Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #3/02 on lawful interception

Budapest 4-6 June 2002

Please direct all comments to

Rupert Thorogood at rupert.thorogood@homeoffice.gsi.gov.uk

Chairman: Brye Bonner Motorola

Vice-chairman: Bernd Adams Deutsche Telekom AG

Support/Secretary: Maurice Pope ETSI

Meeting Secretary: Rupert Thorogood UK Home Office

List of participants: see annex A List of documents: see annex C

1 Opening of Meeting

The meeting was opened by the Chair, Brye Bonner of Motorola.

3G LI specifications:

3G TS 33.106 Lawful Interception Requirements version 5.0.0	Berthold Wilhelm (Reg TP)
3G TS 33.107 Lawful Interception Architecture and Functions version 5.2.1	Berthold Wilhelm (Reg TP)
3G TS 33.108 Handover Interface for Lawful Interception version 1.1.0	Ron Ryan (Nortel Networks)

1 Meeting Objectives

The Chair stated that the main issue for this meeting is to finalise TS 33.108 release 5 for the June SA meeting.

1.1 Welcome and logistics

The Chair welcomed the delegates and the host, Janos Varros of Ericsson, also welcomed the delegates and outlined the facilities.

2 Approval of Agenda

The agenda with working schedule in **tdoc** <u>S3LI02_117r1</u> was proposed by the chair and agreed without modification.

3 Registration and assignment of input documents

The input documents are listed in Annex C. Documents up to and including tdoc <u>S3LI02 118</u> were accepted. The late contributions will be considered at the end of the agenda.

4 Approval of Report of previous meeting

The final report from the S3-LI meeting in Orlando 9-11 April 2002 was tabled as <u>Tdoc S3LI02 103</u>. It was decided that the SMG documents would be removed to an annex. The report was approved with the exception of the version numbers of TS 33.107 (now 5.2.1) and TS 33.108 (now 1.0.0).

4.1 Discuss status of <u>tdoc 3LI02 090</u> Identification of deficiencies in TS33.107 and TS 33.108 regarding Quantitive aspects by Telecordia and <u>tdoc S3LI02 091</u> Identification of deficiencies in timing by Telecordia. These documents had been tabled late at the previous meeting. They were accepted.

4.2. Action Points from Orlando see Annex B

The following action points were closed: AP02-14, AP02-16, AP02-17 and AP02-18. The following action points remain open AP02-08, AP02-13 and AP02-15. AP02-15 is to be referred to the ILETS STC.

5 Reports

5.1 SA3 WG3

Berthold Willhelm of RegTP reported that the CRs to TS 33.107 had been slightly modified and are now published. SA3 agreed to approve TS 33.108 version 1.0.0 by e-mail and no negative comments were received by the approval deadline of May 30. The document is expected to be presented to SA at the June meeting.

5.1.1 Report of meeting SA#22 sees section 9.

5.2 SA5

<u>Tdoc S3LI02 113</u> "Distribution of IMS charging ID (ICID) from GGSN to SGSN". Marcus Lutz of Alcatel presented this document and explained that the discussion on the IMS charging ID is ongoing. He thinks that if a solution to IMS charging is found this can be applied to the LI work. The group will continue to monitor this development.

AP02-19 Marcus Lutz to monitor the IMS charging ID situation.

5.3 ETSI TC LI

There was a liaison statement <u>tdoc S3LI02_118</u> asking that TC LI be kept informed of work in 3GPP S3 LI. Giorgi Gulbani of Nokia offered to formally convey the appropriate matters between TC LI and 3GPP LI. The Chair will draft an LS to ETSI TC LI.

5.4 T1P1.sah

Ron Ryan of Nortel presented the report orally. He reported that there had been a meeting in Key West and they reviewed open issues, most of which are closed. They reviewed the contribution on security remanded to sah from LI and determined that no change should be made. The other outstanding issue was SMS redirected messages.

5.5 TR45 LAES

Brye Bonner of Motorola presented this reported orally. The FCC has produced new definitions, which will be reflected in J-STD-025A. CDMA2000 contributed stage 1 work to be incorporated into J-STD-025B. Telecordia/CIS contributions for stage 1 are being reviewed. J-STD-025B stage 1 is expected to be approved by September.

