

25 - 28 February 2002

Bristol, UK

Tdoc S3 LI 02\_064

**Report of the 3GPP TSG SA WG3-LI (S3-LI) meeting #1/02 on lawful interception**

**Amsterdam 29-31 January 2002**

Please direct all comments to  
Rupert Thorogood at [rupert.thorogood@homeoffice.gsi.gov.uk](mailto:rupert.thorogood@homeoffice.gsi.gov.uk)

Chairman: (acting)	Bernard Spalt	Siemens
Support/Secretary:	Maurice Pope	ETSI
Meeting Secretary:	Rupert Thorogood	UK Home Office

List of participants:	see annex A
List of documents:	see <b><u>tdoc S3LI02_016</u></b>

## **1 Opening of Meeting**

The meeting was opened by the Secretary Rupert Thorogood. The host Koen Jaspers welcomed the delegates and gave the domestic arrangements.

### SMG10-WPD specifications:

GSM 01.33: Lawful Interception requirements for GSM version 8.0.0	<u>rapporteur</u>
GSM 02.33: Lawful Interception - stage 1 version 8.0.0	David Miles (Cellnet)
GSM 03.33: Lawful Interception - stage 2 version 8.0.0	Brye Bonner (Motorola)
	Bernhard Spalt (Siemens)

### 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 5.0.0	Berthold Wilhelm (Reg TP)
3G TS 33.108 Handover Interface for Lawful Interception version 0.3.1	Ron Ryan (Nortel Networks)

## **2 Election of (interim) chairman for the meeting**

Bernard Spalt offered to chair the meeting and was accepted.

Later in the meeting Brye Bonner of Motorola was elected as Chairperson for a period of two years. This will be recommended to SA3.

## **3 Meeting Objectives**

The Chairman stated that the main issues for this meeting were:

- 1. Work on 3GPP 33.108**
- 2. Work on 3GPP 33.107 change requests**

### 3. update on ASN.1

## 4 Approval of Agenda

The agenda with working schedule in tdoc S3LI02\_015 was proposed by the chairman and accepted by the meeting.

## 5. Registration and assignment of input documents

See tdoc S3LI02\_016 the list of meeting documents. It was agreed to accept the five documents submitted after 25/01/02.

## 6 Approval of Report of previous meeting

The final report from the S3-LI meeting in Aspen in October 2001 is available in tdoc S3LI02\_014. This was presented by the Secretary. There were no amendments

### 6.1 Action Points

Action points 01/01-02/04 01/04 01/11 01/13-01/17 and 01/19 and 01/21 closed.

## 7 Reports

### 7.1 SA3

**Report of SA3 meeting 21** tdoc S3LI02\_026 was presented by Berthold Wilhelm. He had reported the problem of chairmanship of the LI WG. He had presented the CRs of which all were accepted except the Inter-SGSN RA update with active PDP Context which was withdrawn. Motorola to provide CRs for R99 and Release 04. The change request in 010611 was suspended because of confusion with the Release number which Berthold Wilhelm will rectify.

**Action AP02-01 points: Berthold Wilhelm and Maurice Pope to rectify 010611.**

There are some Liaison Statements 564 and 565 (tdoc S3LI02\_035) AMR-WB for attention. Also TWG2 010571 our tdoc S3LI02\_027 VASP for attention. Also 010591 on the Privacy Override Indicator our tdoc S3LI02\_028, and the reply from TSG3 as 010591 our tdoc S3LI02\_033 for which we must provide a LS.

**liaison statement from VASP tdoc S3LI02\_027 presented by Brad Owen** . This is a LS from T2. regarding LI of value added services and concerns possible end to end encryption. Suggestion that a rapporteur is invited to explain. . See also MM7 working assumptions tdoc S3LI02\_029.

**Action AP02-02: Giorgy to provide a LS to T2 cc CN5.**

**Privacy override indicator tdoc S3LI02\_028 and tdoc S3LI02\_033**. These were presented by Brad Owen where SA 3 consider that there are LI aspects especially as this applies between countries. The LEA representatives explained the relevance of the location requirements. Chair recommends a joint workshop and to then insert appropriate section in TS 33.107 and TS 33.108. tdoc S3LI02\_033 asks for clarification if the operator is out of country.

