



3rd Generation Partnership Project

REPORT Version 1

TSG_SA_WG1#10 Plenary Meeting

Orlando, USA
14th to 17th November 2000

TSG_SA_WG1 Chairman: Alan Cox
Secretary: Michael Clayton

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DRAFT MEETING REPORT

1 Opening of the Meeting

The TSG_SA_WG1#10 Plenary Meeting was held in Orlando, USA from the 14th to 17th November 2000. It was chaired by Mr Alan Cox (Vodafone) and the secretary was Mr Michael Clayton from the MCC. The host was Pacific Bell Wireless and Siemens with the social event being hosted by Qualcomm.

Randolph Wohlerth welcomed the delegates to Orlando, Florida. He wished the delegates a pleasant stay and a fruitful meeting.

2 Adoption of Agenda

Document Number	Title	Source
653	Agenda for SA1 meeting #10	MCC

Document S1-000653 contained the draft agenda for SA1 meeting #10. It was approved without comment.

3 Report and Email Approval from last meeting

3.1 Approval of report of last meeting

Document Number	Title	Source
652	Report of SA1 meeting #9	MCC

Document S1-000652 contained the report of TSG S1. It was approved.

3.2 Email Approval

Document S1-000655 contained a summary of S1 Email agreements reached before the meeting. It was noted.

The following documents were noted as they were provided after the previous SA1 meeting for agreement over email and were submitted to SA#9 for approval.

Document Number	Title	Source
645	LS to SA on Handling of emergency call	Vodafone
651	Recall Capability for Emergency call	NTT DoCoMo
655	Email summary	MCC
656	Removal of the Requirement on Network to Tear Down Calls to Accept EC in Multicall	Ericsson
657	Addition of Ncs_MT limitation to number of MPTY members	Ericsson
658	Reply to LS on Guidance on future work for T2 SWG5, Multi-mode terminals	Telia
659	Reply to LS on Security issues with ME user input and DTMF tones	S3
667	Provision of Velocity for Location Services	LCS Ad Hoc
668	Correction of constraint of LCS functionality to the Access Network	LCS Ad Hoc
669	Removal of the restrictive sentence and modification for specific high level requirement	LCS Ad Hoc

670	External LCS client identity	LCS Ad Hoc
671	Privacy Control for LCS	LCS Ad Hoc
672	PS Session Support for LCS	LCS Ad Hoc
673	Clarifications to LCS on privacy and Service response	LCS Ad Hoc
674	Geographic Location	LCS Ad Hoc
675	Adding statement on "active" and "idle" UE in chapter 4.13	LCS Ad Hoc
676	Radio Access Network support for LCS	LCS Ad Hoc
677	Identification of a Target UE using IP addresses	LCS Ad Hoc
678	LCS: LCS Open Service Architecture (OSA) and Application Programming Interface.	LCS Ad Hoc
679	Liaison Statement to RAN2 regarding Open Interfaces within the UTRAN for LCS Support	LCS Ad Hoc
680	Liaison Statement to TSG-GERAN regarding Open Interfaces within the GERAN for LCS Support	LCS Ad Hoc
689	Global Text Telephony, Stage 1 description (22.226)	Ericsson
698	Numbering Principles (revision of 597 CR#47)	Ad Hoc
699	IM Number portability	Ad Hoc
700	General corrections and clarifications to 22.101 for Release 4 (revision of 618 CR#42)	Ad Hoc
701	Introduction of IM CN Subsystem	Ad Hoc
702	IP multimedia services	Ad Hoc
703	TS22.228 v 0.6.0 "Service requirements for the IP Multimedia Core Network"	Ad Hoc
704	Subscription	Siemens
705	Roaming	SA1

The documents were presented for information at SA1 #10 and were noted.

3.3 Admin

Document Number	Title	Source
713	List of S1 specifications with Rapporteur names	MCC
718	Work Items for SA1	MCC
781	Specification sets for Release 99 and Release 4	Lucent
792	List of S1 specifications with Rapporteur names	MCC
793	Work Items for SA1	MCC

S1-000713 contained a list of all the S1 specifications with Rapporteur names. The chairman requested that updates be forwarded to the SA1 secretary for updating. The update was provided in document S1-000792.

S1-000718 contained a list of all the work items that relate to SA1. As has already been explained, there are Features, Building Blocks and Work Tasks in the project plan. In the following annex the Features are shown in bold at the top of each table (under the header). The Building Blocks and Work Tasks are either indented under the feature entry.

The first section show those features that belong to SA1. These are the responsibility of SA1 and for which SA1 must provide a Work Item Description (WID). It is possible for the WI to be approved without a WID, although it is highly unusual since it is this WID that dictates what work should be done by the other groups. If SA1 identifies a Building Block or Work Task, then it is incumbent on SA1 to put this into the project plan and provide some indication of what should be done via the main WID or possibly a new WID¹. It should be noted that in some instances, SA1 owns the Feature and has subcontracted a Building Block to another group, which has itself subcontracted SA1 to perform a Work Task (See IDs **1273**, 1804 and 1650).

The SA1 WIDs are on the server at:

¹ Normally WIDs only exist for Features.

ftp://www.3gpp.org/TSG_SA/WG1_Serv/WIDS/

The second section shows those features that belong to other groups, but for which SA1 is responsible for a Building Block or Work Task. In these circumstances, SA1 needs to refer to the WID to find out what exactly needs to be done. These WIDs are now on the server at:

ftp://www.3gpp.org/TSG_SA/WG1_Serv/WIDS/WIDsNonSA1/

Document S1-000781 from Lucent contained a document regarding the Stage 1 descriptions for Release 99 and Release 4. In the document there is a list of SA1 specifications by the MCC following SA#9, which also indicates whether the specifications are applicable to GSM and/or UMTS. In Release 99 the Stage 1's are contained in the 02.xx and 22.xxx series. Those specifications in the 02.xx series apply only to GSM. There are however some specifications that apply only to GSM also in the 22.xxx series.

In Release 4 (and in further releases) the Stage 1's for GSM only are contained in the renumbered 42.xxx and the others are contained in the 22.xxx series.

It is being proposed that those specifications that apply only to GSM are contained in 02.xx series in R99 and the 42.xxx series in future releases.

The services affected are Follow Me, SoLSA and eMLPP.

It was agreed that:

- ?? eMLPP is applicable to UMTS/3G (TS 22.067 will remain as it is and there will not be a 02.67);
- ?? SoLSA is applicable only to GSM (22.043 will be renumbered to 02.43 and there will be a 42.043 in the future); and,
- ?? Follow Me is applicable to UMTS/3G (TS 22.094 will remain as it is and there will not be a 02.94 and 42.094);

It was noted that Follow Me is highly applicable to the Railway applications and not much else. However, it will be kept in the 22.xxx series as it could be used in 3G where there is no need for security. There is a health warning in 22.094 and will remain as so.

Paul Carpenter indicated that he would check the references for all the specifications to align them all.

4 Reports from other groups

4.1 SA #9

Document Number	Title	Source
654	Report of SA meeting #9	MCC

The report of the SA plenary #9 was provided in S1-000654. It was noted.

5 Liaisons from other groups

5.1 SA

5.1.1 SA3

Document Number	Title	Source
660	Clarification of UMTS-AKA for GSM R'99 Mobiles	S3
687	Clarification of UMTS-AKA for GSM R'99 Mobiles	T3
690	Answer to LS New SIM toolkit feature: "Auto-answer & Mute-	SA3

	ringing"	
740	Support of UMTS AKA for GSM only mobiles	France Telecom
795	Support of UMTS AKA for GSM only mobiles	France Telecom
796	New SIM toolkit feature: "Auto-answer & Mute-ringing"	France Telecom
805	Support of UMTS AKA for GSM only mobiles	France Telecom
806	Support of UMTS AKA for GSM only mobiles	France Telecom
848	LS about USIM support in GSM only terminals (AKA)	S3

Document S1-000660 contained a liaison statement from S3 on Clarification of UMTS-AKA for GSM R'99 Mobiles. TSG SA WG3 (S3) has discussed the use of a SIM card and a USIM card in mobile entities. S3 has made the following working assumptions:

- 1) A SIM card does not support the UMTS authentication and key agreement mechanism.
- 2) A GSM Release 99 mobile entity will support the UMTS authentication and key agreement protocol as specified in TS 33.102 when a USIM is inserted into a mobile entity.