5.6 TIPHON

A TIPHON Report <u>tdoc S3LI02 098</u> was tabled from the previous meeting. The Group felt it was unclear on the formal requirements for TIPHON LI and questioned the status of the document. It was felt that the matter would be better dealt with in ETSI TC LI and The document was noted.

6. TS 33.108 v1.1.0

6.1 tdoc S3LI02 115/6. Are the marked and unmarked latest versions of TS 33.108 and were introduced by Ron Ryan of Nortel who explained the revisions. There was some discussion on the tags for the private extensions in section under B3 IRI and it is proposed to refer this to ETSI TC LI. There is a query on the map datum enumeration of WGS84. There were a number of changes, mainly editorial, which will be developed into a CR for later submission to SA. Tdoc S3LI02 116 will be presented to the SA June meeting for release 5 approval.

Review of TS 33.108 v5.0.0 as tdoc S3LI02_116r1. This was presented by Ron Ryan of Nortel for information and includes all the previously agreed editorial changes. After a number of minor corrections this will be revised as a CR to TS 33.108.and distributed via e-mail by 15 June. Members will then review it with comments by June 30. This CR will be sent to SA3 for the July meeting (after 33.108 v5.0.0 is approved).

6.2 Circuit Switch Domain contribution <u>tdoc S3LI02 106</u>. This was presented by Bernard Spalt of Siemens who said that it would make sense to have a solution for UMTS. He has adapted the current European interface HI2. He considers it to be an essential CR for r5.

There was some discussion on whether it was necessary to use the entire section or just refer to TS 201 671.

It was noted that parts of 201 671 had been modified as the intention is to make it align with the rest of 33.108. After a lengthy discussion it was decided that Bernard would produce a comparison document illustrating the required changes within a month. This will be followed by an e-mail discussion prior to the next meeting.

6.3 **Definitions of the delivery function and the mediation function** tdoc S3LI02 110. This CR was presented by Giorgi Gulbani of Nokia who said that the mediation function is incomplete and the delivery function is missing altogether from 33.108. After a lengthy discussion it was decided an alignment is necessary regarding the mediation functions and Georgi will be revise his contribution for the next meeting.

7. TS 33.107 Change Requests

Essential clarification to the Timestamp IE, 33.107 version 3.5.0 (rel 99)	tdoc S3LI02_107
Essential clarification to the Timestamp IE, 33.107 version 4.3.0 (rel 4)	tdoc S3LI02 108
Essential clarification to the Timestamp IE, 33.107 version 5.2.1 (rel 5)	tdoc S3LI02 109

These were presented by Giorgi Gulbani of Nokia and arose from the Orlando meeting. He proposed the use of the local clock for timestamping. There is no action for 107 and 108. The proposal in <u>tdoc</u> **S3LI02 109** was accepted for release 5 and the category in the CR was changed to F.

Additional X3-interface parameters, 33.107 version 5.2.0 tdoc S3LI02 112 Marcus Lutz of Alcatel proposed aligning 33.107 with 33.108 by adding a timestamp and T-PDU direction to the X-3 interface. After a lengthy discussion on sequencing and packet delivery it was decided that the time stamp and direction would be optional and the change was accepted as modified in tdoc S3LI02 112r2.

8. TS 33.106 Change Requests

Clarify intercept capabilities <u>tdoc S3LI02_114</u>, presented by Ron Ryan of Nortel, is a resubmission of a contribution to the Orlando meeting and is intended to provide information on responsibilities of the Network Operators regarding encryption. After including the addition of known encryption key information the document was reissued as tdoc S3LI02_114r2.

9.Discussion on "Prefix Allocation for IPv6

Liaison statements on auto-configuration and other IPv6 issues. <u>Tdoc S3LI02 111</u> ((S5-024024, S5-024024, S3-020184, S2-020760, S2-020761, S2-020762, S3-020181 (N3-020361, N3-020328)). This was an action point from Orlando following the introduction of support to IPv6 autoconfiguration in UMTS and was presented by Giorgy Gulbani of Nokia. This lists the events in the stateless address autoconfiguration case and proposes that the GGSN should report a new event. After discussion it was decided to draft an LS to CN4, copied to SA3, identifying the problem and asking for their response.