### **Action AP02-03: Pierre Truong to draft a LS to SA2 SA1**

Configurability of cipher use tdoc S3LI02\_030 and tdoc S3LI02\_032 presented by Brad Owen who stated that 030 was erroneous and not to be handled here.

Revised work item for 33.108 tdoc S3LI02\_031.

### **Action AP02-04: Berthold Wilhelm and Maurice Pope to discuss the status of r4 and r5.**

Response to IP Cablecom on LI tdoc S3LI02\_034. This is an ETSI internal discussion and was noted.

LS on AMR-WB and LI tdoc S3LI02\_035. This was responded to by Brad Owen who considers that this was discussed at Aspen. He will find out the document from SA3. See tdoc S3LI02\_49/50.

TSG-SA WG3 tdoc S3LI02\_036 was discussed and responded to. Berthold Wilhem and Maurice Pope to clarify. See **AP 02-04**

WID for AMR-WB speech in R5 network aspects tdoc S3LI02\_037 and tdoc S3LI02\_038. These are related to 035 and we wait input from Brad Owen who will do a LS which will be tdoc 049 this documents is the old LS of Aspen; 50 was a response See **AP 02-12** at chapter 11 agreement between Pierre Truong, Brye Bonner and Brad Owen necessary.

CR to 33.102 tdoc S3LI02\_039. This was related to tdoc S3LI02\_030 and tdoc S3LI02\_032 and was noted.

## **7.2 ETSI TC SEC WG LI**

### **Proposed Terms of Reference tdoc S3LI02\_022.**

Bernd Adams reported from the Vienna meeting. Most of the work had been done so the discussion revolved around the future work. It had been proposed that only the maintenance of 201 671 was required. However the group believed that a new handover spec for IP was needed. There is a new draft TOR by the new interim chairman Scott Cadzow. There is a debate on the status of the group on whether it should be a TC – this will be decided by the ETSI Board.

The maintenance of 201 671 is important and they will liaise with the other groups for this purpose.

New Work Item for IP interface tdoc S3LI02\_024. Koen Jaspers said that currently there were only generic handover requirements – there was nothing on network layers and their security. Secondly there is no standardisation in the IP world for LI. The meeting expressed some concern that some of the work would unnecessarily duplicated. It was proposed to send an LS which will be tdoc 051 to TC LI.

### **Action AP02-11: Chair to draft an LS to TC LI regarding their new WI on IP interface**

## **7.3 ANSI T1P1.SAH (surveillance ad hoc)**

Ron Ryan reported that the SAH is working on US requirements with contributions from CALEA Implementation Section (CIS). There was a meeting last week where consensus was reached on most issues. There is a recommendation to 3GPP LI. There is a plan to complete the work on the five open issues by April. Although contributions to 3GPP will be from individual companies this is based on a consensus in T1P1. The Chairman asked that T1P1 documents should clearly state that there is agreement on the content.

#### **7.4 TR 45 LAES (Lawfully Authorized Electronic Surveillance)**

Pierre Truong presented several documents. One proposed to add a new section to the J-STD-025 standard on packet data access. This applies to cdma2000. TR45 expects input from T1P1 or 3GPP LI. There is also a background document on the CALEA requirements. There was a CIS framework document for packet based services. There is another document from CIS defining the requirements for Stage 1. Finally there was a report from the last meeting that outlined their Workplan.

#### **7.5 TIPHON**

Rupert Thorogood presented a verbal report (which came from John Horrocks). He said that Stephen Fischer had resigned as chairman of WG8. John suggests that TIPHON should have a dedicated LI WG. He went on to say that there are two new work items – one a general description of LI and CALEA and the other for a SIP based handover interface.

### **8 Work on TS33.108**

#### **8.1 Input Documents**

**TS33.108 v0.3.0 tdoc S3LI02\_007** was presented by Ron Ryan. This version, which contains all the revision marks, is the output of the Aspen meeting and the Dusseldorf workshop. He reviewed these changes which led to an updated document from the Dusseldorf workshop, **TS33.108 v0.3.1 tdoc S3LI02\_008**.

