. Introduction

The increasing emergence of VoIP services has led over the past year to a significant number of activities associated with obligations to assist law enforcement, including wireline standards activities both within ETSI TISPAN, ATIS, CableLabs, and other forums.¹ These activities are also driven by a number of high profile regulatory activities in the public sphere.²

¹ See, e.g., **LS from T1S1 on Desire to establish a liaison relationship**, Doc. 05litd016; **LS from T1S1 on Status Report of T1S1 LAES Ad Hoc Group Effort**, Doc. 05litd017; **LS re. Update on LI work of TISPAN (TIPHON)**, Doc. 05litd018; **Draft TS 101 909-20-1 (CMS Architecture)**, Doc. 05litd023, **Draft TS 101 909-20-2 (Non-CMS Architectures)**, Doc. 05litd024; **LS from T1S1 on Status Report of T1S1 LAES Ad Hoc Group Effort**, Doc. 05litd033; **ANSI T1.678-XXXX: Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks**, Doc. 05litd034; **Draft Report of the January 21-22, 2004 T1S1 LAES AHG Meeting**, Doc. 05litd035; **Notice of T1S1 Ad Hoc Meeting on LAES: Dates: May 4-6, 2004**, Doc. 05litd036.doc; **PacketCable™ Electronic Surveillance Specification, PKT-SP-ESP-I02-030815**, Nov 2004; **ANSI T1.724-2004: UMTS Handover Interface for Lawful Interception**, ATIS T1P1 Doc. 3p100783.doc; **Cisco Architecture for Lawful Intercept In IP Networks**, Doc. draft-baker-slem-architecture-02.txt, Oct 2003; **Cisco Lawful Intercept Control MIB**, Doc. draft-baker-slem-mib-00, Apr 2003.

² See, e.g., European Commission Information Society, **Open Workshop on IP voice and associated convergent services**, http://europa.eu.int/information_society/topics/ecomm/index_en.htm; **Notice of Proposed Rulemaking In the Matter of IP-Enabled Services**, Docket No. 04-36, Document No. FCC 04-28, 10 March 2004. Especially important, the framework also encompasses related LI capability requirements. See *ibid*, and **Joint Petition for Expedited Rulemaking**, FCC RM-10865, 12 March 2004.

The characteristics of VoIP, IP-enabled, convergent services, especially including their distributed global provisioning architecture and agile nomadic subscriber-users, makes TC LI's modular standards approach a very compelling one.³

This was contemplated in the development of TS 102 232 and the existing suite of service-specific details found in TS 102 233 for E-mail and 234 for Internet access services. The architecture is portrayed in Figure 2 of TS 102 232.

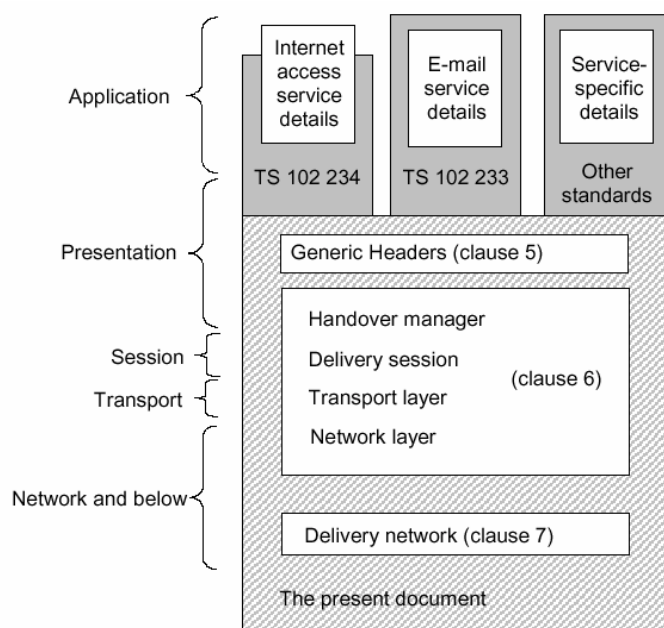


Figure 2: Contents of the present document and its relationship to other standards

2. Work Programme Description

This contribution proposes the creation of one (or perhaps two) new work items in TC LI:

- Working with other Technical Committees in ETSI, ATIS, Cable Labs, and other forums developing VoIP LI specifications, including associated signalling systems and gateways, with an aim to integrate those specifications as one or more VoIP modules into TS 102 232
- Other IP-enhanced Service specific modules such as Presence and Access Management Services, convergence, or multimedia services. Alternatively, this might include a working group between plenary sessions to consider which new service specific modules are appropriate in light of revisions to TS10133 (Requirements of Law Enforcement Agencies), and TD 050 (On LI and the market place).

