Tdoc S3 LI 01_157

Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #5/01 on lawful interception

Aspen, Colorado 30 October – 1 November 2001

Please direct all comments to
Rupert Thorogood at rupert.thorogood@homeoffice.gsi.gov.uk by 30 November 2001

Chairman:	Rolf Schnitzler	Mannesman
Support/Secretary:	Maurice Pope	ETSI
Meeting Secretary:	Rupert Thorogood	UK Home Office

List of participants:	see annex A
List of documents:	see **Tdoc S3LI01_158**

1 Opening of Meeting

The meeting was opened by the Chairman Rolf Schnitzler. The host Pierre Truong of Ericsson gave the domestic arrangements.

SMG10-WPD specifications: rapporteur

GSM 01.33: Lawful Interception requirements for GSM version 8.0.0   David Miles (Cellnet)
GSM 02.33: Lawful Interception - stage 1 version 8.0.0   (Motorola)
GSM 03.33: Lawful Interception - stage 2 version 8.0.0   Bernhard Spalt (Siemens)

3G LI specifications:

3G TS 33.106 Lawful Interception Requirements version 3.1.0   Berthold Wilhelm (Reg TP)
3G TS 33.107 Lawful Interception Architecture and Functions version 3.0.0 Berthold Wilhelm (Reg TP)

2   Meeting Objectives

The Chairman stated that the main issues for this meeting were:

1. **Work on 3GPP 33.108**

2. **Work on 3GPP 33.107 final draft**

3. **Clarification "ASN.1"**

4. **Preparation session T1/P1 SAH**

5. **Joint session with T1/P1 SAH**

3 Approval of Agenda

The agenda with working schedule in **Tdoc S3LI01_118** was proposed by the chairman and accepted by the meeting.

4. Registration and assignment of input documents

See **Tdoc S3LI01_158** the list of meeting documents.

5 Approval of Report of previous meeting

The final report from the latest S3-LI meeting in Saarbruecken during August 2001 is available in **Tdoc S3LI01 117 .** The draft report was approved with no amendments.

6 Reports

6.1 SA3

SA3 meeting in Sydney see **tdoc S3LI01_144** which include reports from Munich and Saarbruecken. Presented by Berthold Willhelm. Number of change CRs. Good arguments needed for change Request to inter SGDN area update for 481 also why. Waiting response from SA3 LI. All other CRs approved. To ask Maurice Pope . **Action** Uri will prepare new CR and then ask Maurice Pope for the correct wording. Will use change F. New CR as 149 updated xx for R4 and 150 is 98 updated for R99. Work Item not discussed but should be updated as new document 145. This to be considered by group and sent to Pope. Also presented 33.108 which was noted. Questions in **tdocs S3LI01_132** and **S3LI01_133** re ip mm.

6.2 ETSI TC SEC WG LI

TC Sec LI as tdoc S3LI01_146 presented by Bernd Adams who reported an unproductive meeting in Warsaw. The current Chairman's period has ended and Bernd Adams will act in Vienna where the meeting will chose a new Chairman. Most of the work items have been finalised and published. The active WI are a TR on ISDN LI functionalities as part of new version of 201 671. Second item revision of 201 xx8 requirement for network functions. Other documents completed at Friederickshafen and waiting approval. No news on the future of TC Sec – the ETSI Board has a new proposal which includes the future of LI and ESI. Robin Gape has produced a document that SA3 LI will define the handover spec but circuit switched solution will be done on a regional basis. Agreed single unified ASN.1 structure. The next meeting will be in November in Vienna. The Acting Chair would like to see as many at Vienna as possible.

6.3 ANSI T1P1.sah report given by Ron Ryan who said that the meeting met to progress work on defining US CALEA requirements for UMTS packet domain r99 and GPRS r5. There was participation from the Telcordia Technologies CIS Consultant who has submitted a CIS view on CALEA requirements for PD interception (in broad terms). The .sah group has prepared a contribution for 3GPP LI for discussion here as **tdoc S3LI01_139** this is an extensive document. The work continues and he thinks that 85% of material addressed. The remaining 15% are controversial such as SMS reporting source and terminating parties and reporting IRI against content for IP what is reported. ie which header. Additional timing of delivery. Goal to complete review this week in Aspen. Open issues as IMS domain.

