3GPP TSG SA WG3 Security — S3#14   **S3-000425**

2-4 August, 2000

Oslo, Norway

Tdoc SMG10 AD00-49r2

Report of the SMG10-WPD meeting #2/00 on lawful interception
Mesa April 11, 12 and 13 2000

Please direct all comments to Leopold Murhammer at **leopold.murhammer@siemens.at** by May 31, 2000

Chairman: Bernie McKibben   Motorola Core Networks Division
Support/Secretary: to be determined   ETSI PT-SMG

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 Erv Comer on behalf of the host Motorola. The domestic arrangements were given. Bernie McKibben couldn't attend the meeting. Rolf Schnitzler acted as chairman for this meeting.
The proposed agenda with working schedule in **Tdoc SMG10 AD026** was proposed by the chairman. The working schedule was accepted and the documents were allocated. The main issues for this meeting were:

1)   Complete GPRS Handover Interface informative annex
2)   IN and CAMEL: documents, working plan
3)   Future of SMG10-WPD: continue as ETSI or 3GPP working party

SMG10-WPD specifications: rapporteur

GSM 01.33: Lawful Interception requirements for GSM version 7.0.0   David Miles (Cellnet)
GSM 02.33: Lawful Interception - stage 1 version 7.3.0   Bernie McKibben (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)

2   Reports

2.1   3GPP SA3

No activities for LI in 3GPP SA3 since last meeting in February.

~~1.2~~2.2   TC SEC LI

For SMG10-WPD it was a successful meeting in Stuttgart.

Presentation of SMG10-WPD:
       GSM Annex for HI2 & HI3   accepted
       GPRS Annex for HI2   accepted
       Location dependent Interception   accepted
German requirement at ES201 671: FTP instead of ROSE!
Only Netherlands (Regulator) and Alcatel are for ROSE.
At the next meeting of TC SEC LI there will be a formal voting about ROSE/FTP.
Status of AIs from TC SEC LI to SMG10-WPD is not clear, some of them should be already closed. The chairman will contact TC SEC and clarify this.

AI 1/2/00	Liaison Statement to TC Sec LI that SMG10-WPD also prefers FTP instead of ROSE. The new workgroup (money !!) and the FTP protocol are different matters, both are supported by SMG10-WPD. (AI: Rolf Schnitzler)
AI 2/2/00	Clarify status of AIs from TC SEC LI to SMG10-WPD (chairman)
AI 3/2/00	Review ETR331 and find out if there are still necessary actions for SMG10-WPD. Identify influence of ETR331 on our 3G-discussions and documents. (AI to all members of SMG10-WPD)

~~1.3~~2.3 *Review draft report of Bonn*

Martin Kaessens is missed at the participants list.
Wrong version numbers for 3G LI documents.
At the chapter of GTP': protocol used for 'billing' should be corrected to ..'charging'.
Fax Nr. of Mr. Kai Sjoblom is not current. The current one is +358-9-51164474.
Spelling of Mr. Kubbutat is not correct on participants list.
Phrases like "Australian authority" are not exact/correct.
For Nokia text in chapter 2 and 6 doesn't describe exactly the situation. Missing: If necessary, Nokia can provide more input for their proposals.
Annex B: List of documents must be dated #1/00 (not #9/99).
Nokia asked that in the paragraph titled "GTP' PROPOSAL FROM NOKIA:" the following sentence would be slightly amended: "… Additional information needed to be provided, including sequence numbers, correlation numbers, PDP types, and other ancillary information could be encoded in the header using GTP' standard methods.". There the wording "...in the header using..." should be: "...in the payload using...".

3   Documents from third party

How we will go on with documents coming from parties outside ETSI?

CONCLUSION:

It was agreed that any party can bring input for SMG10-WPD. On invitation of the chairman the author can present his document to WPD. If the author can't attend the meeting the document can be distributed by mail (by Mr. McKibben or by Mr. Schnitzler). Only if the majority (more than 50 %) agrees to discuss the document it will be handled by WPD.