The Change Requests (for TS33.107 but will reflect to TS 33.108) **PDP Context deactivation tdoc S3LI02-001 and PDP Context modification tdoc S3LI02\_002r1** were presented by Koen Jaspers. These were agreed and will be forwarded to SA3. A relevant modification **tdoc S3LI02\_041** was presented by Ron Ryan regarding PDP Context Modification Capability. **Updates include modification to the CONTINUE record, ASN.1 GPRSevent and the text in the IP address coding.** After some discussion it was proposed that annex A should not be amended and that all updates correlated to TPKT should be in the informative section annex H. The final proposal concerned SMS Event Reporting in table 6.5 in 33.108. the question concerned SMS and service center addresses. The question of conditional or optional will be dealt off-line. optional was agreed. All these changes will be reviewed later in the meeting. **This is a possible CR on optimising HI3 tdoc S3LI02\_019** and was presented by Giorgi Gulbani who proposed that the time stamp should not be conditional. In VoIP applications some parts of the header could be disposed of. If only certain packets were time stamped then the other packets could be referenced back to those. This was discussed and no CR is necessary.

The document entitled **Definition of ULIC header tdoc S3LI02\_012** was presented by Giorgi Gulbani who said that there were two issues. Firstly there was the question of naming the GLIC header. The next concerned information elements. After some discussion the Chairman recommended that it should be updated and discussed later.

The document **LIC Header for HI3 tdoc S3LI02\_017** was presented by Laurent Perrine. The first part of the document lists reasons specific to 33.108 in favour of ASN.1 instead of specific TLV. The second part gives some general reasons for using ASN.1 and standardised encoding rules instead of specific TLV.

Similarly **LIC Header for HI3 defined tdoc S3LI02\_018** was presented by Laurent Perrine which proposes the definition of the LIC Header and that it should use ASN.1.

The Chairman recommended a combined discussion later after the revised **tdoc S3LI02\_012** has been tabled. **Length of QoS tdoc S3LI02\_010** was presented by Giorgi Gulbani. He proposed to re-define the QoS parameter in Annex B.4 to be either from 3 to 11, or from 3 to 254 octets long. Giorgi will provide a revision mentioning the suppression of the first two octets and this will be amended in the TS.

**CC Content for FTP tdoc S3LI02\_011** was presented by Giorgi Gulbani. This proposed to fix the type of the IE in the CC header. The Chair suggested that the table is only inserted in version 1 of the FTP header. This was accepted and a revision will be produced.

**Private extension for HI2 tdoc S3LI02\_020** was presented by Giorgi Gulbani and concerned the adding of an optional Private Extension IE to the HI2 port. After some discussion this was withdrawn.

**SMS address clarification tdoc S3LI02\_042** was presented by Selvem Rengasami who proposed three changes. This was agreed.

**Timing tdoc S3LI02\_046** was presented by Selvem Rengasami who suggested a refinement in timing and proposed a clarification of the existing text by adding a clause to 6.2.1. After some discussion the Chairman suggested that the fixed structure of :hh,mm,ss should only be mentioned as example. A revised document will be issued.

**Roaming tdoc S3LI02\_045** was presented by Selvem Rengasami who suggested that there are two scenarios not yet addressed. Firstly where the user is roaming and intercepted through a home GGSN. The Chairman noted that this should only be optional. Secondly there should be an indication from the HLR when the user has roamed. After considerable discussion the Chairman recommended that an additional sentence was needed in IRI events that this will be a national requirement. The US will discuss this matter further.

**Packet Activity Reporting Events tdoc S3LI02\_044** was presented by Selvem Rengasami and notes that currently TS 33.108 does not provide support for the delivery of IRI for packet communications and proposed several changes to tables and clauses. However T1P1 has not yet consensus on this subject. The Chairman asks if it implies that an IRI packet is sent for each CC packet. This was discussed and there were a number of disagreements correlated to the idea of IRI (additional information to CC) and also the big impact on performance of the systems. Accordingly **tdoc S3LI02\_043** (update of 33.107 for this new requirements was not discussed .

**Text Proposal Continue Records tdoc S3LI02\_056** was presented by Koen Jaspers and was a result of the Rattingen workshop. It was agreed to incorporate this proposal.

