

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

Helsinki 24-26 September 2002

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

Chair:	Brye Bonner	Motorola
Vice Chair:	Bernd Adams	Deutsche Telekom
Support/Secretary:	Maurice Pope	ETSI
Meeting Secretary:	Rupert Thorogood	UK Home Office
List of participants:	see annex A	
List of documents:	see annex C	

3G LI specifications:

3G TS 33.106 Lawful Interception Requirements version 5.1.0	Berthold Wilhelm (Reg TP)
3G TS 33.107 Lawful Interception Architecture and Functions version 5.4.0	Berthold Wilhelm (Reg TP)
3G TS 33.108 Handover Interface for Lawful Interception version 5.1.0	Ron Ryan (Nortel Networks)

1 Welcome and Logistics

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

The Chair welcomed the delegates and the host, Giorgi Gulbani of Nokia, also welcomed the delegates and outlined the facilities.

1.1 Approval of Agenda

The agenda with working schedule in **tdoc S3LI02_135** was proposed by the chair and agreed without modification.

1.2 Registration and assignment of input documents

The input documents are listed in Annex C.

1.3 Approval of Report of previous meeting

The final report from the S3-LI meeting in Budapest 4-6 June 2002 was tabled as **Tdoc S3LI02_128r2**. The report was approved with the exception of minor editorial corrections to be supplied by Telcordia.

Action Points from Budapest see Annex B

The following action point was closed: **AP02-19**. The following action points remain open **AP02-06, AP02-13 and AP02-15** which is to be referred to the ILETS STC. Maurice Pope will ask SA3 whether they consider **AP02-13** should be elevated to SA.

1.4 Usage of new CR form Tdoc S3LI02_CR-form_v7.zip

This was noted.

1.5 review outcome of LI CRS TO SA3

All accepted – see 2. below.

2 Reports

2.1 SA3 WG3

2.1.1 draftSP-020504SA3 report to SA#17.ppt and the report on SA#17 for SA3 were tabled for information.

2.1.2 LS to SA2 on Multimedia Broadcast/Multicast Services **tdoc S3LI02_S3-020434_MBMS_Security_LS_SA2** and **tdoc S3LI02_S3-020433_WID_MBMSv2** were placed under new business.

2.1.3 Tabled for information was the approval from SA3 of the liaisons to SA3 from SA3 LI S3-020396_S3LI02_114r2_CR33106Rel5 intercept Capabilities and S3-020454_33107CR-Rel5_event_reporting..

2.1.4 Subscriber Certificates S3-020377_architecture_alternatives and S3-020447_LS_to_S1_S2_sub_certs are available for information. As explained by Adrian Escott, this is a description of an authentication system for 3G customers.

2.1.5 Wireless Local Area Networks S3_020452_LS to SA2 on WLAN_CWB, S3-020451_WLAN Interworking Security WID Draft 3, S3-0200453_LS to SA1 on WLAN were placed under new business.

2.2 SA #17

2.2.1 See 2.1.1 **Report on SA#17.doc**

2.3 ETSI TC LI

Giorgi Gulbani of Nokia, SA3 LI rapporteur to ETSI TC LI, referred to the ETSI LI meeting report, document li01td002r1. He said the LI Group is working on a generic IP handover specification. Koen Jaspers, Netherlands MoJ, stated that he had hosted the Rapporteur's meeting and that the goal is to provide a handover interface for ISPs from the ETSI point of view. Koen clarified the first draft is expected at the beginning of next year and it would cover e-mail and streaming media. The LI group believes there will be no conflict with the work of the 3GPP LI group.

2.4 T1P1 SAH

The report, **tdoc S3LI02_ 153**, was submitted by Ron Ryan of Nortel for information. T1P1 SAH members are reviewing 33.108 and **tdoc S3LI02_ 153** lists changes which were proposed at the September meeting. Their next meeting is in November.

2.5 TR45 LAES

Brye Bonner reported that TR45 LAES continues to work on J-STD-025B and stage 1 is now considered stable.

2.6 TIPHON

No report was available.