4   Review of TIA intercept activities

As Bernie McKibben couldn't attend this meeting there was no discussion of the prepared documents
(Tdoc 29 and Tdoc 30; attention: wrong numbering of these 2 documents according Tdoc-List).
Bernie McKibben will attend the 2 US standardization (Las Vegas; Hawai) meetings in May. Any input for these meetings is welcomed and should be sent to Bernie until 20 of April.

AI 4/2/00	Bernie to make a presentation of all our documents, offer a cooperation between us and the USA standardization groups.

There is a common agreement in SMG10-WPD that the requirements of USA should be in line with our documents.

5   Intelligent Networks

5.1   SPAN 6 (DEG/NA – 61209) document

The general requirements for interception are covered by this document, but there are comments on this document.

Comments:
Nokia:
- At the scope the environment of these functions should be described.
- Problem with the wordings for ROSE: Proposal to prefix "In case ROSE is used, ..." and to describe
  that ROSE is only an example at the last chapter.
- SCP,SCF, CAMEL and SSP are not at the abbreviations list.
Siemens:
- Two boxes for the mediation functions are necessary at Fig. 7.1-2.
- How is the correlation of Fig. 7.1-1 and Fig. 7.1-2?
- The description of functional entities like ADMF is not clear
- The requirements on security are too general. This part should be reworked

A Liaison statement from SMG10-WPD to TC SPAN6 was written (Tdoc # 42). After minor editorial changes this liaison document will be handed over to Bernie McKibben.

AI 5/2/00   Bernie McKibben will send this liaison statement as official comment from SMG10-WPD to
                   TC SPAN6 and the members of SMG10-WPD.

~~1.2~~5.2   SMG10-WPD work plan for CAMEL

In the report of our meeting in Helsinki (July) we agreed to write CR's to GSM 02.33 and GSM 03.33 (which are still missing) and liaison statements to SMG 3 and SPAN6. SMG 3 stopped their work at May last year, we didn't get any response. Now this topic is handled by 3GPP SA 1/CN 2.

The question was: what shall be specified for CAMEL interception? Can we use parts of SPAN 6 documents for our requirements? Who will write the requirements?

Problems discussed during the meeting:
- Until now we made standardization for services, but the idea of CAMEL / IN is that the TSP define their own
  services.
- A concept must consider mobile networks, fixed networks and IN. An isolated solution for one part can
  result in problems in the future.

A Liaison statement was written (Tdoc 062 of last year was updated) as Tdoc # 41, to ask for help and input on CAMEL interception. After minor editorial changes this liaison document will be handed over to Bernie McKibben.

AI 6/2/00   Bernie McKibben will send this liaison statement as official comment from SMG10-WPD to
                   3GPP CN2 and the members of SMG10-WPD.

AI 7/2/00   Rolf Schnitzler will try to collect requirements (with REG TP, UK Home Office ...)

6   3GPP contributions

3GPP: Tdoc 013R1 Security / Tdoc 031UMSC from Motorola
As Bernie McKibben couldn't attend this meeting it was not possible to discuss these documents.
Topic will be postponed to the next meeting!

7   TC Sec Action points to SMG10-WPD

7.1   HI2 and HI3 syntax trees

Until now there are no inputs for this topic.
Further proceedings:
Siemens offered to organize a workshop in Vienna (26. or 27. June) to produce a draft paper. This document will be sent out for review by e-mail to SMG10-WPD before handover to TC Sec LI.
Participants: Siemens, Nokia and MMO

~~1.2~~7.2   GSM release codes

Until now there is no input for this topic. No one of the participants offered any help/contribution.

AI 8/2/00   All members of the group are asked to provide these release causes per e-mail (until end of april) to the chairman.

8   GPRS Handover Interface Informative Annex: HI3 interface

8.1   Decision on GTP' and GTP*

2 possible solutions (combinations) were discussed:
- GTP* and FTP
- GTP' and FTP

The majority of the participants insisted to chose one solution until the end of the meeting!

Nokia made a presentation of their requirement document for HI3 delivery to promote GTP' (Tdoc 043). This document is Nokia's view for requirements for any HI delivery protocol considered.

MMO could never agree on point 15) of this document.

Siemens made a presentation of GTP* (Tdoc 33) as a cheap and easy way for the delivery of HI3 data.

FTP was presented by VIAG Intercom as a 'more reliable' solution than GTP* and a easier/cheaper solution than GTP'.

