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Phoenix, USA

Tdoc S3 LI 01_053

Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #2/01 on lawful interception

Clearwater March 6,7 and 8 2001

Please direct all comments to
Bernie McKibben at p17982@email.mot.com by April 1, 2001

Chairman: Bernie McKibben
Support/Secretary: Maurice Pope

Motorola Core Networks Group
ETSI

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

1 Opening and approval of proposed agenda

The meeting was welcomed by Bernie McKibben and Ron Ryan on behalf of Motorola and Nortel Networks. The domestic arrangements were given.

The proposed agenda with working schedule in **Tdoc S3LI01 030** was proposed by the chairman. The working schedule was accepted and the documents were allocated. See Tdoc S3LI01_025 for initial tdoc list. The main issues for this meeting were:

1. Complete TS 33.107 R4 and R5 for release per SA3 comments with informative annexes
2. Prepare for TC Sec LI workshop
3. CN4 liaison on Mc interface
4. Other CRs as received

The final report from the latest S3-LI meeting in Ratingen during January 2001 is available in **Tdoc S3LI01 029**.

SMG10-WPD specifications:

rapporteur

GSM 01.33: Lawful Interception requirements for GSM version 7.0.0
GSM 02.33: Lawful Interception - stage 1 version 7.2.0
GSM 03.33: Lawful Interception - stage 2 version 7.1.0

David Miles (Cellnet)
Bernie McKibben (Motorola)
Bernhard Spalt (Siemens)

3G LI specifications:

3G TS 33.106 Lawful Interception Requirements version 3.1.0
3G TS 33.107 Lawful Interception Architecture and Functions version 3.0.0

Berthold Wilhelm (Reg TP)
Berthold Wilhelm (Reg TP)

2 TC Sec LI report

S3 LI members who also attend ETSI TC Sec LI reported the following TC Sec LI status:

- ES 201 671 edition 2 will be released in May
- IP interception guide will be converted into a report
- Architecture guide is to be published soon
- Datagram Working group document should be published in April. The nature of the guide and the future of the group was not clear from the information available to S3LI

3 SA3 report

Berthold Wilhelm attended the last SA3 meeting and reported the following results from the meeting:

- CRs to TS 33.106 for R4 and R5 were approved
- SA3 had comments to CRs to TS 33.107 for R4 and R5: (1) 3GMS should be changed to 3GPP MS. (2) Formatting changes to the CR approval form were made (3) no other comments were made. As a result, updates to TS33.107 will be circulate to SA3 for approval and SA3 will forward these CRs to TSG for publication in March.

4 TS 33.107 CR for R5

Several tdocs were presented related to TS33.107 were presented. A section by section review was conducted. Updates to the CR for TS 33.107 for R5 were agreed upon as follows:

- Ericsson presented tdoc LI01 026 which forms the basis for annex A. Text was added to the introduction text to clarify the sequence between bearer establishment to the agency and bearer establishment between users. The multi-party break sequence was agreed to be deleted. With these modifications, the contribution was agreed to be included in TS 33.107 as annex A
- Nortel presented tdoc LI01 027 which reviewed X2, X3 and correlation requirements. It was agreed that transport issues be deferred to the TC Sec LI discussion. It was agreed that a requirement for reliable transport mechanism to DF2 be included in the TS 33.107 CR.
- Motorola presented tdoc LI01 028 which forms the basis for annex C. Formatting corrections were made and editors notes were transformed into 'for further study' statements.
- SGSN event records were updated to replace RAC with location information that includes SAI, LAI and RAI.
- SA3 comments were incorporated
- S3LI01_033 on multi-media user identities was reviewed and presented potential changes to TS 33.107. No immediate change to TS 33.107 was identified. As SA2 and other 3GPP groups provide better definition of all CSCF functions, additional identities as described in S3LI01_033 may need to be added to TS 33.107 if additional identities are made known to the CSCF as part of normal session processing.
- S3LI01_034 on the split DF3 was presented and accepted in principle. The CS service DF3 presentation in TS 33.107 was updated accordingly to allow for separate bearer and signalling paths, without mandating an Mc or other specific interface within DF3.
- Updates from Tuesday were presented in S3LI01_040.

