

16 - 19 October, 2001

Sydney, Australia

Tdoc S3 LI 01\_117

**Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #4/01 on lawful interception**

**Saarbrucken 21-23 August 2001**

Please direct all comments to  
Rupert Thorogood at [Rupert.thorogood@homeoffice.gsi.gov.uk](mailto:Rupert.thorogood@homeoffice.gsi.gov.uk) by xx August 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_114	

## 1 Opening of Meeting

The meeting was opened by the Chairman Rolf Schnitzler and Berthold Wilhelm on behalf of RegTP. The domestic arrangements were given.

### SMG10-WPD specifications:

rapporteur

GSM 01.33: Lawful Interception requirements for GSM version 7.0.0xxx	David Miles (Cellnet)
GSM 02.33: Lawful Interception - stage 1 version 7.2.0	(Motorola)
GSM 03.33: Lawful Interception - stage 2 version 7.1.0	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)
<u>add release 4 and 5 versions.</u>	

## 2 Meeting Objectives

The main issues for this meeting were:

1. Clarify the situation of the 3GPP Handover Interface
2. Work on 33.108
3. Work on 33.107

## 3 Approval of Agenda

The proposed agenda with working schedule in **Tdoc S3LI01 080** was proposed by the chairman and accepted by the meeting.

#### **4. Registration and assignment of input documents**

See **Tdoc S3LI01 114** for the list of meeting documents.

#### **5. Approval of Report of previous meeting**

The final report from the latest S3-LI meeting in Munich during June 2001 is available in **Tdoc S3LI01 115**. The draft report was approved with three amendments: Ericsson, VIAG Interkom and the attendance list.

#### **6. Reports**

##### **6.1 SA3**

The SA3 official report was presented by Berthold Wilhelm. The CR on SMS was not agreed as it is not clear enough. The text is to be clarified.

WI for 33.108 was rejected as the SA3 Chairman thinks that it shall be incorporated in the existing work item description (Tdoc S3LI01\_093) The task is to work out 33 108 directly for UMTS release 5.

33.107 is published by SA3 - v 5.0.0 .

Rupert Thorogood raised the cross border issue from the Newbury report (Chapter 13) which is a requirement in Etr331. Clarification about possible gaps or differences to the legacy interception solutions will be presented to SA3.

##### **6.2 ETSI TC SEC WG LI**

The Chair of ETSI TC Security WG LI was present at the meeting and gave a short report (see tdoc 095) from the Helsinki meeting. He said that TR 101 331 had been agreed and that the ETSI membership was currently voting on 201 671 v2. ETSI Security WG LI were waiting for clarification of new work on 33.108 and a LS was sent to this (3GPP LI) meeting. Finally, the position of chair of WG LI is to be decided at Warsaw.

##### **6.3 ANSI T1P1**

The T1P1.sah (.sah = surveillance ad hoc) report was given by Ron Ryan.. They are responsible for UMTS GPRS and GSM. Tr45.2 will be set up by TIA by the end of this month, which deals with similar questions. Ron will insist on the responsibilities of T1p1.sah and keep SA3 LI informed. We asked Ron for a short paper describing the above

##### **6.4 ETSI TIPHON**

No information from WG8. Work items on LI are closed. No new WI on LI has arrived in WG8, although a work item DTS/TIPHON-03020 exists which is owned by WG3. The situation is not really clear. Next TIPHON meetings WGs 1 2 and 3 in Sophia. Plenary will be in November in France.

## **7 3GPP handover interface**

Liaison from TC Sec LI

**Tdoc S3LI01\_081**

- Statement SA 3 (submitted by Wilhelm Berthold) **Tdoc S3\_19**
- Work item description **Tdoc S3LI01\_086**

After the Work Item was rejected by SA3 the task changed to specify directly the handover interface for UMTS release 5.

The WI LI will be updated and send out for e-mail approval.

The work plan was reviewed. The first step is to produce the handover interface part for the packet domain by the end of this year; second is to complete the work for circuit switched and multimedia domain. The group agreed that alignment with the existing specifications e.g. ETSI ES 201 671 should be assured.

A new introduction and scope for the release 5 version were agreed and will be incorporated in next update of 33.108 which is tdoc S3LI01\_111.