3. TS 33.106 Rel 5 and Rel.6

3.1 Surveillance Status, tdoc S3LI02_ 144

This was presented by Selvam Rengasami. This is a proposed CR regarding fault reporting and status. After some detailed discussion it was concluded that this did not receive support and no action is taken.

tdoc S3LI02_ 145 and **tdoc S3LI02_ 146**, which proposed similar changes in 33.107 and 33.108, were noted.

4. TS33.107 Rel.5 and Rel. 6

4.1 Alternative way to report the Serving System and Spec Cleanup, tdoc S3LI02_131

This was presented by Giorgi Gulbani and concerns CR 085r2 which proposed an alternative and more efficient solution not involving the HLR. After some detailed discussion it was concluded that this did not receive support and it was withdrawn.

4.2 Correcting the wrong implementation of CR 021, tdoc S3LI02_133

This was presented by Giorgy Gulbani. After some clarification it was agreed that a change is necessary. The contribution was put on hold subject to a further input by Alcatel. See 4.4.

4.3 Interception regarding SMS-MT, tdoc S3LI02_139

This was introduced by Selvam Rengasami and is based on a previous contribution. This is the case when terminating SMS packets are sent from the home system to a roaming subscriber. The intention is to amend 33.107 section 3.1, 7.1 fig 19, 7.3 and 7.4. There was some general discussion on the proposed text, “unless otherwise prohibited by national requirements” terminology versus the more commonly used statement “as a national option” when requirements are permitted in some countries and not in others. After an extended discussion the contribution was not accepted but it was felt that a discussion between the contributor and the 3GPP SMS group that authored 23.040 would be useful.

tdoc S3LI02_ 143, which proposed a similar change in 33.108, was noted.

4.4 Corrections for “Inter PLMN Type of inter-SGSN RA update, tdoc S3LI02_141

This was presented by Marcus Lutz who said that the intention is to simplify the procedures for inter-PLMN inter-SGSN RA updates. Therefore at each type of inter SGSN change a “start of interception with active PDP context” will be sent. After some discussion it was decided that this will be combined with **tdoc S3LI02_133** into a new **tdoc S3LI02_154**.

Meeting note. Maurice Pope confirmed that release 5 was frozen at SA meeting #16 so that only technical corrections (ie not functional changes) can be accepted. The only changes that will be accepted are class F

Meeting note. It was noted that the CR S3LI02-085r2 to 33.107 5.3.0 para 7.3 which stated “Serving system event reporting is a national option” had in fact been incorporated. It was confirmed by Maurice Pope that the CR containing this phrase has been approved by SA3 but has not yet been approved by SA.

4.5 Discussion: IMS Charging ID situation, tdoc S3LI02_142

This was presented by Marcus Lutz and written in response to an action from Budapest. It is for information only and recommends waiting until a clear picture on charging emerges before using the Charging ID for LI.

4.6 Surveillance Status and Fault Reporting, tdoc S3LI02_145

See 3.1 above.

4.7 DF2 to DF3 Communications, tdoc S3LI02_147

This was presented by Selvam Rengasami who believes that a communication link is required between DF2 and DF3 for some IRI scenarios. The draft CR proposes a number of changes. After some discussion it was decided that this proposed interface could be achieved in other ways. However the status of this contribution was deferred until after the discussion on tdoc S3LI02_150.

4.8 Packet Activity IRI Reporting, tdoc S3LI02_148

This was presented by Selvam Rengasami and arises from discussion at a previous meeting. It concerns extracting IRI packet identifying parameters. After some debate it was agreed to ask Telcordia to investigate extracting and sending parameters from the DF3 interface rather than adding a new interface between DF2 and DF3.

tdoc S3LI02_149 proposed similar changes in 33.108 and was noted.

5. TS 33.108 Rel. 5 and Rel. 6

5.1 Review Editor updates from Budapest (to SA3) tdoc S3LI02_116r3

This had been reviewed by e-mail and there was no further discussion.