Conclusion:

The agreed upon TS 33.107 CR for R5 was documented in Tdoc S3LI01_047. This will be sent to SA3 for

approval. SA3 will forward this onto TSG for publication in March.

5 TS 33.107 CR for R4

An updated of TS 33.107 for R4 was not explicitly reviewed, however, it was agreed that the CR for R4 will be completed by inserting the non-multimedia changes identified for TS 33.107 R5 as described into the CR for TS 33.107 R4 prepared at the last meeting.

Conclusion:

An updated CR to TS 33.107 for R4 will be completed with non-multimedia updates identified above in the CR for R5. See tdoc S3LI01_050 for the R4 CR update.

6 TC Sec LI preparations

An agenda and specific topics were discussed in preparation for the TC Sec LI workshop to be held April 4 and 5. The following list of topics were agreed upon for the joint meeting.

- 1 Overview of 3GPP R5 architecture and services (to be presented by S3LI)
- 2 TC Sec LI Architecture doc
- 3 ETR331 update
- 4 Handover interface for 3G
- 5 Confirmation of ASN.1 structure mapping between 3G and 201671

Tdoc S3LI 027 was presented again in the area of bearer presentation. The need for real time delivery in the US was presented. Although there was strong support from a number of organisations, there was also opposition to pursue the issue by a number organisations. There was not a consensus to present to TC Sec LI a recommendation to include real time delivery in the handover interface, nor was there a consensus to support the current FTP, TCP and ROSE bearer protocol menu present in TC Sec LI.

Tdoc S3LI 035 was presented which recommended that a 3G bearer delivery study be launched to solve the technical issues arising from the simultaneous needs for real time, yet reliable delivery of packet data to the agency. SCTP and RUDP were suggested as input into the study. Other recommendations were encouraged. 5 organisations approved of the idea for a study, 2 opposed the need for a study and 1 organisation requested more time to consider the idea. The balance of organisations expressed no opinion. As a result, no conclusion was reached and a decision on whether to pursue a study was deferred.

Tdocs S3LI01 037 and 038, which deal with CRs to published H13 GPRS FTP handover definitions, were reviewed. Tdoc 037 was not accepted as more organisations saw it as unnecessary than needed. A modified version of 038, see tdoc S3LI01 046, which allowed certain fields to be optional was agreed upon for recommendation for adoption to TC Sec LI.

ETSI Tdoc d007 was sent to S3LI by ETSI TC Sec LI for review. ETSI Td007 deals with location reporting for UMTS systems. S3LI did not find the original version sufficient. S3LI01_032 was presented, which presented another view of location reports. The two tdocs were discussed and merged into S3LI01_041, which allows for SAI location information. S3LI01_041 was agreed by S3LI to be sent to ETSI TC Sec LI as a recommended change to ES 201 671.

Conclusion:

Tdocs S3LI01_044 was agreed upon to be sent to TC Sec LI to confirm S3 attendance and to propose the list of topics listed above.

No conclusions were reached by the group on DF3 transport or the need for a 3G bearer protocol study. S3LI01 046 and 041 will be sent to ETSI TC Sec LI as recommended changes to ES 201 671.

7 CN4 Liaison

CN4 replied to S3LI on the Mc interface, as seen in tdoc S3-010038. CN4 believes that standard H.248 messages can be used to support intercept within the MGW. S3LI concurs and will send a final liaison back to CN4 accordingly. See tdoc S3LI01_042. Furthermore, the S3LI group agreed that an informative message flow would be added to the TS 33.107 annex to illustrate the use of H.248 on the Mc interface for the sake of intercept at the MGW.

Conclusion:

Tdoc S3LI01_042 was agreed upon to be sent to CN4. Standard H.248 supports intercept and no intercept specific message on the Mc interface is required. A call for contributions is made to illustrate the use of H.248 on the Mc interface for the sake of intercept as an informative annex to TS 33.107.