If these working assumptions were incorrect would you please notify S3.

Document S1-000687 contained an answer from T3 on this. T3 point out that working assumption 2) implies that every GSM R'99 mobile must fully support the USIM/ME interface as defined in TS 31.101 and TS 31.102 in addition to the SIM/ME interface specified in GSM 11.11.

It has been the understanding of T3 that the 3G security context (including the UMTS-AKA) is only available with a USIM and that support of USIM, in our understanding, not required for a GSM only ME.

The committees addressed are urgently requested to clarify the situation.

A proposal for this was received in S1-000740. There are two options to implement this:

1. the USIM/ME interface is implemented in GSM only ME so that the USIM and the UMTS AKA is supported by these terminals
2. The SIM/ME interface is upgraded to support UMTS authentication (in fact partially, which means that the AUTN token is passed to the SIM which implements network authentication and anti-replay from sequence number, but there will be no integrity key since there is no integrity on GSM radio path)

In order for the operators to have a better security in their GSM R99 networks, it is proposed to enhance the SIM/ME interface for GSM only ME to support the UMTS authentication in part (network authentication and anti-replay from sequence number, but there will be no integrity key since there is no integrity on GSM radio path).

The understanding is that legacy mobiles are not required to support new functionality in general and this would apply to this also.

For completeness, document S1-000848 contained a liaison statement from S3 on USIM support in GSM only terminals. This liaison statement is a reply from S3 to T3 document provided in S1-000687. In it, S3 indicate T3 has based their specification work on the assumption that GSM only R99 MEs are not mandated to support USIMs. S3 does not see any major security implications in this issue. Therefore, S3 agrees to move into line with the view of T3, and will prepare CRs to its documents accordingly. It was noted.

There is something in 22.105 on this and it was suggested to have a liaison statement back to the relevant groups with some proposed changes. Document S1-000795 was allocated to the liaison statement back to the groups.

It was commented that the liaison statement does require a clear statement that AKA is not required for the GSM only mobiles to support the AKA. This revision was provided in document S1-000858. This was revised to S1-000867 and it was approved.

The CR to implement the decision indicated in the LS was provided in S1-000806. This needed some revision to keep the terms consistent.

The document number S1-000805 should have contained a WID for this, but it was not required. Document S1-000805 was not used.

Document S1-000805 was revised to S1-000859 and an R5 version of the CR was also provided in S1-000860.

S1-000690 contained a liaison statement from S3 on a New SIM toolkit feature: "Auto-answer & Mute-ringing". This related to the confidentiality of entering keystrokes which could emit a tone. This brought up some time ago and was answered. S3 are now indicating that if S1 wants to support this feature, S3 will examine it again, provided that a new security mechanism is proposed in S3.

This could well be a new feature and so the meeting was asked if there is a requirement for this. If not, then S3 need to be told not to continue the work. Anyone requiring for this, should provide a Work Item for this.

Document S1-000796 contained the WID for this feature. (France Telecom). It was reported that there are some security problems and so the feature was not supported at this meeting. Document S1-000796 was not used.

However, it was noted that if we do wish to have this feature, we really should tell the other groups.

Document S1-000121 was a liaison statement from SA1 to SMG9 and TSG SA WG3 indicating that SA1 has considered whether or not there is a need to incorporate this new feature. During these considerations, some disadvantages of this feature in the area of privacy were identified. S1 did not find sufficient detail in the liaison statement from SMG9 to allow for the use of this feature being limited only to scenarios where its use may be beneficial. Accordingly S1 has decide not to include this feature in R'99. Further consideration for releases beyond R'99 will be decided on the basis of any future contributions S1 may receive.

Since we still do not need it, then we do not need to do anything.

5.1.2 SA5

Document Number	Title	Source
728	Liaison on provisionally approved SA5 Work Item Description (BB): "Subscription Management (for approval at SA#10)"	SA5
729	Questions concerning impact on charging of Release 4 architecture	SA5
730	Operation, Administration, Maintenance & Charging regarding IM CN subsystem	SA5
801	Information Exchange on TSG-SA WG5 Issues	TSG-SA WG5 Chair
802	SA5 concept of Subscription Management	TSG-SA WG5 Chair

Document S1-000728 contained a liaison statement from S5 on Work Item Description (BB): "Subscription Management (for approval at SA#10)". It was noted, for now, as background for the presentation by the chairman of S5.

Document S1-000729 contained a liaison statement with questions concerning impact on charging of Release 4 architecture. SA1 has a specification on charging; 22.115, "Service Aspects Charging and billing".

SA5 also sent a liaison statement to SA1 in document S1-000730 on Operation, Administration, Maintenance & Charging regarding IM CN subsystem. Basically, SA5 is thanking SA1 for contact and is looking forward to working together with SA1. The chairman of SA5 noted that there is a resource problem in SA5 for work on tracing, particularly in relation to the IM domain. This really should be brought to the attention of SA.

The chairman of SA5, Albert H. Yuhan gave a presentation on Future New Work planned or considered by SA5.

This is:

?? Subscription Management:

- /// a subset of Service Operational Management
- /// requested by GSMA
- /// provisionally approved by SA#9

?? Terminal Software Update

- /// a subset of User Equipment Management
- /// an optional feature of 3G terminals
- /// being worked on by many external fora (TRUST, TMF/MMC, SDRF, etc.)
- /// proposed by Vodafone in SA5
- /// PCG urges work to be done 3GPP internally

?? IM Network Management

?? IM service charging

?? IM tracing

Document S1-000802 contained more detail.

It was noted that there appears to be some overlap of the work between SA5 and SA1 on subscription management. The tools are being defined by SA1 on a high level, but the two groups need to decide how much to specify and who should do it.

It was decided that a group of interested parties should get together and discuss this.

5.2 CN

5.2.1 CN1

Document Number	Title	Source
662	Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	CN1
665	Response to LS (N1-000997) on Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	RAN2
692	Liaison Statement Answer to Proposal of exchange of the terms "in GSM" and "in UMTS" (Copy SA1)	GERAN
721	Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	SA2

The liaison statement in S1-000662 started a liaison statement discussion on a proposal of exchange of the terms "in GSM" and "in UMTS". This resulted in a liaison statement from RAN2 in S1-000665, S1-000692 and S1-000721.

CN1 does not want to change the terms and RAN2 does think the change is needed as, according to the understanding in RAN2, the UTRAN will be connected to a 3G core network only.

In document S1-000692 GERAN indicate that care must be taken of the distinction between the proposed modes (in A/Gb mode, in lu mode) and the interfaces effectively used. Within the radio access networks. UTRAN uses lu interfaces. GERAN uses A and Gb interface, but also lu interface : as an exceptional case you may have GERAN using lu interface only.

The understanding of TSG GERAN is that a terminology distinguishing between the RAN used may be needed, e.g., UTRAN (only) and GERAN (only). **Separately from this** a terminology distinguishing between the CN-RAN interfaced used may be needed, e.g., A/Gb, lu; A, luCS, Gb, luPS.

Finally, in document S1-000721 S2 accepts N1's proposal for the use of the terms "in lu mode" and "in A/Gb mode" for R99 and will amend 23.060 accordingly for TSG#9.

The point is that there is some confusion as to what comprises 3G. In the lower levels of the radio interface, the definition can be quite specific. However, there is no high level name and a definition of what this contains.

For SA1, there is not need to respond although SA1 agree with CN1. This will be communicated back to CN1 by the vice chairman Tommi Kokkola. It was noted, however, that a common name is really required for a 3G system. The GSM Association did have a long discussion on the name for the 3G standard. The proposal for this was "3GSM", but this was not accepted. Of note was the point that 3GSM may, or may not, contain EDGE; it was specifically left open.

The delegates were requested to consider a proposal for a definition of a high level name for the 3GPP specified system, equivalent to "GSM" used in SMG.

5.2.2 CN4

Document Number	Title	Source
720	LS on positive authentication reporting (Copy SA1)	N4
835	DRAFT LS on Operator Determined Barring of Packet Oriented Services	CN4

Document S1-000720 contained a liaison statement from N4 on positive authentication reporting which was copied to SA1. It would appear that S3 has done some work with AHAG to adopt the 3G authentication for 3GPP2; this is a significant concession by AHAG against the better judgement of some of its members. By doing this, the way is open for roaming between 3GPP and 3GPP2.