5.2 CS Part for 33.108, tdoc S3LI02_136

Leopold Murhammer presented this as a result of the Budapest meeting where the question was whether to use adapted text from 201 671 to align with 33.108 for the circuit switched domain. This contribution contains proposals, which if agreed, will be incorporated in a CR. He described the minor modifications including a new Annex H. However after discussion it was decided that it would not now be appropriate for this section to be in release 5. It was agreed that Leopold Murhammer and Bernhard Spalt would work on a CS section for release 6 in conjunction with an e-mail group consisting of Rhys Arkins, Koen Jaspers, Brad Owen and Sandra Lopez. The Chair will liaise with Bernhard Spalt regarding a timescale.

5.3 ASN.1 Correction of ASN.1 reference version of ETSI TS 101 671, tdoc S3LI02_140

Maurice Pope who had noticed that there was a misalignment with edition/version numbers in TS 101 671 presented this. The CR was noted as an editorial change and withdrawn.

5.4 ASN.1 Ordering of the half-bytes in an Octet string, tdoc S3LI02_138

This was presented by Manfred Beierer and concerned the representation of half byte strings, which are different in ISUP standards. The CR was approved and deferred until a similar CR is considered by ETSI LI.

5.5 ASN.1 Feature to sequence IRI records into a single file, tdoc S3LI02_137

This was presented by Manfred Beierer who noted the overhead in ftp and suggests taking several records and aggregating them. This will be a national option. With a minor correction to make if applicable to ROSE the CR was agreed but a further option will be considered by Manfred Beierer and Sandra Lopez as r2.

5.6 Correcting the wrong implementation of the CR 021, tdoc S3LI02_134

Noted as companion document to 33.107 **tdoc S3LI02_133** and will be resubmitted with Alcatel as **tdoc S3LI02_158**.

5.7 Essential corrections to the Annex C.1, tdoc S3LI02_130

This was presented by Giorgi Gulbani. These are minor amendments to the annex. After some modification this was accepted as r4.

5.8 Alternative way of reporting the serving system and the spec cleanup tdoc S3LI02_132

This was presented by Giorgi Gulbani and will be re-presented as r3 (see 8 below).

5.9 Interception regarding SMS-MT, tdoc S3LI02_143

See 4.3 above

5.10 Surveillance Status and Fault Reporting, tdoc S3LI02_146

See 3.1 above.

5.11 Packet Activity Detection IRI Reporting, tdoc S3LI02_149

See 4.8 above.

5.12 Interception regarding IMS, tdoc S3li02_150

This was presented by Selvam Rengasami and identifies a number of perceived shortcomings in the IP MM sub systems and specified five topics: correlation of IRI and CC for IMS, isolation of media streams involved in an IMS call, parameters included in encapsulated SIP message, dialled digit extraction in IMS and start of interception during active IMS. Selvam will write out the exact recommendations for further consideration as a revised document. Brad Owen pointed out that RFC2833 does include a specification for DTMF signals.

6. New Business

6.1 Discussion on lawful intercept implications for Multimedia Broadcast/Multicast service, tdoc IL02_151 containing S3-020434_MBMS_Security_LS_SA2; S3-020433_WID_MBMSv2

This was presented by Adrian Escott. Following a discussion the group agrees there may be implications for law enforcement and wishes to be kept informed of developments. R1 includes Adrian's presentation slides.

6.2 Discussion on lawful intercept implications for Wireless Local Area Network, tdoc S3LI02_152 containing S3_020452_LS to SA2 on WLAN_CWB; S3-020451_WLAN Interworking Security WID

Draft 3; S3-0200453_LS to SA1 on WLAN. This was presented by Adrian Escott. Again there may be implications for law enforcement and the group wishes to be kept informed of developments. R1 includes Adrian's presentation slides.

7. Review Assignments for liaisons and CRs

Meeting Note. Discussion on a draft Work Item description by the Chair, **tdoc S3LI02_156**. This widens the release 6 study to include IP based services such as IMS phase 2, MMBS and multicast, Priority Service, subscriber certificates and CS AMR-WB. This was reviewed by the Group and agreed. It will be forwarded to SA3.

AP02-23 Michael Schepers to provide an input for the next meeting on the LI implications for AMR-WB.