The structure of the document was discussed and agreed which will now include CSD, PSD, IMS, ASN.1 description and HI2 and HI3 as separate chapters. The definitions, abbreviations etc. will be reviewed when the next version is available

## **8 TS 33.107 R5 Open areas and related contributions**

**Interaction between QoS classes and LI for 33.107**

**Tdoc S3LI01\_82**

**Tdoc S3LI01\_83**

This concerns the protocol to be used between the SGSN and DF3 which is not defined in 33.107 presented by Uri Baniel. The general reaction was that this is the X3 interface and therefore out of scope of the TS 33.107 on a stage 3 level.

It recognises four classes of service depending on the used application e.g. http, ftp, sip phone and voip. Proposed solution is that TCP is used for connection oriented and UDP is used for connectionless services like streaming.

Chair concluded that the CR is rejected but the concept itself is accepted  
Chair asks that 082 and 083 to be updated by Motorola for the next meeting.

**Second start of interception with PDP context active (CR - 33.107)**

**Tdoc S3LI01\_84**

Presented by Uri Baniel. This concerns an activation where a PDP context is already active. Suppose a second LEA activates to ADMF but nothing to SGSN. He will get unknown packets. Should the ADMF let the SGSN know about the second LEA so that a start signal shall be sent. A clarification is necessary in 33.107

Bernard and Uri checked 33.107 and found appropriate words to insert.

Change requests were created and will be presented to the next SA3 meeting as tdoc 104 and 105.

## **Inter-SGSN RA update with PDP context active (CR - 33.107)**

**Tdoc S3LI01\_85**

Presented by Uri Baniel. Target has services from (old) SGSN1 but LEA had only asked (new) SGSN to intercept the traffic. The target moves to new SGSN. This is a special situation of location dependant interception and should be covered by the 33.107.

Change requests were created and will be presented to the next SA3 meeting as tdoc 98 and 99.

## **LI call flows for IMS**

**Tdoc S3LI01\_089**

LI call flows for IMS introduced by Bernhard Spalt of Siemens. This gives examples of call flows for IMS and LDI. It was tabled for information.

## **Delivery of SMS**

**Tdoc S3LI01\_096**

**Tdoc S3LI01\_097**

These were presented by Brad Owen of Lucent and describe the delivery of SMS whether or not the transfer has been successful. SA3 at Newbury asked for a tighter definition.

These were approved to go to SA3. A third CR is needed for R5 and will be approved via e-mail.

## **Direction of PDP Context**

**Tdoc S3LI01\_074**

This was presented by Uri Baniel. It describes an indicator whether an PDP context is requested from the MS or the Network.

Change requests were created and will be presented to the next SA3 meeting as tdoc 102 and 103 after e-mail approval.

## **9 3GPP Handover interface**

**Tdoc S3LI01\_094**

### **TS 33.108 v0.0.2**

The proposed changes to TS 33.108 v0.0.2 tdoc 094 was presented by Ron Ryan (Nortel) who said that the changes resulted from a review by the CIS (CALEA Implementation Session). It was then reviewed by the meeting. The principal points were –

- the title is to be amended to show that it now applies to Release 5
- the scope will be reworded to show that the document applies to Packet Data, Circuit Switching and IMS and that National options are not precluded especially in the areas of security and the total number of interception requirements and delivery options.
- that the unused ASN.1 protocol lines in annexes A-D will not be deleted but annotated to show that they are not used in this version for packet data
- that a liaison statement is expected from TC Sec LI on the maintenance of the 3GPP ASN.1 Object Tree
- the annex C GPRS LI correlation header will be normative
- circuit switching will be addressed by specific reference to ANSI J-STD-025 and ETSI ES 201 671.

Ron Ryan will now complete the revisions, circulate the document for review as tdoc 111 by first week in September and take it to T1P1 and CIS in late September. Their comments will be distributed to SA3 LI in time for the October meeting.

### **Correlation of HI2 and HI3 for Packet Oriented**

**Tdoc S3LI01\_088**

Tdoc 088 presented by Bernhard Spalt of Siemens. Correlation of HI2 and HI3 for Packet Oriented in TS33.108. He proposes a unique LIID in GPRS. CID is named GPRS correlation number in the current version of TS33.108. This is a discussion document only and if approved it will result in several CRs/proposals after two weeks, when the updated version 33.108 is available. When it is agreed, Bernhard will also prepare a CR for ETSI TC Sec WG LI relating to ES 201 671.

### **GTP' as a handover protocol for UMTS.**

**Tdoc S3LI01\_092**

This paper was presented by Giorgi Gulbani to propose the use of GTP' as a handover protocol for UMTS. Proposed to R5 for UMTS HI3. After some discussion the proposal was rejected but the Chair asks that it should not be presented again for six months.