No common agreement was found, a voting had to be done to choose the solution SMG10-WPD will describe and present to TC SEC LI.

Result:
- GTP* + FTP: 5 votes
- GTP' + FTP: 1 vote
- no preferencies: 1 vote

No one of the participants was not happy about this way to find a solution but there was no other possibility to go on. Nokia requested that the 21-point requirement list in TDoc AD00-043 would be minuted noted as the criteria according which it voted on the delivery protocols.

CONCLUSION:

The alternative pair GTP* and FTP was agreed upon in the SMG10 WPD with one vote in objection. The annex for GPRS HI3 interface (with 2 chapters for GTP* and FTP) will be described in a new document and sent to TC Sec LI to complete action point.

1.28.2 *Specification for the Annex*

Siemens presented Tdoc #44 as first draft describing general part and chapter for GTP*. This document was in general agreed with some necessary changes:
- Figure 1 update like it was agreed in Tdoc 38.
- Extension of the abbreviations list with GTP, GTP*, FTP, GSN, SGSN, GGSN.
- Editorial updates: Delete IP, use only CC. Don't use CD, use only IRI; run spellchecker.
- Common description of the use of the GTP* is missing.
- At chapter 0.5 the sentences describing the reason for use of a method have to be deleted. New text: There are 2 alternative solutions. According to national requirements at least one of them has to be provided.
- A sentence that payload could be lost is missing.

Nokia presented Tdoc #45 as a first draft describing the chapter for FTP. This document was in general agreed with some necessary changes:
- A references and a abbreviations list is necessary.
- Structure of the document should be improved

Following skeleton was fixed for the annex:
- References
- Additional Abbreviations
- Functional architecture
- Correlation
- HI3 (Delivery of Call Content)   (5.1 GTP* / 5.2 FTP)
  - Introduction   5.x.1
  - Protocol   5.x.2
  - Exceptional Procedures   5.x.3
  - Other Considerations   5.x.4

AI 9/2/00   Siemens has to provide a new version of the document based on new skeleton. This new document (Tdoc #47) contains the general part and the chapter for GTP*. This document has to be sent out for e-mail-discussion until end of next week.

AI 10/2/00   Nokia has to provide a new version of the document based on new skeleton. This new document (Tdoc #46) contains the chapter for FTP. This document has to be sent out for e-mail-discussion until end of next week.

AI 11/2/00   Bernie McKibben has to provide a new document combining Tdoc 46 and Tdoc 47 after the review period of one week for the input papers. A fixed version of the annex has to be available and distributed until end of April.

1.38.3 *Additional requirements*

Tdoc 17 (e-mail to the last meeting in Bonn from Mr. Jim Greethead) and Tdoc 24 (e-mail from Tony Youel): We discussed these documents and forward them to Koen Jaspers, editor of ETR 331, as two single positions (it's not the position of SMG10-WPD)

9   New topics for SGSN/GGSN interception

9.1   *Tdoc 38 Editorial clarifications to ES 201 671 Edition 2 draft 6 Annex K (GPRS) from Nokia*

The proposed changes on the picture were accepted. The note "GGSN interception is a national option" will be transferred from text parts later on (structure of the events) to Figure 1 of the document.

AI 12/2/00   Bernhard Spalt will make an update of the document (Annex for GPRS HI2) and send it to SMG10-WPD and TC Sec LI

9.2 Tdocs 34, 36, Addition of SGSN Change event for GGSN (Nokia)

SMG10-WPD had a long discussion about the requirement to provide many national options / requirements in the standards. The question here is not to accept/reject this event by SMG10-WPD but to decide how should we handle national options.

Up to now all interception specifications describe "lawful interception by the PLMN serving the intercepted subscriber". The new requirement would be: Specify also interception for subscribers roaming in other PLMN than the "intercepting PLMN". How this can be specified?

AI 13/2/00   All (regulators, operators, manufacturers) shall provide input to get a clear picture what SMG10-WPD should do for subscribers roaming in other PLMN than the intercepting PLMN.
This is a topic on the agenda for the next meeting of SMG10-WPD.