10. Review change request outputs

<u>Tdoc S3LI02 114r2</u> reviewed by Ron Ryan of Nortel, includes amendments to the CR form for 33.106 v5.0.0 changing the version number, the origin as T1P1 and a number of further amendments. This was approved.

<u>tdoc S3LI02</u> <u>109r2</u> is the CR on 33.107 regarding the clarification of the timestamp and was reviewed by Giorgi Gulbani of Nokia. This was approved.

tdoc S3LI02 112r2 is the CR on 33.107 regarding additional X3 parameters and was reviewed by Marcus Lutz of Alcatel. This was approved.

tdoc S3LI02 125r1 is an LS from the Chair to ETSI TC LI regarding the rapporteur and was reviewed by the Meeting and approved.

tdoc S3LI02 126 is an LS from the Group to CN4 regarding IPv6 stateless address autoconfiguration and was reviewed by Giorgi Gulbani of Nokia. The debate was reopened and it was decided to hold the document for subsequent discussion. The Chair will issue an LS to SA2 stating that there might be an issue and further discussion will take place.

<u>tdoc S3LI02 119</u> is a discussion document (draft CR for 33.108) on the session correlation identifier and was reviewed by Ron Ryan of Nortel. After some discussion the concensus of the group is that the LEMF is able to correlate all communications with SIP information. There is no need for a separate correlation.

11. Review meeting output

Revised Work Item (SA3 # - S3-020131) from April

This is the responsibility of the ETSI Secretariat.

11.1 Develop September/October meeting agenda, work plan

not done.

12. schedule 2002 meeting dates and venues

Bernd Adams explained that Companies that are members of "European Friends of 3GPP" will not host meetings on their own but that meeting should now be held at ETSI Headquarters.

- 24-26 September in Helsinki hosted by Nokia.
- 2-14 November in San Diego hosted by Ericsson.
- 13.1 draft proposed meeting dates and venues for 2003
- 18-20 February Paris hosted by Aqsacom.
- 13-15 May in Sophia Antipolis hosted by European Friends of 3GPP.
- 16-18 September in US host to be advised.
- 18-20 November in London host to be advised.

13. Other Business

The meeting schedule allowed the group to discuss the following documents distributed after the document closure date.

Mobile terminating part of SMS <u>tdoc S3LI02 120</u>. This was introduced by Selvam Rengasami of Telcordia/CIS who considers that it is not covered in the standard and proposed a discussion. The contributor agreed that a craft CR against 33.108 will be produced for discussion at the next meeting.

Alternative for IP MM Service (IMS) interception <u>tdoc S3LI02 121</u>. This was introduced by Selvam Rengasami of Telcordia/CIS who developed this from the previous meeting. There are other proposals by other bodies and he feels that a harmonised approach would be preferable. He described the approach in J-STD-025. After some discussion it was decided to take no further action.

Background and examples for supporting packet activity detection and IRI reporting tdoc S3LI02 122. This was introduced by Selvam Rengasami of Telcordia/CIS who said that this is related to documents 123 and 124 which are reissued from the January meeting with minor changes. This document provides examples for how network suppliers could support detection and reporting of individual packets when the court order does not permit content.

Packet activity detection and IRI reporting in TS 33.107 and 33.108 tdocs S3LI02 123 and 124. These were dealt with together by Selvam Rengasami of Telcordia/CIS to illustrate the reports that may be implemented and proposes new sections in the Standards. The contributor agreed that draft CRs against 33.108 will be prepared for discussion at the next meeting. E-mail comments are welcomed..

Close of meeting

The Chair thanked Ericsson for the facilities and for the boat trip last evening.

Working procedures

Contributors are encouraged to perform the following when issuing contributions for an upcoming meeting.

- 1. Request TDOC number.
- 2. Distribute contribution via email to LI group members.
- 3. Send contribution to Maurice to upload.

For the next meeting the cut off date for Tdoc numbers to be received and contributions to be distributed/uploaded is September 18.

It is requested that all contributions be upload no later than Wednesday before the meeting. Contributions brought into the meeting or uploaded later than Wednesday will be discussed at the end of the meeting if time is available. The meeting schedule will not be changed to accommodate late contributions.

