

**Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #2/03
on lawful interception**

Jackson Hole, Wyoming 22-24 September 2003

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

Management Team:

Chairman:	Brye Bonner	Motorola
Vice Chairman:	Burkhard Kubbutat	O2 Germany
Meeting Secretary:	Rupert Thorogood	UK Home Office

List of participants:	see annex A
List of action points:	see annex B
List of documents:	see annex C
List of Change Requests	see annex D
List of Liaison Statements	see annex E
List of related specifications	see annex F

3G LI specifications:

3G TS 33.106 LI Requirements version 5.1.0:	Berthold Wilhelm (Reg TP)
3G TS 33.107 LI Architecture and Functions version 5.5.0:	Berthold Wilhelm (Reg TP)
3G TS 33.108 Handover Interface for LI version 5.4.0:	Ron Ryan (Nortel Networks)
3G TS 33.106 LI Requirements version 6.0.0:	Berthold Wilhelm (Reg TP)
3G TS 33.107 LI Architecture and Functions version 6.0.0:	Berthold Wilhelm (Reg TP)
3G TS 33.108 Handover Interface for LI version 6.2.0:	Ron Ryan (Nortel Networks)

1 Welcome and Logistics

The meeting was opened by the Chair, Ms Brye Bonner of Motorola. She welcomed the delegates. After introductions Ron Ryan of Nortel Networks welcomed the delegates on behalf of North American friends or 3GPP who are the meeting hosts, and explained the logistics.

2. Apologies were received from Jari Haatainen (who will be leaving the Group), Gyorgi Gulbani, Erwin Forster and Martin Kassens.

3. Approval of Agenda

The agenda with working schedule in Tdoc S3LI03 080 was proposed by the chair and agreed.

4. Nomination and voting for Vice-Chair

Bernd Adams, the existing vice chair, has resigned. Burkhard Kubbutat of MMO2 Germany was nominated as vice chairman and approved by approbation.

5. Registration and assignment of input documents

The input documents are listed in Annex C.

6. Approval of Report from Vienna

The report from the S3-LI meeting in Vienna 20-22 May 2003 was tabled as Tdoc S3LI03 081. The report was approved with the following amendment from Marcus Lutz – the conclusion in section 3a should read:

Not to send out the LS for requesting a change of the GTP. 2. Action Point to Ron Ryan and Marcus Lutz to check all Specification (33.106, 33.107 and 33.108) to find places where some clarification has to be added.

7. Review Action Points from Vienna

List of action points in Tdoc S3LI03 081 from Vienna.

All the outstanding Action Points were closed with the exception of AP03_27 on the Chair to advise SA3 on the use of the term ANP in SA3LI. This was completed later in the meeting. The new Action Points are listed in Annex B

8. Review outcome of LI and CRs to SA3 and ETSI TC LI

8.1 Liaisons

8.1.1 S3LI03 073 LS to ETSI TC LI.

Liaison was accepted and incorporated into TC LI 003020 spec.

8.2 Change Requests

Brad Owen agreed to handle the CRs to SA3 in future.

All the CRs from the Vienna meeting have been accepted by SA3.

9. Reports

9.1 SA WG3

Berthold Wilhelm of RegTP tabled the report **tdoc S3LI03_089** for information. Selvam Rengasami asked about the procedure and timetable for approval of CRs. Brad Owen confirmed the procedure will allow for two weeks unless there are any major technical changes.

Bernhard Spalt asked about the proposed joint meeting with SA3 in London in November. It seems that their next meeting will now be in Munich so a joint meeting is not possible.