Future meetings will be within T1P1 21 January before the next SA3 LI meeting. He assures us that the requirement will not limit other countries but will still comply with US requirements. The Chairman says he has not seen a "European" standard so the ILETS Explanatory Memoranda were subsequently tabled as **tdoc_S3LI01_153.**

6.4 TR 45 LAES (Lawfully Authorized Electronic Surveillance) tdoc S3LI01_148 Presented by Terri Brooks asking for cooperation between groups and saying that they have reviewed the 3GPP documents. Particular action require a more formal relationship and how this should be done. Rolf outlines work of LI which describes how LI will be done in IP networks. They are looking at what is required for the high level requirement at the e interface (ie between the system and the collection point). Refining the packet solution. Pierre said that with CS environment it was straightforward but in PD a new approach so that there are not divergent requirements. Ron Ryan tabled a LS (**tdoc S3LI01_123**) which defined the relationship between the various groups in the US.

Terri Brooks presented a paper on J-Std-025 and CALEA developments as **tdoc S3LI01_151**

6.5 TIPHON tdoc S3LI01_147 presented by Rupert Thorogood on behalf of John Horrocks. The group noted the contents and asked whether the TIPHON LI work item was still open. **Action** on Rupert Thorogood to ascertain status of TIPHON Work Item. There is a **tdoc S3LI01_142** as a LS from TC AT WGD on how to coordinate the work within ETSI and the associated bodies This had not been confirmed by the initiating group so it was not discussed. It will be discussed when the final version is in the **Action** Rolf to send e-mail to Edward Fitzgerald saying that the document will be discussed when the final version is available.

7   Work on TS33.108

Review of TS33.108 v0.1.0 tdoc S3LI01_111 presented by Ron Ryan incorporating decisions in Saarbrucken. Section 2 references have been reworked. Definitions section has been updated. No change in abbreviations. It was pointed out that there are other changes viz 6.5 table 2 where communications direction is retained. References in the annex updated. A .1.3 (Profiles) will be deleted. Question on whether an informative clause A.2.3 can appear in a normative document – decided to create a separate informative annex. The B.2 and B.4 Object Tree needs to be reviewed. The question of GPRS correlation number be defined where 8 or 20 octets are necessary. Editor will research. Several matters to be addressed in annex f. Should the deletions in section D be effected or annotated with "not used" or a general note. It was agreed that for the time being a note would be placed at the head of section D.

Definitions for TS33.108 v0.1.0 tdoc S3LI01_094 from Saarbruecken presented by Ron Ryan which were the amendments to the definitions carried forward to v0.1.0. There was some discussion on the definitions for interception subject and network identifier.

Harmonisation of HI2 and HI3 tdoc S3LI01_126 from Nokia presented by Giorgi Gulbani
This deals with apparent inconsistencies in the draft 33.108. There are proposed solutions in
tdoc S3LI01_127, tdoc S3LI01_128 and tdoc S3LI01_129. After some discussion it was agreed that the three elements are optional and that a version number will be placed in the ftp header. **Action** on Giorgi Gulbani to produce revised document **tdoc S3LI01_128**. Chairman stated that CRs are not necessary at this stage. Furthermore the Chairman is not convinced that it is necessary to put options into the standard. The meeting agreed that **tdoc S3LI01_127** is postponed (later accepted in part during the later discussion on **tdocS3LI01_139**), **tdoc S3LI01_128** to be updated and **tdoc S3LI01_129** is not accepted.

GLIC Header version tdoc S3LI01_116 from Siemens presented by Bernard Spalt on whether the LIID is required in the GLIC. After some discussion the meeting agreed to defer the decision following further consideration.

GLICv0 modification **tdoc S3LI01_130** from Nokia presented by Giorgy Gulbani concerned the impact of future requirements.

LIC (Lawful Interception Correlation) Header tdoc S3LI01_140 from Alcatel presented by Marcus Lutz and proposes an enhancement to the GLIC header.

Following the above three contributions the Chairman concludes that a new GLIC version is needed but asks if it should it be static or dynamic and secondly which encoding rules and thirdly about the fields. The Group agreed to adopt a dynamic header.