Now, in order to support roaming from 3GPP2 to 3GPP, positive authentication reporting is required. The liaison statement indicates that there are no service requirements and so CN4 will not do anything further until some are available.

Positive authentication reporting is a mechanism, which sends back a specific acknowledgment when authentication has been done, rather than the way it is done in 3GPP (the absence of a negative result implies a positive authentication).

The chairman agreed to check if this had been dealt with in SA.

Document S1-000835 contained a liaison statement from CN4 on Operator Determined Barring of Packet Oriented Services that arrived late in the meeting. It was noted that the stage 1 for Operator Determined Barring for UMTS Release 99 (TS 22.041 v3.1.0) includes a service requirement for various types of operator determined barring of packet oriented services. Unfortunately CN WG4 (and its predecessor, CN WG2 SWGB) did not receive any contributions to introduce the corresponding enhancements to the stage 2 and stage 3 specifications (TS 23.008, TS 23.015 and TS 29.002).

SA WG1 is being asked to draft the necessary change request to remove from TS 22.041 the service requirement for Operator Determined Barring of packet oriented services. SA WG1 are also being asked to decide whether they require Operator Determined Barring of packet oriented services to be supported in UMTS Release 4, and to advise CN WG4 of their decision.

Finally, if SA WG1 require Operator Determined Barring of packet oriented services to be supported in UMTS Release 4, then SA1 needs to provide further clarification of the service requirements.

It was decided to re-phrase the explanation and to make a CR to the R99 and R4 versions. The R99 CR is to take out the feature out and the CR to R4 is to re-word it to make it clearer. The documents to do this were provided in S1-000852 and S1-000853. A liaison statement to explain this was provided in document S1-000854.

The CRs in S1-000852 and S1-000853 were approved and will be sent to SA #10 for approval.

The LS in S1-000854 was approved.

5.2.3 CN3

Document	Title	Source
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Number		
727	LS requesting clarification on Synchronous Bearer Services in UMTS (WITHDRAWN FOR NOW)	CN3

5.3 T

Document Number	Title	Source
663	Terminal Capability Negotiation	T2 SWG3 MMS AdHoc

Document S1-000663 contained a liaison statement on Terminal Capability Negotiation from T2. It was noted in the absence of any comments.

Document Number	Title	Source
706	Response LS to TSG-SA on Call Control Applications in External Devices	SA4
694	RE: Applications on external devices (response to Tdoc T2-000382 (S1-00611) and T2-000386 (SP-000353))	T2

Document S1-000706 was copied to SA1 and was noted. As was S1-000694.

Document Number	Title	Source
684	Terminal Local Model (copy S1)	T3
696	LS on Draft TS 23.227, Terminal Local Model. Response to T2-000498 (T3-000434)	T2

Documents S1-000684 and S1-000696 both contained liaison statement on the subject of Terminal Local Model and which were copied to SA1.

Document Number	Title	Source
682	Emergency Call Indication in the network (Copy SA1)	T3
683	Encrypted USIM-ME interface	T3
797	Deleting Encrypted USIM-ME interface	Vodafone
798	Deleting Encrypted USIM-ME interface	Vodafone
799	Deleting Encrypted USIM-ME interface	Vodafone

Document S1-000682 contained a liaison statement on Emergency Call Indication in the network which justifies a change already sent to plenary. It was noted for historical interest.

Document S1-000683, however, contains a liaison statement to SA1 on Encrypted USIM-ME interface. T3 are informing S1 that 3G TS 22.101 still seems to contain a requirement which had been considered not necessary from a security point of view by SMG10 (from a liaison statement 2 years ago).

Clause 13, 1st bullet point states that an encrypted terminal-UICC interface is a basic mandatory UE requirement.

This is in contrast to the statement expressed in the attached LS from SMG10 which was in response to a query from SMG9/UMTS.

If there are any new issues on this matter, T3 would be delighted to further discuss the matter. Otherwise, S1 is invited to consider whether the requirement can be removed from TS 22.101.

This could well result in a CR to 22.101 to clean up the specification. Documents S1-000797, S1-000798 and S1-000799 were allocated for CRs to R99, R4 and R5.

It was agreed to send these CRs to SA #10 for approval.

Document Number	Title	Source
686	T3 work item for use of local link as a bearer for USAT (copy S1)	T3
818	LS on USAT local link mechanism and impact on TS 22.038	T3
819	USAT interpreter stage 1	T3

Document S1-000686 contained T3 work item for use of local link as a bearer for USAT (copy S1). It was noted that this WI does indicate that a CR is required to 22.038. A liaison statement to this effect was provided in document S1-000818. In the liaison statement there was a proposal to change 22.038. Unfortunately, the proposed CRs to T3 specifications were not attached as indicated.

T3 are asking for a change to 22.038 along the lines suggested in the liaison statement. This was generally agreed and the appropriate changes were provided in document S1-000861 and S1-000862.

The CRs in S1-000861 and S1-000862 were agreed to be sent to SA #10 for approval.

The stage 1 should have been attached to the liaison statement contained in S1-000819, but it was not. SA1 is being asked to comment on the high level requirements, but without the stage 1, this was not possible.

Document S1-000686 and S1-000819 were noted.

Document Number	Title	Source
820	Introduction of features from the CPHS for 3G R4	T3
822	Re-transmission of authentication request using the same quintet (Copy S1)	T3

The Common PCN Handset Specification or CPHS was written by the PCN operators in the UK. This is not freely available and is not really maintained, but the functionality is quite useful. Document S1-000820 contained a liaison statement on the introduction of features from the CPHS for 3G R4. This was supported in principle, but it is a little late to do at this meeting. Therefore, it was suggested that the impact on SA1 specifications are investigated with a view to having the changes to the next meeting.

Document S1-000822 contained a liaison statement between T3 and S3. It was not understood why it was sent to us. It was noted.

5.4 RAN

5.5 GERAN

Document Number	Title	Source
691	Liaison Statement on preventing unciphered writing/overwriting of pre-configuration fields by the HPLMN (Copy SA1)	GERAN
712	Answer to LS	TSG GERAN Convenor

Document S1-000691 contained a liaison statement on preventing unciphered writing/overwriting of pre-configuration fields by the HPLMN. In the absence of any comments it was noted.

Another liaison statement from GERAN on 32 kbit/s UDI/RDI multimedia was provided in S1-000712. This appears to confirm, by GERAN, a change that was put forward to SA by SA1. It was noted.

5.6 GSM Association

Document Number	Title	Source
710	Standardisation of Service Operation Management	SERG /ISG
715	Regarding the	GSM NA

A contribution from SERG and ISG was provided in document S1-000710. It is a GSM Association's wish, on this ground, that 3GPP consider undertaking the standardisation work of 3G service operation management at the earliest possible stage of the system architecture. This was noted.

Document S1-000715 contained a liaison statement on a Proposal to Change IMEI Encoding to hexadecimal. The GSM Association list a number of reasons why this change should not be done without some serious consideration of possible alternatives. The GSM Association TWG group will be looking into this and will be reporting back in due course and we should heed that output.

6 Pre Release 4

6.1 Multicall (22.135)

No input.

6.2 Handover (22.129)

Document Number	Title	Source
784	Handover requirements	Orange
811	Handover requirements	Orange
849	Handover requirements	Orange

Document S1-000784 contained a CR to 22.129 on Handover requirements. This is to align the requirements in 22.129 with what actually is available in R99. It also replaces the terms UMTS and GSM to be inline with other S1 specifications. It has been provided on the email exploder with no comments other than from the SA chairman.

It was requested that some time be given to review this off-line as not all members have received it by email. This should be checked on the email expander.

On the handover between environments, it is being proposed to delete this from the specification. This was a good idea when it was first written, but no work has been done since then. It was decided to delete this.

Nonetheless, there are some serious concerns regarding the deletion of the features in this CR. In particular, it was requested that several days should be allowed for a full investigation. It is clear that an email approval is not possible due to the time constraints to the next plenary. It was suggested, therefore, that this CR be reviewed to pull out the controversial parts and provide two CRs; one which is acceptable and the other containing the controversial parts.

It was suggested that a group get together to discuss this. The revision was provided in document S1-000811 for release 99 and another for R4 in document S1-000849.

There was an objection to these change requests from Hutchison 3G. The changes have serious implications to Hutchison 3G.