All CRs to be approved by e-mail after LI meeting

9.2 SA report

There was no formal report but Brad Owen reported that SA has frozen release 5

9.3 ETSI TC LI report

In the absence of Gyorgi Gulbani **tdoc S3LI03_099** was tabled for information. Peter van der Arend (the chair of TC LI) reported verbally from the Copenhagen meeting that there was no impact on the work in 3GPP LI. He noted the work on the IP services –

ETSI Doc No	Title
TS 102 232	Telecommunications Security; Lawful Interception; Handover specification for IP delivery
TS 102 233	Telecommunications Security; Lawful Interception; Service specific details for Internet Access Services
TS 102 234	Telecommunications Security; Lawful Interception; Service Specific details for e-mail services

There was an LS on aligning the scope. The Chair asked about the objection to referring 33.108 in the ETSI document. This will be checked by the ETSI TC LI Chair and Secretary. It seems that it is referred to in the document and will be normalised at the next meeting in Moscow.

Selvam Rengasami asked about the Global LI workshop. Peter van der Arend responded that the OCG had instructed that following the GSC meeting in Ottawa that ETSI TC LI should organise a

Global Workshop. The intention is to promote ETSI LI standards in the rest of the world especially the Far East. This will be addressed in Moscow. Pierre Truong commented that the standards may be available but they may be reluctant to participate in an open forum (in 3GPP SA2 they have asked that LI is left as a national option).

9.4 T1P1.5 report

Ron Ryan of Nortel Networks tabled [tdoc S3LI03_086](#) and commented in addition that 025-B (joint project on packet data) where there are references to 33.108 and GPRS/UMTS. The FBI expressed concern on the lack of packet activity in the CDMA2000 solution. He said that 33.108 r5 is being balloted this month and ballot comments will be resolved in November. The ballot comments on 33.108 will be distributed when he has received them. The FBI expressed concern on the lack a packet activity. They also noted that DDE (Dialed Digit Extraction) is not available.

They have also looked at Wireless LAN for US requirements and given the current WLAN architecture, the expressed conclusion was no new UMTS LI capabilities are needed at this time as the existing capabilities in TS 33.108 appear to be sufficient.

Broadcast MM was also discussed briefly and there were questions on whether support for these services were required as they may be defined as information services. Bernhard Spalt asked about multicast and broadcast services (i.e. to telecoms). This capability is being left open.

Finally on the question of DDE several scenarios were discussed in T1P1 and a number of issues were identified in each scenario. He suggested that this should be done on a per warrant basis. This is addressed again as [tdoc S3LI03_087 and 088](#).

Two new projects are being proposed by TIA. They are additional LEAS requirements under CALEA and – non required capabilities. These should not impact 3G LI documents.

Work continues on voice over packet in the wired environment.

Selvam Rengasami queried the third bullet point on the existing capabilities for WLAN. Ron Ryan agreed to make a minor deletion and reissue the document as 086r1.

9.5 TR-45 LAES

The Chair had tabled [tdoc S3LI03_082](#) as a report but Terri Brooks of Nokia took the opportunity to comment verbally on the status of TR45 LAES.

Two new projects were accepted by the LAES and forwarded for final approval to T1 and TIA. The first project is to “produce a new T1/TIA J-STD containing the messaging for support of additional LAES capabilities. Messages should be able to toggle on/off, as implementations of these capabilities are optional and to be provided upon request with negotiated terms. This J-STD assumes a J-STD-025 embedded architecture, messaging and protocol for communications surveillance. This standard is not being developed to meet the requirements of CALEA.

The second project is a revision to J-STD_025B intended to include CALEA capabilities for new services and standard maintenance following J-STD-025B.

ANSI J-STD-025A has been distributed in published form by TIA on April 16, 2003.

The ballot copy of J-STD_025B was distributed for information.

9.6 TISPAN (TIPHON)

The inaugural meeting of TISPAN takes place at ETSI HQ on 22 September. Details of the meeting should be available shortly on the ETSI server.