The group could not decide on a common encoding model. There are two candidates TLV and ASN.1 with 5:3 supporting TLV. To minimise the possible options in the spec the group were asked to review their thoughts and the issue will be tabled again in Amsterdam.

Proposed Additions, Enhancements and Changes tdocS3LI01_139 from Nortel presented by Ron Ryan supported by CALEA Implementation Section Telcordia Technologies, Inc. This was a lengthy document presented by the author but recommending that specific US items are highlighted. There was some discussion on the US specific comments and it was felt that an annex specific to the US will be included. Discussion stalled round the question of ASN.1 ownership. Chairman suggests that we make an ASN.1 tree in annex F in 33.108 normative for the US. As there appear to be divergent views within the US delegation the Chairman asks that a common view be expressed. There was a statement that the two standards would remain aligned (33.108 and 201 671).
The results of this execise are dokumented in Tdoc S3LI01 _139r1.
Action : A rapporteur is required to make the CRs for 201.671. **Action** : A workshop will be convened to check the tables against 33.107 and to agree the proposals in the **tdocS3LI01_139** and to raise the necessary CR for 33.107 and 33.108.

Change Request on 33.108 Tdoc S3LI01_127 by Nokia presented by Giorgi Gulbani. This deals with fixing of the CID mapping and the GPRS correlation number. It was agreed to delete communication identity number CIN and add correlation number (CN). **Action**: Giorgi Gulbani to review the composition of the GPRS correlation number and produce a new contribution.

Change Request on 33.108 ftp update Tdoc S3LI01_128 r1 by Nokia presented by Giorgi Gulbani. This is a revision of the original document. This was accepted. **Action**: Editor of 33.108 to amend the tables.

Proposed changes to 33.108 Tdoc S3LI01_125 by Ericsson presented by Pierre Truong. This is to align the document with 33.107. The changes were agreed with the exception of minor grammar and that the whole of chapter 5 be deleted and the scope will be amended. **Action**: Bernard Spalt to propose amendment to the scope of 33.108. The change in fig C.1 was rejected.

8.   ASN.1 issue

tdoc S3LI01_136 from BT presented by Bernd Adams regarding the management of the ASN.1 tree between 3GPP and the ETSI world. Proposal that ETSI is the body that maintains ASN.1 Tree. This was not resolved and the Chairman will discuss the matter with SA3.

tdoc S3LI01_121 from Nortel presented by Ron Ryan which proposed removing section B and making section F normative,just for the US is acceptable for the group**.**

9 Review on Reports LS

IP Based Multimedia Services Framework Report tdoc S3LI01_132 from 3GPP SA1 postponed to the next meeting. Members are asked to review these papers.

LS on the WID: AMR-WB Speech Service – Core Network Aspects tdocS3LI01_133 and 134 from TSG CN Plenary presented by Brad Owen. There is a new work item on wide band telephony service using a new CODEC. They wish to know whether this will have any impact on SA3 LI (forwarded from SA3). Questions were raised about the CODEC data and the bandwidth required . **Action** on Brad Owen to respond that there are potential impacts on LI and they are invited to the next 3GPP LI meeting in Amsterdam and would they provide us with the current version of their specification. This was later tabled as **tdocS3LI01_156** and agreed by the meeting.

10 Work on TS 33.107

Change request Interaction between LI and QoS. Tdoc S3LI01_082 by Motorola presented by Uri Baniel. This deals with the transport protocol to be used between the SGSN (GGSN) and DF3. UMTS has four QoS and it is necessary to define which is to be used. It was decided to delete the proposed 7.2.1.1 and add a reference to QoS to 7.2.1. This will be for release 5. An updated CR will be presented to SA3.

Change request Interaction between LI and QoS tdoc S3LI01_083 by Motorola presented by Uri Baniel. This deals with the usage of either FTP/TCP or GLIC/UDP or GLIC/TCP as the protocol between DF3 and the LEA. The proposal is to amend 6.2 to include reliability. This was agreed.

Change request on PDP context initiation tdoc S3LI01_102 (release 5) by Motorola presented by Uri Baniel. This deals with whether the MS has initiated the PDP session or is done by the network. This was accepted. . **Action**: Workshop to generate a change request to 201 671 in accordance with **tdoc S3LI01_103**.