It was pointed out that if a requirement is being removed because they are not supported in the R99 specification set, then the changes must be done. However, as a concession, the removed requirements have been kept in the specification in section 8.2. Further it was clarified that basic functionality of inter-operator handover is included in Release 99, only some the detail issues are missing. (see chapter 6.2.1 and 6.2.2).

It was commented that in section 4.3.2 on Inter PLMN Handover Issues there is some text:

~~///~~ Charging for handover leg is based on visited network tariff. Settlement between operators is based on bulk metering, etc. and is outside of scope of this TS;

It was agreed to remove this.

In the meantime, it was decided to send a revision of this to SA #10 asking SA and the other groups to confirm that the requirements being removed are not supported in the R99 specification set.

The revision of S1-000811 was provided in document S1-000863. The revision of S1-000849 was provided in document S1-000864.

The CRs in S1-000863 and S1-000864 was agreed to be sent to SA #10 for approval.

6.3 Services and Service Capabilities (22.105)

Document Number	Title	Source
717	Convergence of QoS approaches in 3GPP and TIPHON	TIPHON
735	Alignment of delay definition	BT
812	Alignment of delay definition	BT

Document S1-000717 contained a liaison statement from TIPHON on convergence of QoS approaches in 3GPP and TIPHON. TIPHON are looking at some control mechanisms to maintain a level of QoS. These QoS control mechanisms in TIPHON are layered and distributed using a form of contract broking.

All this is fine, but does require an identification of QoS which is the first part of their approach.

Their conclusion is that the work done in TIPHON to date complements that of 3GPP for both the all-IP transport case (R2000) and for the mixed transport case. It is recommended that the work of 3GPP and of TIPHON should be combined to generate a general model for QoS in future networks for future services.

Of course, this will mean a significant effort on behalf of SA1 and SA2 to do this and it is a bit late to do this.

Now, the 3GPP approach and the TIPHON approach may well result in different requirements to be requested of IETF. This must not be allowed, as it will damage the credibility of both groups, particularly as both groups have a close relationship.

A joint meeting between TIPHON and SA2 is imperative. It was noted that this liaison statement has been forwarded to SA2 independently. From SA1's perspective, there is nothing that can be done except to encourage SA2 to have a joint meeting.

The old chestnut of round-trip delay was brought up again in document S1-000735. Now, for some time the definition of delay for QoS has been difficult. A solution is to refer this out to TS 23.107: "Quality of Service, Concept and Architecture" where delays are defined.

It was noted that the maximum of 400ms has been lifted from the ITU. Typically, the value in GSM is around 100ms and it would appear unfortunate to specify a limit that could be mistaken for a design parameter. Moreover, there is another issue of where to measure the delay and if it should be contained within the 3G network. The opinion of the meeting that the measurement should be related to the 3G network only and it should be better than, or comparable with, GSM.

It was decided to make a change to the specification to indicate that 100ms is reasonable. The revision was provided in document S1-000812. It was agreed to be sent to SA #10 for approval.

(824)

6.4 Priority of ME resources for WAP and SAT

Document Number	Title	Source
681	LS on Priority of ME resources for WAP and SIM toolkit applications	T3
693	LS on Priority of ME resources for WAP and SIM toolkit applications	T2
697	Comments to the different documents concerning "Handling of interactions between applications requiring the access to UE resources"	France Telecom

Document S1-000681 contained a liaison statement on Priority of ME resources for WAP and SIM toolkit applications from T3 with an answer from T2 in S1-000693. The response from T2 was noted, but there was a point in the liaison statement from T3 that this issue needs to be dealt with in some depth for subsequent releases. For release 00, T3 believes that a richer and backward compatible procedure is required. The proposal from T3 is that this procedure could take advantage of the inherent difference between the two main known applications. Those being session orientated and event orientated.

Whilst there was no specific response, it was noted that the work in T2 has commenced. It is possible that this will not be available for R4. It was noted.

Document S1-000697 has been sent out prior to the last SA plenary to explain some information. It was noted.

6.5 Location Services

Document Number	Title	Source
719	Response to LS (R4-000763) on Time measurement accuracy	RAN2
785	Draft meeting report for LCS ad hoc #1	Chairman
813	Response to LS R2 and R4 on Time measurement accuracy	Rapporteur
844	Response to LS R2 and R4 on Time measurement accuracy	Rapporteur

Document S1-000719 contained a liaison statement on Time measurement accuracy from R2. Regarding the definition of accuracy classes for UE positioning measurements (e.g. High accuracy and Regular accuracy), it is the opinion of RAN WG2 that it could be introduced in Release 4. This is between RAN2 and RAN4.

However, RAN WG2 want to get the opinion of SA WG1 on the introduction in Release 4 of an additional accuracy class for the UE positioning-relevant time measurements. The UE could signal to UTRAN its capability to support a higher accuracy (in the "UE CAPABILITY INFORMATION" message), and UTRAN could take advantage of this information to achieve a better estimate of the UE position.

It was decided to send a liaison statement back that this may actually be a good thing. The liaison statement was provided in S1-000813. It was revised and provided in document S1-000844. The liaison statement was approved.

Document S1-000666 and S1-000785 both contained the meeting report from the first LCS ad hoc. This resulted in a number of CRs that went to email approval. The issues dealt with resulted from the Taastrup SA1 meeting as well as some new inputs. The result of email approval is provided in S1-000655.

6.6 CAMEL (22.078)

Document Number	Title	Source
749	Meeting Report of SA1 CAMEL Ad Hoc 30th/31st October 2000	CAMEL Ah Hoc
750	Removal of Volume charging for GPRS Session	CAMEL Ah Hoc
751	Alignment with stage 2 & 3, and editorial clarification	CAMEL Ah Hoc
807	Support of CAMEL phase 1 and/or CAMEL phase 2	CN2
808	Support of CAMEL Phase 1 and 2	CN2
809	Support of CAMEL Phase 1 and 2	CN2
810	Support of CAMEL Phase 1 and 2	CN2
814	Support of CAMEL phase 1 and/or CAMEL phase 2	CN2
834	Introduction of GGSN number in CAMEL Phase 3 GPRS Operations	CN2

Document S1-000749 contained the meeting report of SA1 CAMEL Ad Hoc 30th/31st October 2000. It was noted.

Document S1-000750 contained a CR to 22.078 on Removal of Volume charging for GPRS Session. This is a correction to 22.078 to reflect the actual status of CAMEL as completed in the stage 2 and stage 3. It was agreed to be sent to SA #10 for approval.

Another correction to 22.078 was provided in document S1-000751. In general this is an alignment, but does contain a great deal of editorial corrections. It was agreed to be sent to SA #10 for approval.

Document S1-000807 contained a liaison statement from CN2 on support of CAMEL phase 1 and phase 2. TSG-CN2 is asking TSG-SA1 to endorse the decision that an IPLMN or VPLMN supporting CAMEL phase 2 shall also support CAMEL phase 1, and agree the attached change requests.

TSG-CN2 also asks TSG-SA1 for advice on the long-term solution to this problem.

A proposal for the long-term solution was that a higher version of CAMEL will support interworking with lower versions. There was one comment that this a problem with this for CAMEL phase 4, but for CAMEL phase 3 and lower is working.

It was agreed that the principle for CAMEL phases 3, 2 and 1 is that a higher phase will support interworking with the lower phases. However, this has not been agreed at this time for CAMEL phase 4. A liaison statement to state this was provided in S1-000814.

It was approved. It will be sent to CN2 and copied to CN.

A number of CRs to implement the changes from CN1 were provided in documents S1-000808, S1-000809, S1-000810. It was agreed that they should be forwarded to SA #10 for approval.

Document S1-000834 contained a liaison statement on the introduction of GGSN number in CAMEL Phase 3 GPRS Operations. Apparently, it is currently not possible in CAMEL Phase 3 to uniquely identify a PDP context at the CSE. This prevents operators correlating the CSE processes for one PDP context after Routeing Area Update or it prevents correlation of records created in the CSE with the CDRs created by the SGSN.

To enable PDP Context correlation, a charging ID is already available within GPRS as well as at the CSE. However the charging ID is only unique together with the address of the GGSN that allocated it. The corresponding GGSN address is currently not transferred to the CSE.