The existing marketplace of standards is portrayed in Figure 1, below. Some are significantly deployed, others are still under development or being considered. Some are largely device-based specifications, such as the Cisco and Juniper standards. Most are service and/or media centric specifications – largely based legacy wireline-oriented handover interfaces.

³ Technical Specification, **Telecommunications security; Lawful Interception (LI); Handover specification for IP delivery**, ETSI TS 102 232 V1.1.1 (2004-02).

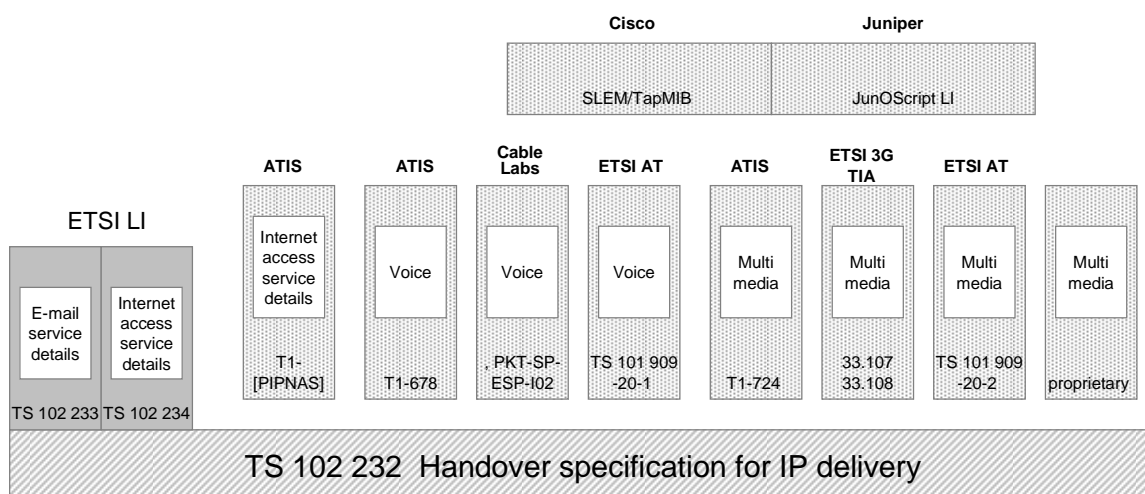


Figure 1 – Possible Consolidation of Existing or Contemplated LI Specifications

It is important that the first work item get underway soon. Considering the distributed worldwide implementation of VoIP and its associated signalling protocols combined with the nomadicity of its use through agile access services, substantial compatibility and interoperability will be required among the LI capability implementations by providers globally. These implications must include, not only IRI derived from network elements within the provider's facilities, but also IRI extracted at border gateways to other providers that will be commonplace in a hybrid, convergent environment.

The new work should proceed in two steps. The first is to identify and compare existing VoIP LI standards and work in progress, and attempt to see if there are sufficient common specification features and associated requirements that would allow for merging any of the work into a common specification module. Specific work items would include comparison and mappings among:

- Scope and purpose
- Organization of the specification
- References
- Terminology and definitions
- Mandate categorizations and granularity, e.g., required or optional
- LI/surveillance models
- Functional architectures
- Demarcations and interfaces
- Perspectives, capability sets, events, and messages
- ASN.1 modules, imports, and information objects
- National or localization requirements as potential annexes

The second step would encompass proposed adjustments to or extracts from the VoIP LI specification(s) to permit their use as modules with TS 102 232 as the common delivery framework. The objective should be to strive for a common delivery framework, if necessary through the use of multiple different VoIP-specific service modules.

This work may also include proposed changes to TS 102 232 and 233 that may be necessary to support VoIP delivery or serving as a common delivery framework.