8 SA5 liaison

A liaison to SA5 was prepared and agreed upon in tdoc S3LI01_043. The liaison solicits the latest status of stage 2 charging specifications development in the areas PDP context and SIP session correlation, or subscription identifiers for billing. Such developments could influence intercept standards.

Conclusion:

Tdoc S3LI01_043 was agreed upon to be sent to SA5.

9 TIPHON

Participants from the meeting encouraged S3LI to investigate TIPHON LI activities for the sake of harmonisation. It was suggested that the S3LI chair attend the next TIPHON LI meeting to represent S3LI. The chair agreed to attempt to make the meeting, but could not commit to the schedule before checking existing commitments.

Conclusion:

The S3LI chair will attempt to attend a TIPHON LI meeting to solicit harmonisation. Attendance at the TIPHON LI meeting in March will be investigated.

10A SHAMAN

Bernd Adams presented a new EU security project entitled SHAMAN. The project is centred on various 4G technologies.

Conclusion:

S3LI found the presentation very informative and thanked Bernd for his efforts.

10B Other topics

S3LI01_031 was presented, which proposed a new GPRS event record for "Stop of Interception with PDP Context Active" to GSM 03.33. The proposal was not agreed upon as a majority of organisations did not believe the change to be necessary.

S3LI01_036 was presented, which recommended requirements clarifications on the interception of session re-direct in R5, as well a presented potential solutions to intercept session re-direct and transfer. The requirements portion of the contribution was modified as seen in Tdoc S3LI01_045 and agreed upon to be included as an informative annex in a future CR to TS 33.107, pending the stabilisation of session redirection and transfer definitions in TS 23.228. The proposed solutions to intercept session re-direct and transfer were not reviewed as the group needed more time to review related material in TS 23.228. As a result, discussion of these proposed solutions was deferred until S3LI's next meeting in June.

11. Call for Contributions

The following contributions were solicited in order to prepare for progress on TS 33.107 at the next meeting:

- All topics listed as 'for further study' in the current CRs for TS 33.106 and TS 33.107
- Contributions for session flows related to using H.248 to set up an intercept point at the MGW.
- Location Dependent Intercept for multi-media

12. Open items for WPD/3G LI Joint Working Party

02.33 open items

- Shared Interworking Functions
- CAMEL phase 3 and on
- Location Services

03.33 open items

- CAMEL phase 3 and on
- Location Services
- TFO

TS 33.106 open items

- All for further study topics based upon the latest CR
- Location Dependent Intercept for multi-media

TS 33.107 open items

- All for further study topics based upon the latest CR
- Location Dependent Intercept for multi-media

13 Any other business

none

14 Review of draft report

The draft report was available March 13, 2001. The draft report was e-mailed to the participants and was/will also be put on the 3GPP server in the S3-LI area. The report could be commented and modified until April 1, 2001. Send all comments to Bernie McKibben at p17982@email.mot.com. The meeting report will be submitted to SA3 plenary.

15 Future meeting dates and closing of the meeting

The following dates for **S3 LI meetings** are scheduled:

4-5 April 2001: Grimstadt, Norway (Telenor): Workshop with ETSI TC Sec LI group and ETSI TIPHON
5-7 June 2001: Munich, Germany (VIAG Interkom)
21-23 August 2001 Saarbrücken, Germany (RegTP)
23-25 October 2001 Ericsson, location open

The following tentative agenda for the next SA WG3 LI meeting in January was agreed:

1. Updates to TS 33.107 for latest S2, S5 work. (S3LI members to need review the version of TS 23.228 published in March, plus any other CRs approved against TS 23.228 as of May 2001 prior to our next meeting)
2. Close off list of 'for future studies' in TS 33.016 and TS 33.107.
3. Location Dependent Intercept for multi-media. Call for contributions.

The chairman thanked the delegates for their active participation, as well as Nortel for helping to arrange and sponsor the meeting.