Proposed Changes to TS 33.107 Release 5 tdoc S3LI01_124 by Nortel presented by Ron Ryan Due to the fact of a parallel session of T1P1.SAH Ron could not present this document. It will be tabled again in Amsterdam.

Event for SRNS Relocation tdoc S3LI01_135 by Siemens presented by Leopold Murhammer. This deals with the case when a subscriber roams into a PLMN and has to be intercepted this will be reported by sending necessary IRI records. The proposal was noted.

Gaps and restrictions in LI tdoc S3LI01_112 by Siemens presented by Leopold Murhammer. This deals with the problems between LI in legacy communications and multi media call scenarios and draws attention to loss of LI in new services. The presentation was noted and also passed to SA3.

Change Request on the use of H.248 in setting up a bearer intercept at MGW tdoc S3LI01_141 by Lucent Technologies presented by Brad Owen. This deals with an omission regarding the H.248 call flows and suggests that the diagram is placed in the annex. Ericsson offered to assist in refining this

proposal for the next. **Action**: Brad Owen and Janos Varro to update **tdoc S3LI01_141** for the next meeting.

Contribution on TrFO/TFO and LI interaction tdoc S3LI01_137 by Ericsson presented by Janos Varro. This deals with the effect of TrFO/TFO on LI and that the targets may be aware of the intercept. The proposal is that unmodified encoded speech be forwarded to the LEMF in calls using Transcoder Free Operation/Tandem Free Operation (TrFO/TFO) mode. This means that subscribers could detect that they are being monitored or could send information that is not detected by the LEA's. The group noted the problem and Ericsson will prepare a discussion paper for the next meeting. **Action**: Ericsson to prepare a discussion paper based on **tdoc S3LI01_137**.

12   Preparation of Joint Session with T1P1

This was done informally during the sessions.

13   Joint Session with T1P1

This did not take place formally but on an ad hoc basis during the meeting period.

14. Review of the meeting output

5. Note to Chairman: I was unable to capture all this at the time. Please amend.

LS to TR45 tdoc S3LI01_152 was approved

New version of Work Item description

Tdoc 112 to SA3 gaps and restrictions in LI

Two LS one to TR45 and one to CN4

Outputs for 33.108 for v 0 1 1 and 139 r1 summarised general agreements to 33.108

The meeting agreed to use a dynamic header for the GLIC.

15   Future Meetings

Develop January meeting agenda, work plan and the Workshop

The object of the workshop, which is scheduled for 2 days, will be to impact of 139 on 33.107 33.108 and for 201 671. Inputs are 139r1, 103 and updated version of 33.108. Provisional date 5-6 December in Dusseldorf.

Objectives for January meeting: complete 33.107 release 5 and review the output of the Workshop. A Chairman is required. SA3 will be advised that there is no nomination either for the next meeting or on the longer term.

Netherlands (MoJ, PIDS)   29-31 January 2002

UK (BT)   9-11 April 2002

Motorola (Chicago)   4-6 June 2002

16   Other business

There was no other business.

17   Summary, Output of the meeting

The Chair summarized the results of the meeting and the following outputs –(**6. Note to Chairman:** I guess this refers to section 14 ??**)**

Close of meeting

The Chairman thanked the delegates for their work.