**Length of the QoS tdoc S3LI02\_010r1** was reviewed by Giorgi Gulbani. There were no objections.

**CC Contents for FTP tdoc S3LI02\_011r1** was reviewed by Giorgi Gulbani. There were no objections.

The updated version of TS33.108 v0.4.0 **tdoc S3LI02\_007r1** was presented by Ron Ryan and incorporated all the agreed changes during the meeting. There were one or two minor adjustments although it was decided to leave section 5 (circuit switched) without comment.

tdoc S3LI02\_061 was presented by Ron Ryan which recommended that a US specific statement be included in TS33.108. He wishes to report back to T1P1 that this can be incorporated under 3GPP rules. The Chairman suggested that Maurice Pope be asked if there are annexes specific for certain countries.

Ron Ryan asked for the following statement to be added to the meeting report:

“The decision of whether U.S. specific sections or clauses are INFORMATIVE or NORMATIVE is a decision of the U.S. (e.g., whether Annex H is INFORMATIVE or NORMATIVE is a decision of the U.S.).”

“The group agreed to consult 3GPP/3GPP procedures to ensure NORMATIVE is possible”

(Secretary’s note: the above statement has not been seen or ratified by the Working Group in Plenary).

### **Action AP02-11: Chairman to ask Maurice Pope if there are annexes specific for certain countries**

There were several discussions on how TS33.108 should be submitted to SA3.

It was agreed that the revised document with the ASN.1 part be finalised and circulated to the list by 15 February which gives a week for approval when Brye Bonner will forward it to SA3. If it is not agreed it will be forwarded to SA3 for information.

## **8.2 Discussion on choice of ASN.1 and TLV**

**HI3 UMTS ASN.1 defined tdoc S3LI02\_018r1** was presented by Laurent Perrine and it was decided that GLIC should be replaced by ULIC. This contribution recommends that FTP is encoded with ASN.1. The latter was not adopted and will be reviewed at a future meeting.

**Definition of ULIC header tdoc S3LI02\_012r1** was presented by Georgy Gulbani who summarized the proposals regarding the name of header and the subsequent changes that would be required.

**Definition of the Type values for ULIC tdoc S3LI02\_013** was presented by Georgy Gulbani who summarized

There was some discussion on the 3GPP rules for voting especially in working groups.

A vote was then held to ascertain support for TLV and ASN.1 -

Support for TLV        for 1 : abstention 5: against 9.

Support for ASN.       For 11: abstain 6: against 1.

## **9 ASN.1 issue on HI2**

### **Report of the (late) evening session on 01/29/02 compiled by Bernd Adams**

Relevant documents on the ASN.1 issue TDs 03, 04, 21, 23

tdoc S3LI02\_003 on ASN.1 issues was presented by Manfred Beierer from the German RegTP. He highlighted 5 issues in his presentation.

1. Syntax errors (no further discussion ; error correction should be handled during the finalisation of the standard by the use of syntax checkers; Manfred also explained that wherever “choice” in

combination with 3 dots appears the checker complains as the 3 dots indicate that a tag is missing (the 3 dots indicate the possibility of an extension))

**Action AP02-06: to Robin Gape to check the syntax with the PEX at ETSI.**

2. Module identifier

He then presented a chart of the ASN.1 Object-Tree for LI (originally drawn by Wolfgang Schumacher from Deutsche Telekom) and asked the question where to place the object tree (branch) for 33.108. The agreement of the group was to add another branch under the lawful intercept node.

**Action AP02-07: AP to Manfred Beirer to amend the chart and to carry the proposal to TC SEC LI for approval (TD52).**

3. HI1 issues

The group agreed that all HI1 issues will be removed from 33.108. HI1 issues will be handled only by ES 201 671.

4. Misalignment with ES 201 671

Manfred presented examples for the misalignment between 33.108 and ES 201 671. Such kind of misalignment will cause implementation problems with the used compilers on the LEA side.

5. Import/Export Functionality

The proposal was presented in detail by tdoc S3LI02\_004.

tdoc S3LI02\_004 on ASN.1 working procedures was also presented by Manfred Beierer. He presented a method to develop ASN.1 parameters within ETSI and 3GPP and a way to share responsibilities. TC SEC LI should define a set of common parameters, which can be exported to and imported from the technology specific groups. This groups are responsible for the ASN.1 parameters for their technology (TETRA, ISDN, TIPHON, UMTS,...).

He presented his idea to create a library for the ASN.1 parameters. One group should maintain this library to guarantee e.g. the backward compatibility of new parameters.