8. Review change request outputs

tdoc S3LI02_154r2 CR on 33.107 presented by Giorgi Gulbani on LI events generated during inter SGSN RAU. See decision on 158r2.

tdoc S3LI02_158r2 CR on 33.108 presented by Giorgi Gulbani LI events generated by RAU when PDP context active. After an extended debate on the optionality of the continue record and the implications for release 5 it was decided to continue the discussion by e-mail and re-address the issue in November.

tdoc S3LI02_130r3 CR on 33.108 presented by Giorgi Gulbani on correction to annex C. After a minor modification this was accepted and will be re-presented as **r4**.

tdoc S3LI02_132r2 CR on 33.108 presented by Giorgi Gulbani and concerns a missing PDP context modification. This was accepted and will be processed by Maurice Pope as **r3**.

tdoc S3LI02_137r2 CR on 33.108 presented by Manfred Beierer concerning the aggregation of IRI records. This was accepted as **r3** after a minor modification.

tdoc S3LI02_150r1 Interception regarding IMS presented by Selvam Rengasami was accepted for information and the issues identified in the document were discussed. Further contributions are invited.

tdoc S3LI02_155r2 is an LS to SA and SA3 on the request to change the LI subscription. This was generally approved after minor modifications and will be re-issued as **r3** after e-mail consultation.

tdoc S3LI02_157 is a correction to a previous CR on 33.107 and concerns the addition of the HLR clock. This was accepted after a minor change and will be issued as **r1**.

9 Review meeting output

AP02-20 All to respond to Koen Jaspers whether or not their documents are available for scrutiny under Netherlands law.

AP02-21 Maurice will ask IT department for no more anonymous access to the 3GPP LI ftp from Jan 1.

AP02-22 Chair to send LS to SA3 and SA to request them regarding the proposed restriction of the 3GPP LI group document access with target date of Jan 1.

AP02-23 Michael Schepers to provide an input for the next meeting on the LI implications for AMR-WB.

10. Discuss November meeting agenda, work plan

12-14 November, San Diego, hosted by Ericsson.

The Chair hopes that the Work Plan will be approved by SA3 and we can write contributions towards Release 6. She asks for contributions to **tdoc S3LI02_150r1**, Interception regarding IMS.

11. Discuss 2003 meeting dates and venues

19-21 February, Paris, hosted by Aqsacom

14-16 May, Sophia Antipolis, hosted by European Friends of 3GPP (subject to confirmation)

17-19 September, US, host to be advised

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

Important Note: the meeting days for the first three meetings have been changed to run from Wednesday through Friday.

Note: It was agreed that meetings would be numbered sequentially through the year (e.g., this meeting is 02/03).

12. Other business

The possibility of a closed exploder list for LI was discussed. Koen Jaspers spoke about the Netherlands WOB request for documents under freedom of information and had e-mailed members on whether their documents may be disclosed. He explained that in all cases the names of the participants would be suppressed.

AP02-20 all to respond to Koen Jaspers whether or not their documents are available for scrutiny under Netherlands law.

Maurice Pope had been asked to investigate limiting access to LI email lists and document areas and said that an area exists on the 3GPP ftp for the LI group. After some discussion it was decided to maintain the same system as used in ETSI (Sec) LI.

Uploading will still be restricted to designated members and there will be normal etsi/3gpp access for reading. Access control rights will be with the Chair, vice Chair, Secretary and Manfred Beierer.

AP02-21 Maurice will ask IT department for the possibility of no more anonymous access to the 3GPP LI ftp from Jan 1.

AP02-22 Chair to send LS to SA3 and SA to request them regarding the proposed restriction of the 3GPP LI group document access with target date of Jan 1.

Close of meeting

The Chair thanked the delegates for an excellent meeting and thanked the host for making the arrangements.

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 contributions to be distributed and uploaded is November 6.

It is requested that all contributions be upload no later than Wednesday before the meeting. Contributions brought into the meeting or distributed/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.