9.3 Tdoc 35, 37 from Nokia: Addition of PDP Context Timer event for SGSN and GGSN

SMG10-WPD discussed this feature (again) and couldn't find an agreement. It seems that the requirement and benefit is not clear enough described.
Nokia is asked to send a new input for the next meeting of SMG10-WPD. Than this topic will be on the agenda for the next meeting.

10 Other topics

10.1 Liaison statement to TC Sec LI for HI2 interface

SMG10-WPD supports FTP instead of ROSE for the HI2-interface.

AI 14/2/00   Bernie McKibben as chairman of SMG10-WPD to write a liaison statement to TC SEC LI (Tdoc #48) to inform them officially about the decisions of SMG10-WPD.

~~1.2~~10.2 Future of SMG10-WPD

For LI requirements/specifications to R'00, it would be better if we would be a subgroup of 3GPP SA3.
There exists already a 'mini-group' for LI. One possibility is to joint this group, another possibility is to establish a new subgroup which is responsible for all interception activities in 3GPP.

AI 15/2/00   Bernie McKibben as chairman of SMG10-WPD to write a letter to Mike Waker to inform and aks him about this fact.

The next meeting of 3GPP SA3 will be held in Tokyo May 23 – 25. Mr. Wilhelm will make a presentation of our ideas there.

~~1.3~~10.3 Secretary support

AI 16/2/00   Bernie McKibben as chairman of SMG10-WPD shall contact ETSI and ask for secretary support for our group (independent if we will be part of 3GPP SA3 or SMG10)

~~1.4~~10.4 *Access to LI standards*

Nokia mentioned that there is a request from LEAs to keep interception documents confidential (and have a restricted access to the standards). This leads to a conflict as standardisation documents always are public available. To clarify this topic TC SEC LI and 3GPP SA3 have to be contacted.

~~1.5~~10.5 *Next meeting*

The next meeting of SMG10-WPD will be held July 18 - 20 in Saarbruecken.
The main topics will be: LI for CAMEL and UMTS Release 2000.

Annex A

List of participants of the SMG10-WPD meeting #2/00 on lawful interception
Mesa, Arizona

<u>Name</u>	<u>Company</u>	<u>CC</u>	<u>Telephone/Fax</u>	
Erv Comer	Motorola	(US)	Tel:	+1 480 732 4182
e-mail: Erv.Comer@motorola.com			Fax:	+1 480 732 5117
Bernhard Spalt	Siemens	(AT)	Tel:	+43 5 1707 21474
e-mail: bernhard.spalt@siemens.at			Fax:	+43 5 1707 51922
Leopold Murhammer	Siemens	(AT)	Tel:	+43 5 1707 21467
e-mail: leopold.murhammer@siemens.at			Fax:	+43 5 1707 51922
Burkhard Kubbutat	Viag Interkom	(DE)	Tel:	+49 89 1480 3363
e-mail: burkhard.kubbutat@viaginterkom.de			Fax:	+49 89 1480 3841
Rolf Schnitzler (vice chair MoU-SG)	Mannesmann Mobilfunk	(DE)	Tel:	+49 211 533 2169
e-mail: Rolf.schnitzler@d2mannesmann.de			Fax:	+49 211 533 2144
Kai Sjöblom	Nokia	(FI)	Tel:	+358 50 1626
e-mail: kai.sjoblom@nokia.com			Fax:	+358 9 51164474
Berthold Wilhelm	Reg TP	(DE)	Tel:	+49 68193 30561
e-mail: berthold.wilhelm @regtp.de			Fax:	+49 68193 30733
Martin Kässens	T-Mobil	(DE)	Tel:	+49 22893 63306
e-mail: martin.kaessens@t-mobil.de			Fax:	+49 22893 63369