## **10 Liaison Statements**

**Tdoc S3LI01\_101**

Tdoc 101 was presented by Matti of Ericsson. The draft LS is needed to SA, CN because there are references to LI requirements in other areas or more precisely in specifications prepared by other 3GPP groups. It seems that, firstly, these requirements are not complete. Secondly they may be contradictory and thirdly it may not be identify all the requirements. The LS asks that SA and CN for their co-operation and co-ordination and asks that in future they should liase over future work. LI is the specific responsibility of this group according to our terms of responsibility.

The agreed version is tdoc 107 will be sent out by the Chair to CN and SA.

## **11 Late contributions**

This was presented by Giorgi Gulbani of Nokia and concerns three additional information elements in the ftp description in 33.108. These values have not been previously defined. Agreed to defer until the next meeting where the proposed benefits are to be clearly explained by Nokia. **Action** Giorgi Gulbani to produce a revised document as tdoc110 for the next meeting in good time.

Bernhard noted that similar late contributions had been offered to ETSI TC Sec WG LI and the contribution should go to the next meeting. Robin Gape agreed and said the change is not necessary for the system to work and is more concerned with protocol analysis. He adds that, as written, the proposed changes this will change the protocol already defined in TS 101 671 & ES 201 671 currently under vote.

Agreed to defer until the next meeting, a new input will be produced by GG where the benefits are clearly explained.

## **12 Organisational**

It was agreed that documents and agenda items for all forthcoming meetings shall be distributed or placed on the server by the Thursday of the previous week.

Otherwise the items will not be discussed!

### **13 Future Meetings**

Aspen (Colorado, US) 30 October-2 November (joint session with T1P1.sah).

Netherlands (MoJ, PIDS) 29-31 January 2002

possibly in the UK (BT) 9-11 April 2002

possibly Motorola (Chicago) 4-6 June 2002.

### **14 Objective of the next meeting**

Stable draft of 33.108 release 5 packet domain.

Final draft of 33.107 release 5.

Preparation of the joint session with T1P1.sah

### **15 Other business**

There was no other business.

### **16. Summary, Output of the meeting**

The Chair summarized the results of the meeting and the following outputs –

CR

S3LI01\_096 Correct the MO-SMS and MT-SMS events R99

S3LI01\_097 Correct the MO-SMS and MT-SMS events R4

S3LI01\_106 Correct the MO-SMS and MT-SMS events R5

S3LI01\_098 Inter SGSN Routing Area Update Event R4

S3LI01\_099 Inter SGSN Routing Area Update Event R5

S3LI01\_102 Direction of PDP Context R4

S3LI01\_103 Direction of PDP Context R5

S3LI01\_104 Secondary Interception Activation Event R4

S3LI01\_105 Secondary Interception Activation Event R5

S3LI01\_108 3Gpp 33.107 Updated/Cleared S3LI01\_77

LS

S3LI01\_107 Liaison to SA, CN

### **Close of meeting**

The Chairman thanked RegTP for their excellent hospitality and the delegates for their work. And gave our best wishes to Matti Airaksinen.

## Annex A: List of attendees

Name		Company	e-mail
Mr	Bernd Adams	Deutsche Telekom AG	Bernd.adams@t-systems.de
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Mr	Berthold Wilhelm	Reg TP	<a href="mailto:Berthold.Wilhelm@regtp.de">Berthold.Wilhelm@regtp.de</a>

## Annex B List of Action Items

03_01/01	Motorola	New rapporteur for GSM 02.33 LI stage 2 version 7.20	open
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!	open
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	open
04_01/06	Uri Baniel	to produce Tdoc 104 and 105 for r4 and r5 Secondary Interception event	open
04_01/07	Brad Owen	to produce tdoc 106 for r5 Correct the MO-SMS and MT SMS events	open
04_01/08	Berthold Wilhelm	to produce tdoc 108 Correct inconsistency in 33.107 R5	open
04_01/09	Uri Baniel	to update tdocs 082 and 083 Interaction of class of service	open
04_01/10	Leo Murhammer	To prepare a note Differences and gaps in LI between legacy telecommunication and MM call scenarios For SA 3	open
04_01/11	Giorgi Gulbani	to produce a revised document as tdoc110 missing elements in the FTP description	Open
04_01/11	Rolf Schnitzler Berthold Wilhelm	The WI LI will be updated and send out for e-mail approval.	open