Annex A: List of attendees

Name			Company	e-mail
Mr	Bernd	Adams	Deutsche Telekom AG	Bernd.adams@t-systems.com
Mr	Rhys	Arkins	LM Ericsson	Rhys.arkins@ericsson.com.au
Mr	Manfred	Beierer	Reg TP	Manfred.beierer@regtp.de
Ms	Brye	Bonner	Motorola	brye.bonner@motorola.com
Mr	Stefan	Bjornson	Ericsson	Stefan.bjornson@era.ericsson.se
Mr	Barclay	Clibborn	Tecnomen	Barclay.clibborn@tecnomen.com
Mr	Adrian	Escott	Hutchinson 3G	Adrian.escott@hutchison3g.com
Ms	Cathy	FitzPatrick	Lucent	Fitz50@lucent.com
Mr	Giorgi	Gulbani	Nokia	Giorgi.gulbani@nokia.com
Mr	Jarri	Haatainen	NBI	Jari.haatainen@krp.poliisi.fi
Mr	Mika	Hanninen	Nokia	Mika.hanninen@nokia.com
Mr	Koen	Jaspers	MoJ, PIDS	Kbj@xs4all.nl
Mr	Martin	Kassens	T-mobile Deutschland	Martin.kaessens@t-mobile.de
Mr	Burkhard	Kubbutat	Mmo ₂	Burkhard.kubbutat@O2.com
Ms	Sandra	Lopez	Telcordia	slopez@telcordia.com
Mr	Antti	Laurila	Nokia	Antti.k.laurita@nokia.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	Maurice	Pope	ETSI MCC	Maurice.pope@etsi.fr
Mr	Selvam	Rengasami	Telecordia	srengasa@telcordia.com
Mr	Ulf	Sanaas	Nokia Networks	Ulf.sanaas@nokia.com
Mr	Michael	Schepers	Vodafone	Michael.schepers@vodafone.com
Mr	Jorma	Seurujarvi	Nokia	Jorma.seurujarvi@nokia.com
Mr	Les	Szwajkowski	Calea Implementation Section	Lmski.calea@fbi.gov
Mr	Rupert	Thorogood	Home Office	rupert.thorogood@homeoffice.gsi.gov.uk
Mr	Berthold	Wilhelm	Reg TP	Berthold.Wilhelm@regtp.de
Mr	Jean-F	Zell	AQSACOM	Jeanfrancois.zell@aqsa.com

Annex B List of Action Items

AP02_01	Berthold Wilhelm and Maurice Pope	to clarify 010611	Closed
AP02_02	Giorgi 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 to consider asking SA 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	Closed
AP02-20	All	To respond to Koen Jaspers regarding the Dutch Freedom of Information law	Open
AP02-21	Maurice Pope	ask IT department for no more anonymous access to the LI ftp from Jan 1.	Open
AP02-22	Chair	to send LS to SA3 and SA to request them regarding the proposed restriction of the 3GPP LI group document access with target date of Jan 1.	Closed
AP02-23	Michael Schepers	to provide an input for the next meeting on the LI implications for AMR-WB	Open

Annex C List of Documents

TD # S3LI02	Title	Source	Meeting	Doc for	Comments	Status
128r2	Draft meeting report from Budapest	Chair	2002-06	Approval		Approved
130r4	Essential corrections to the Annex C.1	Nokia	2002-09	Approval		Approved
131	Alternative way to report the Serving System and Spec Cleanup (33.107)	Nokia	2002-09	Approval	Accepted text editorial	Withdrawn
132r3	Alternative way of reporting the Serving System and Spec Cleanup (33.108) Missing PDP Context Modification event	Nokia	2002-09	Approval	Contribution title changed	Approved
133	Correcting the wrong implementation of CR 021 (33.107)	Nokia	2002-09	Approval	New tdoc 154, joint contribution with Alcatel Siemens	See tdoc 154
134	Correcting the wrong implementation of CR 021 (33.108)	Nokia	2002-09	Approval	New tdoc 158 joint contribution with Alcatel, Siemens	See tdoc 158
135r2	Draft Agenda	Chair	2002-09	Approval		Approved
136	CS Part for TS 33.108	Siemens	2002-09	Approval	Email discussion	Expect output for next meeting
137r3	ASN.1 Feature to Aggregate IRI records into a single file	RegTP	2002-09	Approval		Approved
138r1	ASN.1 Ordering of the half-bytes in an Octet string	RegTP	2002-09	Approval	Defer CR for one meeting to allow ETSI to accept change	Approved
139	Interception regarding SMS-MT (33.107)	Telcordia/LE	2002-09	Approval		No action
140	ASN.1 Correction of ASN.1 reference version of ETSI TS 101 671	ETSI MCC	2002-09	Approval	Accepted text editorial	Withdrawn