TSG CN WG2 have agreed CRs against CAMEL specifications introducing the GGSN Address for the PDP Context Establishment Acknowledge and Change Of Position PDP Context event reports.

TSG CN WG2 asks TSG SA WG1 to consider the attached CRs against 3G TS 22.078 (R99 and R4), proposing the introduction of the GGSN Address, for approval at the next SA Plenary.

The CRs were allocated S1-000855 and S1-000856. These were approved and will be forwarded to SA #10 for approval.

It was noted that there were no CRs for R5. This was provided in S1-000857. This was approved and will be forwarded to SA #10 for approval.

6.7 GPRS (22.060)

Document Number	Title	Source
782	Removal of PTM-G service	Lucent

At the last meeting there was a CR presented to the R99 version of 22.060 to remove PTM-G service. Sadly, there was already a R4 (R00) version and the CR was forgotten. Document S1-000782 contained the mirrored CR for the R4 version.

It is a substantial change and so it was decided to agreed to send this to SA #10 for approval unless comments are received by the end of business on Friday.

7 Work Items (SA1 Responsibility)

7.1 Provisioning of IP-based multimedia services

Document Number	Title	Source
688	re: SAT/USAT Control of IP Multimedia Services (ref S1-000630)	T3
711	Report of R00 ad hoc meeting #6	Chairman
714	All IP Network End-to-End Delay QoS Feasibility Study	GSM NA
733	LS on WID-Support of IP multimedia services	CN1
734	Support of Push and Pull capabilities for multimedia services in the IM CN Subsystem	Motorola
756	The UMTS Third Generation Market - Structuring the Service Revenues Opportunities	UMTS Forum
794	Examples of IP multimedia application scenarios	Ericsson
804	Meeting report of Release 5 ad hoc #7	R4 ad hoc
815	Updated 22.228 after the ad hoc	R5 ad hoc
816	Design objectives of the IMS Rel5, A comparison of views	Services Workshop
817	SAT/USAT Control of IP Multimedia Services	
833	Design objectives of the IMS Rel5, A comparison of views	BT

The meeting report of the ad hoc meeting #6 was provided in document S1-000711. This was noted as all of the outputs were dealt with under email approval.

Document S1-000804 contained the meeting report of the R00/R5 ad hoc.

The first issue dealt with is the issue of a new name is needed which is not related to releases. The name "IP multimedia service ad hoc" was proposed, but the abbreviation would come down to IPMS. The name was agreed, but the abbreviation was not decided in the ad hoc.

SA1 approved the renaming leaving the abbreviation open for the time being.

A short report of Oxford workshop on services was provided for information in the ad hoc. The report was provided in ad hoc document S1-IP-000193 and the output document from the workshop, that was not finished, was provided in ad hoc document S1-IP-000194 and SA1 document S1-000816 (see below).

In important issue brought up was that of the requirements for interworking between IP Multimedia networks and existing networks. It is understood that IM networks will provide a complete solution for the support of IP multimedia applications of which voice communications via IM will be a major part. BT provided an input indicating that users of multimedia networks should be reachable, should they wish, through a single address for all types of multimedia sessions, including voice. Many IM users (who already have GSM/UMTS CS Domain numbers (MSISDN)) may not wish to be given a new IM specific number as they will wish to be reached by a single number/address when served by IM.

This implies interworking between the IM subsystem and the CS systems.

The question is what is meant by interworking? BT clarified that their interpretation is supporting a voice call from the IM subsystem to the CS subsystem and vice versa. In this instance, the user in the CS domain should not experience anything different than if they are connected to another CS domain user. The CS user experience should not differ.

Ericsson does not agree with interworking from the IM subsystem and the PSTN and/or ISDN.

The meeting then went on to deal with the output of the ad hoc.

Current status of 22.228

The output of the ad hoc meeting was an updated version of 22.228, which was provided in document S1-000815.

It was asked whether this could be sent to SA #10 for approval. Ericsson objected to this and asked that it be sent to plenary for information only. The reason is the interworking between the IM subsystem and the CS networks.

It was clarified that this is a major issue with significant implications. If there is to be a stand-alone IM subsystem network, then the proposal may not allow for the IM subsystem to be used for ordinary voice calls.

To clarify, if there is a stand-alone IM subsystem network then voice communication between two users on the IM subsystem will be possible. It is also a requirement to have voice communication between the stand-alone IM subsystem and, for instance, the PSTN; a CS system.

Now this requires some interworking between the call control between the stand-alone IM subsystem and the CS system.

What Ericsson are saying, with some support from Siemens, is that TS 11 in GSM shall not be reproduced in the stand-alone IM subsystem network. That is to say, in order to attract roaming subscribers onto a stand-alone IM subsystem then the operator of the stand alone IM subsystem operator needs either to implement call control logic in the IM subsystem to mimic TS11, or to buy a CS system to run in parallel.

There was a suggestion that a white paper be written to explain the issues. This would allow a proper briefing of the SA plenary delegates. This proposal did not have unanimous support. Another proposal was to send this issue to the ad hoc in November. This did achieve some support.

It was decided to have an ad hoc during this meeting to try and provide a white paper and decide what to do. In the meantime, 22.228 will be sent to SA1 in S1-000815 for approval.

Moving on from the request of a white paper it was decided to look at the output from the Oxford workshop on services, which was provided in document S1-000816. It was mentioned that there was a proposal to enhance the document in S1-000833. This proposal was provided by BT.

It was asked what is the purpose of this document. The answer was that it was considered that this input from BT is a good start for the continuation of the work that was not completed in Oxford. It may help to explain the possible scenarios for IM subsystem implementations. SA1 has an educative discussion on topic and provided valuable input to BT who will provide an updated version of the contribution to next SA plenary.

SAT/USAT Control of IP Multimedia Services

Document S1-000688 contained a liaison statement on SAT/USAT Control of IP Multimedia Services. This refers to the S1 document S1-000630. SAT/USAT control of IP multimedia service has many implications and, before T3 consider new Work Items to support your requests, they would like to ensure that we understand them properly. To this end T3 provide some questions.

It was requested that a reply be drafted. This was provided in document S1-000817. It was approved and will be sent to T3.

Document S1-000714 contained a liaison statement from the GSM NA on an all IP Network End-to-End Delay QoS Feasibility Study. This is being requested of SA1. The chairman asked who would do this? It would appear to be more related to SA2 or even TIPHON.

It was decided to send this to TIPHON and SA2 for consideration. This will also be dealt with in the IM subsystem ad hoc.

A liaison statement on WID-Support of IP multimedia services from CN1 was provided in document S1-000733. In it there are some corrections to the WID. SA1 need to do some house keeping. The revision in S1-000733. It will be forwarded towards the project plan.

Document S1-000794 contains a number of examples of IP multimedia application scenarios to be added to the annex in 22.228. There was general support for these an informative examples. It was decided to put this into 22.228 if there are no objections by "the end of play" then it will added to S1-000815 prior to the TS being sent for approval.

The secretary was volunteered to do this. The resultant will be version 2.0.0.

Next Meeting of the IM Multimedia Service ad hoc

The next IP multimedia service ad hoc has been agreed to take place at New Jersey at 28.-30 November. During this a joint session with SA2 has been fixed on Wednesday 29th November in the morning.

As SA1 status was already presented to SA2 delegates at Sophia Antipolis, the agenda for joint session is proposed to include following topics:

- ☞ S2 Service architecture review based on 23.228, i.e. SA2 shall inform SA1 how they plan to support SA1 requirements and how the architecture looks from services point of view (Note: SA1/SA2 VHE ad hoc delegates are also encouraged to participate).
- ☞ Review of SA1 CAMEL CRs on IP multimedia session support as requested by SA plenary.
- ☞ Also if SA2 had any issues with SA1 LS related to handover those should be discussed.

As TS 22.228 can be completed at Orlando meeting, and there was no indication for work to be done within SA1 specifications the first day of meeting was agreed to be cancelled and work should be done based upon the comments from SA2.

It was decided that the ad hoc in November, which is joint with SA2, does not have the authority to send changes to the SA plenary #10.

7.1.1 Structuring the Service Revenues Opportunities

The presentation in document S1-000756 was given on behalf of the UMTS forum. The presentation was built around study on the 3G and the potential for revenue generation. It was commented that the report is available free of charge on the UMTS website (<http://www.umts-forum.org>).