With the acceptance of TS 33.108 release 5, all contributions are to be in change request format.

Annex A: List of attendees

Name		ne	Company	e-mail		
Mr	Bernd	Adams	Deutsche Telekom AG	Bernd.adams@t-systems.com		
Ms	Brye	Bonner	Motorola	brye.bonner@motorola.com		
Mr	Stefan	Bjornson	Ericsson	Stefan.bjornson@era.ericsson.se		
Mr	Adrian	Escott	Hutchinson 3G	Adrian.escott@hutchison3g.com		
Mr	Giorgi	Gulbani	Nokia	Giorgi.gulbani@nokia.com		
Mr	Koen	Jaspers	MoJ, PIDS	Kbj@xs4all.nl		
Mr	Burkhard	Kubbutat	Mmo2	Burkhard.kubbatat@O2.com		
Ms	Sandra	Lopez	Telcordia	slopez@telcordia.com		
Mr	Markus	Lutz	Alcatel SEL AG	m.lutz@alcatel.de		
Mr	Leopold	Murhammer	Siemens	Leopold.murhammer@siemens.com		
Mr	Brad	Owen	Lucent Technologies NS UK	bvowen@lucent.com		
Mr	Stephane	Polke	Aqsacom	Stephane.malle@aqascom.com		
Mr	Selvam	Rengasami	Telecordia	srengasa@telcordia.com		
Mr	Ron	Ryan	Nortel Networks	Rryan@nortelnetworks.com		
Mr	Jorma	Seurujarvi	Nokia	Jorma.seurijarvi@nokia.com		
Mr.	Bernhard	Spalt	Siemens AG	Bernard.spalt@siemens.com		
Mr	Les	Szwajkowski	Calea Implementation Section	Lmski.calea@fbi.gov		
Mr	Rupert	Thorogood	Home Office	rupert.thorogood@homeoffice.gsi.gov.uk		
Mr	Janos	Varro	Ericsson	Janos.Varro@eth.ericsson.se		
Mr	Berthold	Wilhelm	Reg TP	Berthold.Wilhelm@regtp.de		

Annex B List of Action Items

AP02_01	Berthold	to clarify 010611	closed
_	Wilhelm and		
	Maurice Pope		
AP02_02	Giorgy Gulbani	to provide a LS to VASP	Closed
AP02_03	Pierre Truong	to draft a LS to SA2 SA1	Closed
AP02_04	Berthold Wilhelm and Maurice Pope	to discuss the status of r4 and r5 of 33.108	Closed
AP02_05	Chair	to draft an LS to TC LI regarding their new WI on IP interface	Closed
AP02_06	Robin Gape	to check the syntax with the PEX at ETSI.	Open
AP02_07	Manfred Beirer	to amend the chart and to carry the proposal to TC SEC LI for approval (<u>tdocS3LI02 052</u>).	Closed
AP02_08	Manfred Beirer	to make his PPT-presentation available as a separate TD to the meeting(<u>tdocS3LI02_053_</u>).	Closed
AP02_09	Manfred Beirer	to update his presentation for input to the next TC SEC LI meeting (<u>tdocS3LI02 054</u>).	Closed
AP02_10	Robin Gape	to provide a report from Ratingen workshop with the action points.	Closed
AP02-11	Chairman	to ask Maurice Pope if there are annexes specific for certain countries	Closed
AP02-12	Pierre Truong and Brye Bonner	to prepare and circulate a draft for e-agreement.	Closed
AP02-13	Maurice Pope	to ask chair of SA3 whether he considers it desirable for far east members to join the LI Group	Open
AP02-14	Rupert Thorogood and Chair	to draft LS regarding the possibility of an unlicensed provider controlling the networks	Closed
AP02-15	LE representatives	discuss the implications of the TSG-CN5 reply	Open
AP02-16	Chair	to ask SA3 to approve passing the revised 33.108 directly to SA (this to include CRs to 33.107)	Closed
AP02-17	Pierre Truong and Giorgi Gulbani	will produce a paper describing the IPv6 problem	Closed
AP02-18	Giorgi Gulbani	to write a CR to 33.107 regarding timing deficiency	Closed
AP02-19	Marcus Lutz	to monitor the IMS charging ID situation	