TD # S3LI02	Title	Source	Meeting	Doc for	Comments	Status
141	Correction for "Inter PLMN" Type of inter-SGSN RA update (33.107)	Alcatel S.A.	2002-09	Approval	New tdoc 154, joint contribution with Nokia Siemens	See tdoc 154
142	IMS Charging ID situation	Alcatel S.A.	2002-09	Discussion	Use charging solution once finalized	Monitor for future use in LI
143	Interception regarding SMS-MT (33.108)	Telcordia/LE	2002-09	Approval		Noted
144	Surveillance Status (33.106)	Telcordia/LE	2002-09	Approval		No action
145	Surveillance Status and Fault Reporting (33.107)	Telcordia/LE	2002-09	Approval		Noted
146	Surveillance Status and Fault Reporting (33.108)	Telcordia/LE	2002-09	Approval		Noted
147	DF2 to DF3 Communications (33.107)	Telcordia/LE	2002-09	Approval		No action
148	Packet Activity IRI Reporting (33.107)	Telcordia/LE	2002-09	Approval		No action
149	Packet Activity Detection IRI Reporting (33.108)	Telcordia/LE	2002-09	Approval		Noted
150r1	Interception regarding IMS	Telcordia/LE	2002-09	Discussion	Issues in document discussed	No action
151r1	Discussion on lawful intercept implications for Multimedia Broadcast/Multicast services	Hutchinson 3G	2002-09	Discussion	Presentation	Information
152r1	Discussion on lawful intercept implications for Wireless Local Area Network	Hutchinson 3G	2002-09	Discussion	Presentation	Information
153	T1P1 SAH report	Nortel	2002-09	Information		Information
154r3	Essential correction to the LI events generated during inter-SGSN RAU, when PDP context is active (33.107)	Nokia, Alcatel Siemens	2002-09	Approve	Expect contribution in November	No action
155r2	LS to SA3 and SA on closed subscriber list and FTP sight for SA3 LI	Chair	2002-09	LS	Email approval	
156	LS to SA3 WI for IMS phase 2 intercept	Chair	2002-09	LS		Approved
157r1	CR for 33.107 – Correction to Table 2	Chair	2002-09	Approval	Rel-5	Approved
158r2	Essential correction to the LI events generated during inter-SGSN RAU, when PDP context is active (33.108)	Nokia Siemens Alcatel			Expect contribution in November	No action
159	Meeting Report from Helsinki	Secretariat	2002-06	Approve		

Annex D List of Change Requests

130r4	CR for 33.108 Essential corrections to the Annex C.1
132r3	CR for 33.108 Missing PDP Context Modification Event

137r3	CR for 33.108 ASN.1 Feature to Aggregate IRI records into a single file
138r1	CR for 33.108 ASN.1 Ordering of the half-bytes in an Octet string (hold for one meeting)
157r1	CR for 33.107 – Correction to Table 2

Annex E List of Liaison Statements

155	LS to SA3 and SA on closed subscriber list and FTP sight for SA3 LI (email approval)
156	LS to SA3 WI for IMS phase 2 intercept

Annex F List of Related Specifications

SMG10-WPD specifications:

GSM 01.33: Lawful Interception requirements for GSM version 8.0.0
GSM 02.33: Lawful Interception - stage 1 version 8.0.0
GSM 03.33: Lawful Interception - stage 2 version 8.0.0

rapporteur

David Miles (Cellnet)
Brye Bonner (Motorola)
Bernhard Spalt (Siemens)