It was noted that where as forecasts integrate opinions across the industry and analyse trends, this study was based on the analysis of consumer habits and "propensity to buy". This looks at the market segmentation and why different areas of markets have different buying/spending habits. This also changes geographically and so this was a factor in the study.

The study emphasises subscriptions and revenue streams rather subscriber numbers and terminals. The number of subscribers does not always reflect the revenue amount.

With the cost of licenses, each operator needs to be able to justify new services rather than augment the existing services which already have a revenue stream.

Results are available in the short term with Mobile Internet/Extranet access, customised Infoservices and MMS. At a later date, location services, mobile internet and rich voice (including video phones) may generate some revenue.

Of note was the comment that corporate access for Mobile Internet/Extranet access generally is understood to generate revenue in airtime. This is not so, and many services can be built on top of this access. Moreover, the corporate access is the dominant revenue source for the early implementer. From infotainment, revenue streams are available from airtime and subscriptions.

It is estimated that \$160 billion will be generated on these new services by 2010, but that this will be eroded by competition; i.e. the pie will be divided into more portions, although it should be noted that the pie itself will be bigger.

Some caution was given regarding the view of multimedia in 3G. In 3GPP there is some confusion between multimedia and video telephony.

Some key points were:

- 3G is more than addition of mobile to the internet;
- Early entry into the consumer market is important;
- Significant revenues can be generated without mobility premiums;
- Mobile portals are an additional source; and,
- The benchmark for 3G in other markets (e.g. the financial market) will be the Internet.

Of note was a statement that 42% of corporate employees have a laptop and are portable. However, only 5% use GSM to transfer data. To emphasise this, there was a challenge to the meeting asking who was connected during the meeting via GSM; the answer was nobody. This is a gap that needs to be closed.

It was also commented that to achieve this goal, ease of use is significantly important; plug and play is paramount. Speed is imperative, as is QoS, and alignment with the Internet Multimedia must be achieved.

It commented that historically the broadcast industry have been content providers and it was asked if the study has considered this aspect. It was answered that this has been considered and is the subject to a raging debate.

7.2 Bearer Modification without pre-notification

Document Number	Title	Source
724	Reply to "LS on Service Modification without pre-notification"	SA2
725	LS on SA1's CR for Bearer Modification without Pre-notification	CN3
726	Reply to "LS on Service Modification without pre-notification"	CN3
772	Subscription Check	NTT DoCoMo
824	Reply to "LS on Service Modification without pre-notification"	BT

Document S1-000726 contained a liaison statement from CN3 on Service Modification without pre-notification. This contained S1-000724 (which was noted).

SA2 asked CN3 to clarify which actions on this issue are required from SA2 regarding bearer modification because of radio conditions. CN3 and SA1 have produced WIDs for service modification without pre-notification, SA1 for the service definition, CN3 for the provision of the service. However, SA1's WID has a wider scope than CN3's WID. The WID produced by CN3 does not include service modification without pre-notification because of radio conditions.

It is not sure where this requirement came from. However, there is a possibility that the bearer modification due to radio resources could occur, for instance, when a video call is handed over to a cell that supports speech and not video.

There was a CR that put in this functionality in S1-000613 that created 22.129 v 4.0.0. If, of course, there is no requirement for this, then it can be removed.

A response was provided in document S1-000824. This was revised to S1-000865. The CR to S2 with copy to CN3 was approved.

Document S1-000725 contained a liaison statement from CN3 on Bearer Modification without Pre-notification in which CN3 asks SA1 to review the text in TS 22.001 to ensure a clear explanation of the requirements. A proposal to clarify this was provided in S1-000772, which contained a CR to 22.101. It was agreed to be sent to SA #10 for approval.

The response, however, does not answer the question from CN3 asking SA1 to give guidance on whether TS61 should remain unchanged or should be applicable also for service modification without pre-notification. This point was noted and should be addressed in due course.

7.3 VHE enhancements

Document Number	Title	Source
661	VHE/OSA presentation	T2
685	LS on Support of Bookmarks / VHE User Profiles	T3
709	Reply to LS on Support of VHE User Profiles	CN2
722	Reply LS on Support of VHE User Profiles	SA2 (VHE/OSA)
723	Proposed LS on work split between 3GPP TSG SA WG 1, 3GPP TSG SA WG 2 and 3GPP TSG CN WG 5	SA2
742	Minutes of the VHE adhoc#3 meeting held in Windsor	VHE Ad Hoc group
743	Scope of VHE in Release 2000	VHE Ad Hoc group
744	Summary of email discussion	VHE Ad Hoc group
745	Editorial Changes to TS 22.121, to align all references	VHE Ad Hoc group
746	VHE R4	FUJITSU EUROPE TELECOM
747	Result of Email Discussion (completed 3rd November) For Information and comment	VHE Ad Hoc group
748	Output of Ad Hoc meeting	VHE Ad Hoc group
778	Changing VHE stage 1 TS 22.121 version 4 into a TR	Nokia
830	Proposal for way forward with TS 22.121	Lots of companies

Document S1-000661 contained liaison statement asking for a presentation. This was done.

Document S1-000685 was noted as it has been done in the VHE ad hoc. The same applies to S1-000709, S1-000722 and S1-000723.

Document S1-000742 contained the minutes of the VHE adhoc#3 meeting held in Windsor. A major restructuring was done to 22.121, the result of which was provided in document S1-000748. The document was not completed in the ad hoc and resulted in an email discussion. A summary of the email discussion was contained in S1-000744 and the resultant changes were provided in a revised change provided in document S1-000747. This is not a CR and a CR front sheet is required.

The chairman of VHE also attends SA2 and in this role, Jumoke has been able to put together a refined work-plan, which was contained in document S1-000746 as a revision of the WID. There is a proposal in this revision is to make VHE a part of R5 and not R4. This was endorsed by the meeting.

Document S1-000745 contained a CR to incorporate editorial changes to TS 22.121, to align all references. This is a minor change, which belies the calm before the storm to be proposed in the changes highlighted in document S1-000747.

It was commented that the whole of VHE stage 1 has been changed and it is a new document. This is not entirely so, although it may look like it. Interestingly, document S1-000778 contains a proposal to change 22.121 from a stage 1 to a TR.

There was some mixed reaction to this. It was stated that 22.121 would appear to be the only place that all the toolkit interactions are investigated. This was subsequently refuted.

The chairman of the VHE ad hoc did indicate that the input from this meeting is useful, but it is a pity that these comments have not been brought to the ad hoc. The only major change to the specification is the addition of User Profile and, even then, change only brings together many points that were spread throughout the document.

It was pointed out that VHE used to be a TR and was converted to a TS in order to state mandatory requirements. If it contains mandatory requirements, then it should be a TS; if not, then it can be a TR.

Document S1-000830 contained a Proposal for way forward with TS 22.121. Considering the implications outlined in the document the proposal is for S1 not to convert TS22.121 into a TR but rather continue with progressing the work to generate a good set of requirements for other groups to advance their work. In particular, work will be done to identify the requirements from the descriptive only parts of the TS.

It was earlier agreed that there would be no version 4.0.0 of VHE for R4. However, there are some differences between R99 and R4 as there have been some CRs to 22.121 in the last SA #9. It was clarified that the changes made at the last meeting were made to a R00 and essentially related to moving out the OSA part into 22.127.

It was proposed to endorse S1-000830 for release 5.

It was decided that a clean-up of version 4 should be made to ensure that the requirements in version 4 reflect what will be fulfilled by the stage 2s and 3s of the R4 specification set. The concept of turning 22.121 into a TR was rejected. It was agreed to inform the SA plenary that 22.121 v 4.0.0 is not stable and that work is ongoing on 22.121 (both R4 and R5).

Document S1-000743 contained a WID from the ad hoc. There is already a WID for VHE and this is an update that is mainly dates. It was agreed that the dates should be updated in the project plan. The WID itself may need some updating and is not agreed.

Docum	Result	New doc
745	Noted as work in progress	None
747	Noted as work in progress	None

The next meeting is on 7-8th or 6-7th December in Vienna hosted by Siemens.