Annex A

List of participants of the 3GPP TSG SA WG3- S3LI meeting #2/01 on lawful interception

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Annex B

List of documents of the S3-LI meeting #2/01 on lawful interception

Annex A: List of documents at the meeting

Number	Title	Source	Document for	Comments Status
S3LI01_011	CR to 33.106 (Rel4)	S3 LI	Approval	Approved
S3LI01_012	CR to 33.106 (Rel5)	S3 LI	Approval	Approved
S3LI01_019	Rel4 CR to 33.107: Update of TS 33.107 for Release 4	S3 LI	Approval	Approved for distribution
S3LI01_020	R99 CR to 33.107: Correction of Location information parameters in interception event records	S3 LI	Approval	Approval for distribution
S3LI01_021	Final version of Release 5 draft of 33.107	Chairman	Discussion/update	Basis for further changes
S3LI01_023	Draft report of the meeting	Secretary	Comment	Comment by 15/02/2001
S3LI01_024	Final TDoc List	Secretary	Information	Approved
S3LI01_025	Draft Tdoc list for Tampa	Chair	Discussion	Approved with modifications
S3LI01_026	Annex A for TS 33.107	Ericsson	Approval	Approved with corrections
S3LI01_027	R4 and R5 capabilities	Nortel	Discussion	Reviewed
S3LI01_028	Annex C for TS 33.107	Motorola	Approval	Approved with corrections
S3LI01_029	Final report: Ratingen	Sec&chair	Approval	Approved
S3LI01_030	Draft agenda for Tampa	Chair	Approval	Approved with modifications
S3LI01_031	Stop of intercept: GPRS - end of interception handling	Alcatel	Approval	No consensus
S3LI01_032	Location information provided in PS domain	Alcatel	Approval	Approved with modifications
S3LI01_033	User Identities in IP multimedia domain	Alcatel	Discussion	Reviewed
S3LI01_034	DF3 split for CS	Alcatel	Approval	Approved with modifications
S3LI01_035	3GPP bearer	Motorola	Discussion	Reviewed. Decision deferred
S3LI01_036	Intercept redirect	Motorola	Discussion	Reviewed.
S3LI01_037	GPRS HI3 amendments	Nokia	Approval	No consensus
S3LI01_038	GPRS Length les	Nokia	Approval	No consensus
S3LI01_039	SHAMAN project	Deutsch T	Discussion	Reviewed
S3LI01_040	TS 33.107 R5 CR version March7	Chair	Approval	Approved
S3LI01_041	ETSI TC Sec LI Td007 updated	Siemens	Approval	Approved
S3LI01_042	CN4 liaison : H.248 is sufficient	Chair	Approval	Approved
S3LI01_043	SA5 liaison	Chair	Approval	Approved
S3LI01_044	TC Sec LI liaison on workshop	Chair	Approval	Approved
S3LI01_045	Redirect contribution modified	Motorola	Discussion	Tables Approved, solutions deferred.
S3LI01_046	Tdoc 38 revised	Nokia	Approval	Requirements approved with modifications
S3LI01_047	33.107 march 8	Chair	Approval	Approved
S3LI01_048	Final Tdoc list	Chair	Approval	Approved
S3LI01_049	Draft Clearwater report	Chair	Approval	To be reviewed
S3LI01_50	TS 33.107 R4 CR version March 9	Chair	Approval	Approved
S3LI01_51	Draft Clearwater report version 2	Chair	Approval	To be reviewed

Annex C

Agreed outputs of the S3 LI meeting #2/01 March 6 through 8, 2001 on lawful interception

1. S3LI01_029 Final Ratingen report
2. S3LI01_042 Liaison reply to CN4 on Mc interface
3. S3LI01_043 Liaison to SA5 on charging efforts
4. S3LI01_044 Liaison to TC Sec LI on workshop topics
5. S3LI01_046 revised version of GPRS HI3 Length les over FTP : fields changed to optional
6. S3LI01_047 updated CR to TS 33.107 for R5
7. S3LI01_048 final Tdoc list for Clearwater
8. S3LI01_050 updated CR to TS 33.107 for R4