This proposal received broad agreement. The import / export functionality was agreed in principle.

**Action AP02-08: to Manfred Beierer to make his PPT-presentation available as a separate TD to the meeting(TD53).**

Robin Gape suggested that the maintenance of the library should lie in the hands of the ETSI PEX.

**Action AP02-11: to Manfred Beierer to update his presentation for input to the next TC SEC LI meeting (54).**

tdoc S3LI02\_021 and tdoc S3LI02\_023 were not discussed in the evening session.

**This was the end of the evening session**

**Proposed Modifications to TS 33.108 tdoc S3LI02\_021** presented by Ron Ryan and proposes a number of changes. The Chairman summarises that this will form part of the workshop on ASN.1, including the ETSI experts, to be held shortly. But no formal agreement was found.

tdoc S3LI02\_023 could not be discussed as the author did not attend the meeting and no other presenter was available.

## **10 Work on TS 33.107**

### **Change Requests-**

**QoS IE across X2 interface tdoc S3LI02\_009** was presented by Giorgi Gulbani and concerned the Transfer of the QoS information element across the X2 interface. This had been proposed in Aspen and will be forwarded to SA3.

**New parameters in the events tdoc S3LI02\_005** presented by Berthold Wilhem . This duplicates previous work and was withdrawn.

**H248 Bearer interception tdoc S3LI02\_025** was presented by Brad Owen and concerned the use of H.248 in setting up a bearer intercept point at the MGW following agreement at Aspen. There is an example call flow to be added to the annex. A revision was required.

**H248 Bearer interception tdoc S3LI02\_025r1** was again presented by Brad Owen . This was agreed and will be forwarded to SA3 for release 5.

**TPKT/TCP delivery tdoc S3LI02\_040** was noted.

**PDP Context tdoc S3LI02\_001r1 and tdoc S3LI02\_002r1** the changes were presented by Koen Jaspers. These were agreed for release 5 and they will be forwarded to SA3.

**tdoc S3LI02\_059 and tdoc S3LI02\_060** from Motorola re R99 and Release 04 on 33.107 and concerns location services during the start of interception with active PDP content event. After a minor deletion this was agreed and will be forwarded to SA3.

## **11. Review of the meeting output**

### **Liaison Statements**

**tdoc S3LI02\_047** to T2 on VASP MMS Connectivity and **tdoc S3LI02\_058** to 3GPP TSG-T WG2-SWG3 on MM7 working assumptions were presented by Giorgi Gulbani. These were agreed.

**tdoc S3LI02\_048** to TSG SA2, SA1 on the “Privacy Override Indicator presented by Pierre Truong. After some modification this was agreed.

**tdoc S3LI02\_052** was presented by Manfred Beierer to TC Sec LI and concerns the ASN.1 structure and the responsibility for the nodes of the branch. After modification this was agreed.

tdoc S3LI02\_057 to TC Sec LI on ASN.1 parameter handling and presented by Manfred Beierer. The proposal includes a powerpoint file tdoc S3LI02\_053. After a minor modification this was agreed.

tdoc S3LI02\_051 to TC Sec LI in response to their LS on IP Interception. After some clarification this was agreed.

There was discussion concerning a draft LS to TSG CN regarding the wb codecs.

**Action AP02-12: Pierre Truong and Brye Bonner to prepare and circulate a draft for e-agreement.**

## **12 Future Meetings**

Motorola (Chicago or Phoenix) 9-11 April 2002  
(secretary's note: this has subsequently been changed to Orlando Fla, USA)

Budapest (or USA West Coast in July) 4-6 June 2002

## **16 Other business**

There was no other business.

## **Close of meeting**

The Chairman thanked the delegates for their work and the host for the excellent facilities and the delightful boat trip.