7.4 OSA enhancements

Document Number	Title	Source
695	Request for OSA Interface Information	T2
707	Liaison Statement to S1 on Connectivity Management	CN5
708	Liaison Statement to S1 on the concept of Enterprise Operator	CN5
757	Meeting Report of SA1 adhoc on Open Service Access #2	OSA Ah Hoc
758	Liaison Statement on connectivity management and virtual operator concept, answer to N5-000182 and N5-000183	OSA Ah Hoc

759	Stage 1 Service Requirement for the Open Services Access (OSA) (22.127) v0.4.0	OSA Ah Hoc
760	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access	OSA Ah Hoc
761	Stage 1 Service Requirement for the Open Services Access (OSA) (22.127) v1.1.0	OSA Ah Hoc
762	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access	OSA Ah Hoc
763	Meeting Report of SA1 adhoc on Open Service Access #3	OSA Ah Hoc
764	Liaison Statement on OSA function desired for Release 4	OSA Ah Hoc
765	OSA stage 1, 22.127 version 1.1.1.	OSA Ah Hoc
827	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access	
828	Virtual Home Environment (VHE) and Open Services Access (OSA)	
829	LS to T2 on OSA Interface Information	

Work on the OSA has progressed with two OSA ad hocs. Document S1-000757 contained the meeting report of the first of these ad hocs. It was at this meeting that the name of OSA was decided.

CN5 is the group that works on the stage 3 of OSA. There are two liaison statement from CN3 in documents S1-000707 and S1-000708. The ad hoc did not understand the first liaison statement from CN3 on Connectivity Management in S1-000707 so a liaison statement was sent back asking for more information and is contained in S1-000758.

The second liaison statement is S1-000708 dealt with the concept of Enterprise Operator. Once again, whilst this concept was interesting, more information was required. The request for this was also provided in S1-000758.

All these documents were noted for historical interest.

Document S1-000760 contains the WID that was approved by email by SA1 and resulted from the first ad hoc. Interestingly, the old version found its way to SA #10 and was approved with a minor change. It was suggested that the new WID be sent for approval, but it was answered that document S1-000762 contains a more up-to-date version that should be sent. In part, there is a division of the work between R4 and R5. There is specific mention of the work that should be R4, but there is nothing to indicate that the rest of the work is planned for R5.

A revision was provided in document S1-000827. It was approved and will be sent to SA #10 for ratification.

The output of the most recent ad hoc was provided in S1-000761 and was further revised editorially in S1-000759, but a clean version was provided in document S1-000765. It was noted that there is still a reference to Release 2000 in the scope that needs to be changed.

Clearly, since there is a split, there is a need to ensure that what has been identified for R4 is actually achievable. It is understood that the greater part of the requirements have already been approved. However, this needs to be checked. There is a liaison statement to be sent to CN5. This was provided in document S1-000765 and it was approved to be sent both to SA2 and CN5.

It was asked what has been done on security. The support of E or M commerce will require significant security. Also, the applications are understood to be running autonomously and it was asked what user authentication has been included in order to ensure that the user is aware that the application is running. Finally, it was asked if consideration has been given to the legal requirements for cooling-off periods in some countries.

On security, it was answered that additional security is more an issue between the application owner and the subscriber. Most banks will not accept security of the network. However, banks in particular will avoid those networks that do not apply some small measure of security. This needs to be considered by S3 as are most of the issues queried. The rapporteur agreed to speak to the SA3 chairman.

In the meantime, it was decided that document S1-000765 will be used as input to the next OSA ad hoc where the elements not related to R4 will be removed. It was further agreed that the resulting stage 1 will be sent to SA #10 for approval.

Document S1-000695 contained a request from T2 for a presentation of OSA. This was given in September and is provided for information S1-000828. T2 are also asking if OSA can support interfaces needed for MMS. The answer is that the interfaces are probably not be applicable R4 as they are user data related. It may be possible to have this in R5. A liaison statement to indicate this towards T2 was provided in document S1-000829. It was approved and will be sent to T and copied to S2 VHE ad hoc and CN5.

The meeting report of the OSA ah hoc #3 was provided S1-000763. It was noted for information.

It was announced that there is to be an ad hoc on 6-7th December 2000.

7.5 CAMEL phase 4

Document Number	Title	Source
749	Meeting Report of SA1 CAMEL Ad Hoc 30th/31st October 2000	CAMEL Ah Hoc
752	Introduction of Call Party Handling	CAMEL Ah Hoc
753	Introduction of IP multimedia sessions control in CAMEL Phase 4	CAMEL Ah Hoc
754	Criteria for the Mid-Call event detection point	CAMEL Ah Hoc
755	CAMEL control of IP Multimedia Sessions - Revision of TS 22.078 CRs 051, 052, 053, 055 and 057	CAMEL Ah Hoc
766	CAMEL service inter working	Siemens
767	Comments on CAMEL CPH description	Siemens
768	Comments on CAMEL support for IM CN subsystem based Multimedia services	Siemens
775	CAMEL 4 features as part of UMTS Release 4	Siemens
783	Enhancement to the Mid Call event to include out band information	NTT DoCoMo/Lucent

Document S1-000749 contained the report of the last CAMEL ad hoc held in Paris. The summary was as follows:

1. The relative short duration (two days) and the high number of input documents meant that several input documents were not discussed and had to be postponed.
2. The release planning of CAMEL Phase 4 was discussed and the consensus reached by the Ad Hoc was that there would not be a CAMEL release as part of UMTS Release 4. A complete CAMEL Phase 4 package would be available for UMTS Release 5. The scope of CAMEL Phase 4 is not closed and features may be added and/or removed.
3. There were three input documents for SA1#10 as part of CAMEL phase 4 that were endorsed by the ad hoc. These include the requirements for Call Party Handling, CAMEL interaction with IP telephony and enhancements to mid call event triggering criteria.
4. In addition, a liaison statement for SA1's information was generated by the meeting. This LS deals with the revision of the CRs against 3G TS 22.078 on the subject of CAMEL control over IP telephony.
5. Two change requests against CAMEL Phase 3 (Release 99) were endorsed by the Ad Hoc. This should hopefully close all issues on CAMEL Phase 3.
6. Another CAMEL Phase 4 ad hoc meeting is scheduled for the week of 29th January 2001. A host is yet to be confirmed, but the duration of the meeting is expected to be at least three days.

On the point of CAMEL being delayed until R5, there was an input documents from Siemens in S1-000775. In this, there is a proposal to have a CAMEL phase 4 in release 4 with the features:

- ?? Introduction of MT SMS inter-working
- ?? Inclusion of Mid call event
- ?? Inclusion of flexible tone injection
- ?? Transport of Charging Information to the Home Network
- ?? CAMEL support of OR for mobile-to-mobile calls

Potential further candidates, which are currently under discussion are:

- ?? Support of USSD prepaid,
- ?? Invention of Handover detection procedures

It was answered that it is not clear if the ad hoc agrees with the above features. This was supported by Lucent, who indicated that it is not at all sure that the features will be completed by March 2001.

In the end, the meeting considered that there is not enough time for these features to be put into a phase 4 for Release 4. Hence, the proposal in point 2 was endorsed.

Document S1-000752 contained a CR to 22.078 on Introduction of Call Party Handling. A proposal to modify this was provided in document S1-000767 from Siemens. It was stated that for the issue on the term "connect" and/or "re-connect" causes the first and second parts of this CR are inconsistent, but that this is a minor clarification. It was suggested that a second change request be provided to the next CAMEL ad hoc. The other issues in document S1-000767 are for the next ad hoc.

Therefore, the CR in S1-000752 will be sent to SA #10 for approval.

Document S1-000753 contained a CR on Introduction of IP multimedia sessions control in CAMEL Phase 4. A liaison statement in document S1-000755, contained liaison statement to explain what had happened regarding this CR and the revisions of TS 22.078 CRs 051, 052, 053, 055 and 057

Once again there was a Siemens contribution in document S1-000768. Siemens believes it is too simple to define "IP Telephony" with better words and submit the CR again. It has to be made clear to which extent CS and IM services are overlapping. In case of a "larger" overlap, approaches like CAMEL might succeed. In cases of "smaller" overlapping area, CAMEL may still survive in the CS domain but different approaches might be found for service provisioning methods in the IM domain.

As long as the prime questions are not answered, Siemens strongly recommend not to adapt the "slightly modified" CR's (S1C000077) to solve the challenge. Instead service requirements shall be analysed and parsed to get a very good basis for the decision on the IM CN subsystem service enabler. Ericsson also had some reservations on this CR.

The principle of this CR has already been approved in Taastup and so it would probably be inappropriate for us not to support this now.