10. Liaisons

11. TS 33.106 Rel. 5 and Rel. 6

11.1 Updates to Release 5 33.106 v.5.1.0

There were no contributions

11.2 Contributions towards Release 6 33.106v.6.0.0

There were no contributions

12. TS 33.107 Rel. 5 and Rel. 6

12.1 Updates to Release 5 33.107 v.5.5.0

There were no contributions

12.2 Contributions towards Release 6 33.107v.6.0.0

12.2.1 Change Request – MSISDN/IMEI clarification for GPRS interception

tdoc S3LI03_094 is a CR on TS 33.107 r5 presented by Marcus Lutz of Alcatel and concerns the fact that MSISDN and IMEI is not available all the time in SGSN and GGSN, the interception results may be incomplete, additional clarification have to be added in order to make LI users aware of this fact. Two modifications were proposed.

There was some discussion about the use of target identities in section 5 note 1. It was agreed to amend the note by a revised second sentence. And to note that the MSISDN is applicable to packet switch and to define that target identities apply to the PS domain (i.e. reference to GPRS is deleted).

There were minor changes proposed to section 5.2.

Marcus Lutz will revise the CR and reissue as r1.

There was a proposal by Maurizio Ioviono of Ericsson to put a section into the Service Requirements 33.106. He was asked to provide a section.

tdoc S3LI03 094r1 was re-presented by Marcus Lutz with the amendments and additions and will be further issued as tdoc S3LI03 094r2

AP3_09 Maurizio Ioviono to consider a paragraph for 33.106 for the use of target identities in the PS domain.

AP03_11 to amend the incorrect reference to TS101 331 in 33.107 release 6.

12.2.2 Change Request – Clarification for GPRS – with MSISDN/IMEI as interception identities

tdoc S3LI03 100 was presented by Bernhard Spalt of Siemens. This was not accepted.

13. TS 33.108 Rel. 5 and Rel. 6

13.1 Updates to Release 5

33108-v.5.4.0

Annex G Correction

This was introduced by Selvam Rengasami of Telocardia/FBI tdoc S3LI03 101 and concerned the parameters in the TCP based transport. This was approved.

13.2 Contributions towards Release 6

33108-v.6.2.0

13.2.1 Legal Requirement Adaptation Box

tdoc S3LI03 090 and tdoc S3LI03 091 were presented by Bernhard Spalt of Siemens. He suggested a general solution that could form an informative annex to clarify any special adaptations to confirm with national laws.

Koen Jaspers commented that this was a juridical problem and the filter could be placed with the operator. He did not see a place for it in a technical document. After some discussion it was decided to keep the document in a folder for subsequent review. This would be maintained by the Chair.

AP03_10 The Chair to open and maintain a file for ideas for regular review.

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Meeting Note – CS Section in 33.108

Under r5 there was a reference to the ETSI CS domain. The reference was removed and whole text from 201 671 was inserted. It now seems that the CS part has not been properly addressed in 33.108. This was discussed in TC LI and their response was considered in Vienna. There were four issues to be considered. These are dealt with below.

13.2.3 Change Request – Sending of HI1 notification

This was presented by Marcus Lutz of Alcatel as **tdoc S3LI03 095** and deals with the sending of HI1 notification and concerns the backward compatibility to R5. The Proposed amendments are to Annex B7. As this had previously been consciously omitted due to our work item no action was taken.

13.2.4 Change Request - User data packet transfer

This was presented by Marcus Lutz of Alcatel as **tdoc S3LI03 096** and concerns the references to user data packet transfer. It ensures backward compatibility and proposes additional sections in annex A1 and B6. After several amendments this will be reissued after clarification of the ASN.1 tree.

13.2.5 Change Request – IRI Parameters clarification

This was presented by Marcus Lutz of Alcatel as **tdoc S3LI03 097** and concerns clause 5.2. It proposes to explain some of the HI2 ASN.1 parameters. This had no support and no action was taken.

13.2.6 Change Request – LI Management Operation

This was presented by Marcus Lutz of Alcatel as [tdoc S3LI03_098](#) and concerns LI management ROSE operations and proposes amendments to Annex B.5. ASN.1. During the discussion it was decided to renumber and reassign the B.3 sections. 098 will be reissued after consultation with Manfred Beirer.