Annex C List of Documents

TD # S3LI02	Title	Source	Meeting	Doc for	Comments	Status
117	Draft Agenda	Chair	2002-06	Approval		Approved

TD # S3LI02	Title	Source	Meeting	Doc for	Comments	Status	
106	CS for TS 33.108	Siemens	2002-06	Approval	Members		
106r1					request more information	No action	
107	Essential clarification to the Timestamp IE. 33.107 R99	Nokia	2002-06	Approval	CR on R99 not necessary	No action	
108	Essential clarification to the Timestamp IE. 33.107 Rel-4	Nokia	2002-06	Approval	CR on rel. 4 not necessary	No action	
109	Essential clarification to the Timestamp	Nokia	2002-06	Approval	Accept with	Accept as	
109r1	IE. 33.107 Rel-5				modificatio ns	modified	
109r2							
110	Definitions of the delivery function (DF) and the mediation function (MF) 33.108	Nokia	2002-06	Approval	Two CRs, one for 33.107 and one for 33.108	CRs will be developed for Sept. meeting	
111	Implications of the IPv6 auto- configuration on LI	Nokia	2002-06	Discussion	CR to CN4 to be developed	Noted	
112	33.107 CR on additional X3-interface	Alcatel S.A.	2002-	Approval		Accept as	
112r1	parameters		062002- 06			modified	
112r2							
113	Distribution of IMS charging ID from GGSN to SGSN	Alcatel S.A.	2002-06	Information		Noted	
114	33.106 CR on Security	T1P1 (Nortel Networks)	2002-06	Approval		Accept as modified	
114r1		rtetworkey				modified	
114r2	70.00.400.1/		0000 00				
115	TS 33.108 Version 1.1.0 with Change Marks	Rapporteur	2002-06	Approval		Accept as modified	
116	TS 33.108 Version 1.1.0 Clean (revisions accepted)	Rapporteur	2002-06	Approval	Revise with modificatio	Accept as modified.	
116r1					ns from 115	116r1 will be put into CR form	
118	Liaison from ETSI SEC LI	SEC LI Chair	2002-06	Discussion		Response liaison TDOC # 125	
119	Session Correlation	Nortel Networks	2002-06	Discussion		No action	
The following documents were distributed during the meeting							
120	SMS MT	Telcordia	2002-06	Discuss		No action,	
		CIS		and approve		CR for next meeting	
121	IMS Interception	Telcordia CIS	2002-06	Discuss and approve		No action	
122	Packet Activity Background	Telcordia CIS	2002-06	Discussion			

TD # S3LI02	Title	Source	Meeting	Doc for	Comments	Status
123	TS 33.107 Packet Activity Change	Telcordia CIS	2002-06	Discuss and approve		No action CR for next meeting
124	TS 33.108 Packet Activity Change	Telcordia CIS	2002-06	Discuss and approve		No action CR for next meeting
125 125r1	LS to ETSI TC LI	Chair	2002-06	Approve		Accepted as modified
126	LS to CN4 on Prefix Allocation for Ipv6	Nokia	2002-06	Approve	Hold	No action
127	LS to SA2 on Prefix Allocation for IPv6	Chair	2002-06	Approve		Accept
128	Meeting Report from Budapest	Secretariat	2002-06	Approve		

Annex D List of Change Requests

tdoc S3LI02_109r2 33.107 r5 timestamp

tdoc S3LI02_112r2 33.107 timestamp and direction adding

tdoc S3LI02 114r2 33.106 clarify interception capabilities

Annex E List of Liaison Statements

tdoc S3LI02_125r2 response to TC LI tdoc S3LI02_118 re rapporteur tdoc S3LI02_127 Ipv6 autoconfiguration

Annex F List of Related Specifications

SMG10-WPD spécifications:

rapporteur

GSM 01.33: Lawful Interception requirements for GSM version 8.0.0 GSM 02.33: Lawful Interception - stage 1 version 8.0.0

Brye Bonner (Motorola)
Bernhard Spalt (Siemens)

David Miles (Cellnet)

GSM 03.33: Lawful Interception - stage 2 version 8.0.0