E-mail list for SMG10-WPD: smg10_wpd@list.etsi.fr

Annex B

List of documents of the SMG10-WPD meeting #2/00 on lawful interception

TDoc	No	status
Secure Provisioning for Multiple Agencies from Motorola revised per Bonn review	Tdoc SMG10 AD00-13R1	Distributed for Mesa
Statement from Australian government rep	Tdoc SMG10 AD00-17	Distributed in Bonn
Siemens GTP* clarification	Tdoc SMG10 AD00-22	Distributed in Bonn
Motorola proposal for enhanced GTP*	Tdoc SMG10 AD00-23	Distributed in Bonn
Email from Tony Youel on Reliability	Tdoc SMG10 AD00-24	Distributed in Bonn
Bonn draft report	Tdoc SMG10 AD00-25	Distributed for Mesa
Mesa draft agenda	Tdoc SMG10 AD00-26	Distributed for Mesa
Mesa draft Tdoc list	Tdoc SMG10 AD00-27	Distributed for Mesa
Interception of Intelligent networks from SPAN 6	Tdoc SMG10 AD00-28	Distributed for Mesa
T1P1 Surveillance Ad Hoc Working Document, May 2000	Tdoc SMG10 AD00-29	Distributed for Mesa
Method for Identifying Telecommunications Services and Information Services for Packet-Mode Communications Subject to Surveillance Under CALEA for TIA	Tdoc SMG10 AD00-30	Distributed for Mesa
Interception with a UMSC from Motorola	Tdoc SMG10 AD00-31	Distributed for Mesa
"GTP' Protocol" from Nokia revised	Tdoc SMG10 AD00-32	Distributed for Mesa
Description of GTP* Header from Siemens	Tdoc SMG10 AD00-33	Distributed in Mesa
CR "Addition of SGSN Change event for GGSN", r1 to GSM 03.33 from Nokia	Tdoc SMG10 AD00-34	Distributed in Mesa
CR "Addition of PDP Context Timer event for SGSN and GGSN", r3 to GSM 03.33 from Nokia	Tdoc SMG10 AD00-35	Distributed in Mesa
CR "Addition of SGSN Change event for GGSN" to 3G TS 33.107 from Nokia	Tdoc SMG10 AD00-36	Distributed in Mesa
CR "Addition of PDP Context Timer event for SGSN and GGSN" to 3G TS 33.107 from Nokia	Tdoc SMG10 AD00-37	Distributed in Mesa
Editorial clarifications to ES 201 671 Edition2 Draft 6 Annex K (GPRS) from Nokia	Tdoc SMG10 AD00-38	Distributed in Mesa
Event record amendments to ES 201 671 Edition2 Draft 6 Annex K (GPRS) from Nokia	Tdoc SMG10 AD00-39	NOT distributed
CR "Sequence Numbers and identifiers sent to DF" to GSM 03.33 from Nokia	Tdoc SMG10 AD00-40	NOT Distributed
Request for input on LI of CAMEL services from SMG10-WPD to 3GPP CN2	Tdoc SMG10 AD00-41	Distributed in Mesa
Liaison statements to DEG/NA-61209 to SPAN 6	Tdoc SMG10 AD00-42	Distributed in Mesa
Requirement for HI3 protocol for packet data from Nokia	Tdoc SMG10 AD00-43	Distributed in Mesa
Annex GPRS (for ES 201 671 (Handover Interface 3 of TC SEC LI) from Siemens	Tdoc SMG10 AD00-44	Distributed in Mesa
FTP chapter for 201 671 annex K from Nokia	Tdoc SMG10 AD00-45	Distributed in Mesa
FTP chapter for 201 671 annex K from Nokia with new skeleton	Tdoc SMG10 AD00-46	t.b.d. (early draft available)
Annex GPRS (for ES 201 671 (Handover Interface 3 of TC SEC LI) from Siemens with new skeleton	Tdoc SMG10 AD00-47	Distributed after Mesa
Liaison statement from SMG10 WPD to TC SEC to support FTP	Tdoc SMG10 AD00-48	Distributed after Mesa
Mesa draft report	Tdoc SMG10 AD00-49	Distributed after Mesa

Annex C

Agreed outputs of the SMG10-WPD meeting April 00
on lawful interception

Request for input on LI of CAMEL services from SMG10-WPD   Tdoc SMG10 AD00-41

Liaison statements to DEG/NA-61209   Tdoc SMG10 AD00-42

Liaison statement to TC SEL LI to support FTP on HI2   Tdoc SMG10 AD00-48

Annex GPRS (HI3 for ES 201 671) from Siemens   Tdoc SMG10 AD00-44

FTP chapter for ES 201 671 from Nokia   Tdoc SMG10 AD00-45