13.2.7 Change Request – LI Reporting of Dialed Digits

Two documents were presented by Ron Ryan of Nortel as [tdoc S3LI03_087](#) and [S3LI03_088](#). In [tdoc S3LI03_087](#) He proposed methods of dialed digit extraction. He described the various proposals – at the SGSN, PSTN Gateway (IMS-GW) or at the delivery function. In the first case he concluded that multiple codecs would be required where they are not needed for any other purpose. In the second case there is only a partial solution. In the third case more resources are required (i.e. codecs) where content collection is not authorised. In summary he suggested that the major issue was that of codecs and one solution would be that the entire content stream should be sent to the LEMF (where the warrant requires DDE) as the codecs are already in place. Concern was expressed that some of the proposed solutions over-provided and that only reasonable product should be forwarded. He also noted that some manufacturers do not have a separate DF.

[tdoc S3LI03_088](#) is a change request for 33.108 R6 to insert text in Annex H to support DD reporting where it is done on a per authorisation basis by directing the media stream to the LEMF. This was accepted as modified and will be reissued as R1.

[tdoc S3LI03_088r1](#) was later re-presented by Ron Ryan and accepted

13.2.8 Annex G Correction

This was introduced by Selvam Rengasami of Telcordia/FBI as [tdoc S3LI03_102](#) and concerned the parameters in the TCP based transport. This was approved.

13.2.8 Identification of LEMF address

This was introduced by Selvam Rengasami of Telcordia/CICS as [tdoc S3LI03_103](#) and proposes enhancements to 33.108 to support the Network Operator selection of an LEA Address when there are multiple addresses to choose from for delivering content. After considerable discussion it was decided to defer the proposal until the November meeting. However the attached Change Request was reviewed in some detail and some amendments made. It was decided to add some examples on where this can be used.

13.2.9 Draft LS to ETSI TC LI to Update of scope in 102 232 to conform with 33.108

This was introduced by Bernhard Spalt of Siemens as [tdoc S3LI03_104](#) and proposes that the IP handover specification in TC LI be amended. This was agreed.

14. Continued Discussion and New Business

14.1.1 Code of Conduct

This was presented by the Chair, Brye Bonner, as document [tdoc S3LI03 083](#). It proposed guidelines for delegates in regard to laptops and documents. It included an article on laptop protection from Charles Brookson. It was agreed that the start of every meeting will include an IPR statement and a reference to the Code of Conduct.

14.1.2 Liaison to SA3

This was presented by the Chair, Brye Bonner, as [tdoc S3LI03 084](#) and is a draft liaison statement to SA3 on the use of the ANP acronym by the LI group. (ref 6.2 in Vienna Report).

This was approved for forwarding to SA3.

15. Review meeting output

15.1 Change Requests.

CRs 88, 94 101 102. It was agreed that these will not be put on the SA3 e-mail exploder until the week after the SA3 meeting (SA3 approval will be by e-mail over a fortnight period).

16. Discuss November meeting agenda, work plan

Subjects for discussion at the November meeting will be PTT, MBMS, transcoder free and WLAN.

17. Review Action Points

See Annex B for new Action Points

18. Other business

18.1 Meeting dates and venues for 2004.

Jan 27-29 US (FBI) tba

Apr 14-16 (Easter) note start on Wednesday Europe tba

Jul 20-22 – combined meeting venue with ETSI TC LI tba

Oct 12-14 US tba

18.2 Joint meeting with ETSI TC LI

This was presented by the Chair, Brye Bonner, after discussion with the Chair of TC LI who was also attending the meeting. The liaison is in [tdoc S3LI03 085](#). The proposal was noted and the date

suggested is week beginning July 19 with a location to be decided. The 3GPP LI group prefer the Monday/Tuesday.