Annex A: List of attendees

Name			Company	e-mail
Mr	Bernd	Adams	Deutsche Telekom AG	Bernd.adams@t-systems.de
Mr	Uri	Baniel	Motorola	Uri.Baniel@motorola.com
Mr	Bob	Beeson	Lucent	rbeeson@lucent.com
Ms	Brye	Bonner	Motorola	brye.bonner@motorola.com
Ms	Terri	Brooks		
Mr	Don	Codling	FBI CIS	Dcodling.1@askulea.net
Mr	Giorgi	Gulbani	Nokia	Giorgi.gulbani@nokia.com
Mr	Koen	Jaspers	MoJ, PIDS	Kbj@xs4all.nl
Ms	Sandra	Lopez	Telcordia Technologies	slopez@telcordia.com
Mr	Markus	Lutz	Alcatel SEL AG	m.lutz@alcatel.de
Mr.	Leopold	Murhammer	Siemens AG	Leopold.Murhammer@Siemens.at
Mr	Randall	Oster	Consultant	roster@attglobal.net
Mr	Brad	Owen	Lucent Technologies NS UK	bvowen@lucent.com
Mr	Ron	Ryan	Nortel Networks	Rryan@nortelnetworks.com
Mr.	Rolf	Schnitzler	D2 Vodafone	Rolf.Schitzler@d2vodafone.de
Mr.	Bernhard	Spalt	Siemens AG	Bernhard.Spalt@Siemens.at
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Mr	Rupert	Thorogood	Home Office	rupert.thorogood@homeoffice.gsi.gov.uk
Mr	Pierre	Truong	Ericsson	pierre.truong@ericsson.com
Mr	Janos	Varro	Ericsson	Janos.Varro@eth.ericsson.se
Mr	T	Wan	Rogers	twwan@vci.rogers.com
Mr	Berthold	Wilhelm	Reg TP	Berthold.Wilhelm@regtp.de
Mr	Wing	Yeung	Qualcomm	wyeung@qualcomm.com

Annex B List of Action Items

03_01/01	Motorola	New rapporteur for GSM 02.33 LI stage 2 version 7.20	Closed
04_01/01	Ron Ryan	Prepare short overview on US standard bodies for LI	Open
04_01/02	Robin Gape	Ask ETSI how amendments to ES 201 671 could be made without a vote. (Change requests belong to the group)	Open
04_01/02	Rolf Schnitzler	To ask SA3 for Far East member	Open
04_01/03	Rolf Schnitzler	Keep Sa 3 Chair updated of our work!	Ongoing
04_01/04	Rolf Schnitzler Robin Gape	Clarify the situation on The ASN.1 Object Tree	Open
04_01/05	Uri Baniel	produce **Tdoc 102 for r4 and 103 for r5** as CRs Direction of PDP Context	Done
04_01/06	Uri Baniel	to produce **Tdoc 104 and 105 for r4 and r5** Secondary Interception event	Done
04_01/07	Brad Owen	to produce **tdoc 106 for r5** Correct the MO-SMS and MT SMS events	Done
04_01/08	Berthold Wilhelm	to produce tdoc 108 Correct inconsistency in 33.107 R5	Done
04_01/09	Uri Baniel	to update **tdocs 082 and 083** Interaction of class of service	Done
04_01/10	Leo Murhammer	To prepare a note Differences and gaps in LI between legacy telecommunication and MM call scenarios For SA 3	Done
04_01/11	Rolf Schnitzler Berthold Wilhelm	The WI LI will be updated and send out for e-mail approval.	Open
05_01/12	Uri Baniel	Baniel will prepare new CR (from SA3 meeting in Sydney) and then ask Maurice Pope for the correct wording. (**Tdocs 98 149 and 150)**	Open
05_01/13	Terri Brooks	to prepare a paper on the work schedule adopted by TR45 LAES	Open
05_01/14	Rupert Thorogood	to ascertain status of TIPHON Work Item	Open
05_01/15	Rolf	to send e-mail to Edward Fitzgerald saying that their LS will be discussed when the final version is available	Open
05_01/16	Giorgi Gulbani	to review the composition of the GPRS correlation number and produce a new contribution.	Open
05_01/17	Rom Ryan	to amend the 33.108 tables in accordance with **Tdoc S3LI01_128 r1.**	Open
05_01/18	Bernard Spalt	to propose amendment to the scope of 33.108 arising from tdoc S3LI01_125.	Open
05_01/19	Brad Owen and Janos Varro	Varro to update **tdoc S3LI01_141** for the next meeting	Open
05_01/20	Janos Varro	to prepare a discussion paper based on tdoc S3LI01_137.	Open
05_01/21	Brad Owen	Owen to respond to TSG CN4 copied to SA3 that there are potential impacts on LI in response to **tdocS3LI01_133 and 134**	

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Action Ericsson to prepare a discussion paper based on tdoc S3LI01_137.

Action Brad Owen to respond to TSG CN4 copied to SA3 that there are potential impacts on LI in response to tdocS3LI01_133 and 134