## Annex A: List of attendees

Name			Company	e-mail
Mr	Bernd	Adams	Deutsche Telekom AG	<a href="mailto:Bernd.adams@t-systems.de">Bernd.adams@t-systems.de</a>
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Mr	Berthold	Wilhelm	Reg TP	<a href="mailto:Berthold.Wilhelm@regtp.de">Berthold.Wilhelm@regtp.de</a>

## Annex B List of Action Items

03_01/01	Motorola	New rapporteur for GSM 02.33 LI stage 2 version 7.20	Closed
04_01/01	Ron Ryan	Prepare short overview on US standard bodies for LI	closed
04_01/02	Robin Gape	Ask ETSI how amendments to ES 201 671 could be made without a vote. (Change requests belong to the group)	closed
04_01/02	Rolf Schnitzler	To ask SA3 for Far East member	Open
04_01/03	Rolf Schnitzler	Keep Sa 3 Chair updated of our work!	closed
04_01/04	Rolf Schnitzler Robin Gape	Clarify the situation on The ASN.1 Object Tree	closed
04_01/05	Uri Baniel	produce <b>Tdoc 102 for r4 and 103 for r5</b> as CRs Direction of PDP Context	Done
04_01/06	Uri Baniel	to produce <b>Tdoc 104 and 105 for r4 and r5</b> Secondary Interception event	Done
04_01/07	Brad Owen	to produce <b>tdoc 106 for r5</b> Correct the MO-SMS and MT SMS events	Done
04_01/08	Berthold Wilhelm	to produce tdoc 108 Correct inconsistency in 33.107 R5	Done
04_01/09	Uri Baniel	to update <b>tdocs 082 and 083</b> Interaction of class of service	Done
04_01/10	Leo Murhammer	To prepare a note Differences and gaps in LI between legacy telecommunication and MM call scenarios For SA 3	Done
04_01/11	Rolf Schnitzler Berthold Wilhelm	The WI LI will be updated and send out for e-mail approval.	closed
05_01/12	Uri Baniel	Baniel will prepare new CR (from SA3 meeting in Sydney) and then ask Maurice Pope for the correct wording. ( <b>Tdocs 98 149 and 150</b> )	Open
05_01/13	Terri Brooks	to prepare a paper on the work schedule adopted by TR45 LAES	closed
05_01/14	Rupert Thorogood	to ascertain status of TIPHON Work Item	closed
05_01/15	Rolf	to send e-mail to Edward Fitzgerald saying that their LS will be discussed when the final version is available	Open
05_01/16	Giorgi Gulbani	to review the composition of the GPRS correlation number and produce a new contribution.	closed
05_01/17	Ron Ryan	to amend the 33.108 tables in accordance with <b>Tdoc S3LI01_128 r1.</b>	closed
05_01/18	Bernard Spalt	to propose amendment to the scope of 33.108 arising from tdoc S3LI01_125.	Open
05_01/19	Brad Owen and Janos Varro	Varro to update <b>tdoc S3LI01_141</b> for the next meeting	closed
05_01/20	Janos Varro	to prepare a discussion paper based on tdoc S3LI01_137.	Open
05_01/21	Brad Owen	Owen to respond to TSG CN4 copied to SA3 that there are potential impacts on LI in response to <b>tdocS3LI01_133 and 134</b>	Closed

<b>AP02_01</b>	Berthold Wilhelm and Maurice Pope	to clarify 010611	
<b>AP02_02</b>	Giorgy Gulbani	to provide a LS to VASP	
<b>AP02_03</b>	Pierre Truong	to draft a LS to SA2 SA1	
<b>AP02_04</b>	Berthold Wilhelm and Maurice Pope	to discuss the status of r4 and r5 of 33.108	
<b>AP02_05</b>	Chair	to draft an LS to TC LI regarding their new WI on IP interface	
<b>AP02_06</b>	Robin Gape	to check the syntax with the PEX at ETSI.	
<b>AP02_07</b>	Manfred Beirer	to amend the chart and to carry the proposal to TC SEC LI for approval ( <b><u>tdocS3LI02_052</u></b> ).	
<b>AP02_08</b>	Manfred Beirer	to make his PPT-presentation available as a separate TD to the meeting( <b><u>tdocS3LI02_053</u></b> ).	
<b>AP02_09</b>	Manfred Beirer	to update his presentation for input to the next TC SEC LI meeting ( <b><u>tdocS3LI02_054</u></b> ).	
<b>AP02_10</b>	Robin Gape	to provide a report from Ratingen workshop with the action points.	
<b>AP02-11</b>	Chairman	to ask Maurice Pope if there are annexes specific for certain countries	
<b>AP02-12</b>	Pierre Truong and Brye Bonner	to prepare and circulate a draft for e-agreement.	