18.3 Joint meeting with TR45 LAES

This was presented by the Chair, Brye Bonner, in conjunction with Terri Brooks, Chair of TR45 LAES who was also attending the meeting. The liaison is in tdoc S3LI03 092. FBI asked for a meeting cycle time to study the joint meeting proposal and the liaison will be reissued for the November meeting.

18.4 Joint meeting with T1P1.5

This was presented by the Chair, Brye Bonner, in conjunction with Ron Ryan, Chair of T1P1.5. The liaison is in tdoc S3LI03 093. FBI asked for a meeting cycle time to study the joint meeting proposal and the liaison will be reissued for November meeting.

20. Close of meeting

The Chair, Brye Bonner, thanked the delegates for their work and thanked Ron Ryan, on behalf of the US Friends of 3GPP for making the meeting possible.

2003 meeting dates and venues

18-20 November, London, Department of Trade and Industry.

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.

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

For the next meeting the cut off date for contributions to be distributed and uploaded is November 11.

Annex A: List of attendees

Name		Company	e-mail
Mr Peter	Arend vd	KPN	p.c.j.vanderarend@kpn.com
Ms Brye	Bonner	Motorola	Brye.bonner@motorola.com
Ms Terri	Brooks	Nokia	Terri.brooks@nokia.com
Mr Colin	Gray	O2 UK	colin.gray@o2.com
Mr Maurizio	Iovieno	LM Ericsson	Maurizio.iovieno@eri.ericsson.se
Mr Koen	Jaspers	MoJ, PIDS	Kbj@xs4all.nl
Mr Burkhard	Kubbutat	O2 Germany GmbH	Burkhard.kubbutat@o2.com
Mr Antti	Laurila	Nokia	Antti.k.laurita@nokia.com
Mr Alex	Leadbeater	BT Group	Alex.leadbeater@bt.com
Mr Marcus	Lutz	Alcatel SA	m.lutz@alcatel.de
Mr Greg	Milonovich	FBI/CALEA	gmlanovich@askcalea.net
Mr Peter	Musgrove	AT&T Wireless	Peter.musgrove@attws.com
Mr Brad	Owen	Lucent	bowen@lucent.com
Mr Selvam	Rengasami	Telecordia	srengasa@telcordia.com
Mr Ron	Ryan	Nortel Networks	rryan@nortelnetworks.com
Mr Bernhard	Spalt	Siemens AG	Bernhard.spalt@siemens.com
Mr Les	Szwajkowski	CALEA	lszwajkowski@askcalea.net
Mr Rupert	Thorogood	Home Office	rupert.thorogood@homeoffice.gsi.gov.uk
Mr Pierre	Truong	Ericsson	pierre.truong@ericsson.com
Mr Berthold	Wilhelm	Reg TP	Berthold.Wilhelm@regtp.de
Mr Jean-F	Zell	AQSACOM	Jeanfrancois.zell@qsacom.com

Annex B: List of Action Items

<u>AP03_01</u>	Koen Jaspers	Contribution on alarm and information messages	Closed
<u>AP03_02</u>	Ron Ryan	To amend abbreviations for NOs ANs and APs in R6.	Closed
<u>AP03_03</u>	Giorgi Gulbani	write a LS to TC LI in response to tdoc 058 as tdoc 073	Closed
<u>AP03_04</u>	Chair	to write to TC LI regarding joint meeting	Closed
<u>AP03_05</u>	Maurice Pope	To amend Release 6 in accordance with S3LI03_04	
<u>AP03_06</u>	Maurice Pope	to amend Release 6 in accordance with tdoc S3LI03_049	
<u>AP03_07</u>	Chair	advise SA3 on the use of the term ANP in SA3LI	Closed
<u>AP03_08</u>	Chair	to work on code of conduct for meeting and circulate by e-mail	Closed
<u>AP03_09</u>	Maurizio Ioviono	to consider a paragraph for 33.106 for the use of target identities in the PS domain.	
<u>AP03_10</u>	Chair	to open and maintain a file for ideas for regular review	
<u>AP03_11</u>	future	to amend the incorrect reference to TS101 331 in 33.107 release 6	

Annex C: List of Contributions

TD # S3LI03_	Title	Source	Meeting	Doc for	Comments	Status
80	Draft Agenda	Chair	2003-09	Approval		Approved
81	Draft Meeting report from Vienna	Secretariat	2003-05	Approval	Modified	Approved
82	Liaison – TR45 LAES report	Rapporteur	2003-09	information		discussed
83r1	Code of Conduct	Chair	2003-09	Approval	Modified for meeting agenda	Approved for meeting agenda
84	Liaison to SA3 ANP Acronym	Chair	2003-09	Approval		Approved
85	Liaison to ETSI TC LI Joint meeting with TC LI	Chair	2003-09	discussion	Decision to meet jointly July 20-22 venue possibly Iceland	discussed
86	Liaison – T1P1.5 Report	Nortel	2003-09	information		discussed
87	LI Reporting of Dialed Digits	Nortel	2003-09	Discussion		discussed
88r1	Change Request 33.108 R6 LI Reporting of Dialed Digits	Nortel	2003-09	Approval	Modified	Approved
89	Liaison – SA WG3	Reg TP	2003-09	information		discussed
90	Legal Requirements Adaption Box	Siemens	2003-09	discussion	To be kept in a “possible futures” folder	discussed
91	CR 33.108 R6 Legal Requirements Adaptation Box	Siemens AG	2003-09	Approval	To be kept in a “possible futures” folder	noted
92	Liaison to TR45 LAES Joint meeting	Chair	2003-09	Approval	FBI ask to hold for one meeting	To be reissued for the November
93	Liaison to T1/T1P1.5 Joint meeting	Chair	2003-09	Approval	FBI ask to hold for one meeting	To be reissued for November
94r2	CR 33.107 R6 MSISDN/IMEI clarification for GPRS interception	Alcatel/Nortel	2003-09	Approval	Modified	Approved r2
95	CR 33.108 R6 Sending of HI1 Notification	Alcatel	2003-09	Approval	discussed	NA
96	CR 33.108 R6 User data packet transfer	Alcatel	2003-09	Approval	Approved for r1. Need to work with Manfred on a new ASN.1 branch	To be reissued for the November meeting
97	CR 33.108 R6 IRI parameters clarification	Alcatel	2003-09	Approval	discussed	NA

TD # S3LI03_	Title	Source	Meeting	Doc for	Comments	Status
98	CR 33.108 R6 LI Management Operation	Siemens AG	2003-09	Alcatel	Approved for r1. Need to work with Manfred on a new ASN.1 branch	To be reissued in the November meeting
99	Liaison ETSI TC LI Report	Rapporteur	2003-09	Discussion		discussed
100	Change Request to 33.107 R6 Clarification for GPRS – with MSISDN/IMEI as interception identities	Siemens AG	2003-09	Approval		NA
101	CR 33.108 R5 Annex G Correction	Telcordia/ FBI	2003-09	Approval		Approved
102	CR 33.108 R6 Annex G Correction	Telcordia/ FBI	2003-09	Approval		Approved
103	CR 33.108 R6 Identification of LEMF address	Telcordia/ FBI	2003-09	Approval	discussed	reissue
104	Liaison ETSI TC LI on IP Handover	Siemens	2003-09	Approval		Approved

Annex D: List of Change Requests

TD # S3LI03	Title
88r1	Change Request 33.108 R6 LI Reporting of Dialed Digits
94r2	CR 33.107 R6 MSISDN/IMEI clarification for GPRS interception
101	CR 33.108 R5 Annex G Correction
102	CR 33.108 R6 Annex G Correction

Annex E: List of Liaison Statements

TD # S3LI03	Title
84	Liaison to SA3 ANP Acronym
104r1	Liaison to ETSI TC LI