It was commented that SA2 does actually support this in CAMEL interface in 23.228 and that this is actually alignment with the stage 2. There is a joint meeting between SA1 and SA2 on IM subsystem, and this issue should be brought up during this meeting. This was agreed, but it was stated that the task of the joint meeting is to confirm that the architecture in stage 2 does support this feature.

If SA2 cannot confirm that this can be supported then this should be brought to SA #10.

It was agreed that the CR in S1-000753 will be submitted, with the comment that both Siemens and Ericsson had some reservations. It will be presented for information at the joint SA1/SA2 for information but the joint ad hoc does not have the authority to change the CR. If SA2 cannot confirm that the architecture supports this, then this shall be reported to SA #10.

It was queried why the identifiers "\$CAMEL4\$" are being put into the specification? The point of deleting these identifiers in SA #9 was to allow the whole specification to relate to CAMEL phase 4. By including these in this version, implies that whatever is not so marked is automatically included in CAMEL phase 3, 2 or 1. It was understood that when the indicators were removed from v5.0.0 of the specification, so also were some of the

features, which were specific to one and one only phase. So, to introduce this back into the specification would only cause confusion. This will be brought to the attention of the CAMEL ad hoc chairman.

Document S1-000754 which contained a CR to 22.078 on Criteria for the Mid-Call event detection point. It was agreed to send this to SA #10 for approval.

One of the contributions which was not taken at the ad hoc due to time, was provided in document S1-000783. The document contained a CR to 22.078 on Enhancement to the Mid Call event to include out of band information. It was agreed to be provided to SA #10 for approval.

Document S1-000766 contained a proposal for a serving PLMN to be able to support multiple concurrent CAMEL based Services operating on a single call. In particular, it should be possible to support multiple simultaneous operating Services for mobile originating, mobile terminating and forwarding calls. The document goes on to propose some rules for interaction. It was noted; it may be put on the CAMEL email exploder.

7.6 Facsimile

Document Number	Title	Source
780	Correction to list of access dependent features.	Nokia
825	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	CN3
836	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson
837	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson

Document S1-000780 contained a CR to 22.105 to correct the list of access dependent features; in particular NT CS fax has been implemented in Release 4 (TS 23.146). It was agreed to send this CR to SA #10 for approval.

In approving this CR in S1-000837, this meant that a CR in S1-000780 needed to be revised. A revision was provided in S1-000850 and it was agreed to be sent to SA #10 for approval.

Document S1-000825 contained a liaison statement from CN3 to SA1 on the removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases. In particular CN3 are asking SA1 to consider removing NT fax from GSM for Rel-4 and onwards. Should SA1 agree to remove NT fax from GSM for Rel-4 and onwards, CN3 asks SA1 to amend TS 22.003 to reflect that TS61 and TS62 NT applies to UMTS only. Furthermore, CN3 asks SA1 to correct TS 22.003 Rel-99 and Rel-4 to reflect that TS61 and TS62 T applies to GSM only.

It was queried if the changes should be made to R99 as this is a functional change. There is a consistent specification set for R99, even though it is not implemented and not used. It was asked if the CRs have been made to the CN specifications. This will be check and the decision to provided the R99 CR will be made in light of the response.

It was agreed that appropriate CRs should be created. These were provided in documents S1-000836 and S1-000837 for R99 and R4 accordingly.

It was reported that the CR to R99 should not be done. Therefore, S1-000836 was withdrawn.

There was a comment that some minor revisions are required to the CR in S1-000837 to bring the text in line with common usage. It was revised to S1-000866 and it was agreed to be sent to SA #10 for approval.

In approving this CR, this meant that a CR in S1-000780 needed to be revised. A revision was provided in S1-000850 and it was agreed to be sent to SA #10 for approval.

7.7 Technical Enhancements and Improvements (TEI)

Document Number	Title	Source
779	Fixed Dialling Numbers (FDN)	Nokia
780	Correction to list of access dependent features.	Nokia
825	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	CN3
826	LS requesting clarification on Circuit Switched Bearer Services in UMTS	CN3
825	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	CN3
826	LS requesting clarification on Circuit Switched Bearer Services in UMTS	CN3
836	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson
837	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson
838	Clarification on Circuit Switched Bearer Services in UMTS	Lucent/Siemens

A CR to 22.101 to clarify the working of FDN was provided in document S1-000779.

The FDN requirement in 22.101 states that:

"If the ME does not support FDN, the UE shall not allow the making or receiving of calls when Fixed Dialling is enabled." It is believed that receiving of calls should not be prevented in such a case.

Further, in 31.102, it states that:

"In case FDN is enabled, an ME which does not support FDN shall allow emergency calls but shall not allow MO-CS calls and MO-SMS."

Given the inconsistency between S1 and T3, it is required to clarify the requirement to avoid confusion. It is being proposed that if the ME does not support FDN, the UE shall allow the receiving of calls when Fixed Dialling is enabled.

Now in GSM, the implementation meant that the solution proposed by T3 was necessary, but the meeting was reminded that this was not the service requirement of SMG1. It is probable that the implementation of FDN for non-supporting UEs is the same in 3G as for GSM, then the CR should be withdrawn.

Document S1-000779 was withdrawn.

Document S1-000826 contained a LS requesting clarification on Circuit Switched Bearer Services in UMTS from CN3. CN3 has to maintain some specifications related to circuit switched bearer services, like 27.001, 23.910 and 29.007. CN3 has found some inconsistencies between these specifications but also with 22.002. Reason for the inconsistencies is mainly a confusing and unclear presentation of the information in the specifications.

It was decided that the rapporteur of 22.002 and the delegate from Siemens get together to propose a CR in light of the liaison statement from CN3. The number allocated was S1-000838.

The CR in S1-000838 was postponed until the next meeting.

7.8 Service Provider Name

Document Number	Title	Source
737	Display of service provider name in the UE	One2one
738	Display of service provider name in the UE	One2one
821	Feature for 3G R4	T3
839	Display of service provider name in the UE	One2one

840	Display of service provider name in the UE	One2one
841	Display of service provider name in the UE	One2one

Document S1-000737 contained a CR to 22.101 on Display of service provider name in the UE. Another CR for R5 was provided in document S1-000738. The CRs propose a new procedure is described in order to display the correct information on the terminal about the provider of the service. When in the home network the service provider is displayed, and such a name is stored in the USIM by the USIM issuer. When roaming, the radio network providing the service is displayed in parallel (optionally) with the service provider name.

Document S1-000821 contained a liaison statement from T3 on the Enhancement of CPHS Network Operator Name. This is really about the network operator name and the list that is maintained by the GSM Association. These are two different subjects.

Nonetheless, the subjects are required to be studied, possibly under the same work item.

The documents above are agreed in principle, but revisions are required. These were provided in documents S1-000839 and S1-000840. A WID is required for this also. It is possible that the WI in T3 can be used, but if not the WID was provided in document S1-000841.

There are still some problems with this. The definitions used must be consistent and these definitions do not appear to be, even in the same specification. It was asked if this could be put on email approval. However, it was suggested that this should be delayed until the next meeting.

It was agreed in principle, but it was decided to put documents S1-000839 and S1-000840 on an email discussion (not email approval) for the next meeting of SA1. This will also be reported in the status report of SA1 to SA #10.

The WID was provided in S1-000841. It was decided to send this to SA #10 for approval.

For the issue of operator name updating, it was noted that there is a TS called NITZ. In it the text says:

- ~~///~~ Relevant information shall be presented to the MS user at the earliest opportunity.
- ~~///~~ It is expected that the MS will display the most up to date information transferred to it.
- ~~///~~ Switching off the MS should not cause the updated name of the network(s) to be deleted.
- ~~///~~ Removal of the SIM should not cause the updated name of the network(s) to be deleted.
- ~~///~~ However, the number of different network identities retained in the ME is a manufacturer issue.
- ~~///~~ Usage of time information in MS is a ME manufacturer issue. For example, time information can be utilised to time stamp transactions for logging purposes.

This being the case, then it is possible that the standard already caters for the requirement in document S1-000821.

7.9 GPRS (22.060) New WI

Document Number	Title	Source
831	Push Service	NTT DoCoMo, Lucent Technologies
832	LS on Definition of Push Services	NTT DoCoMo, Lucent Technologies
842	Push Service	SA1
843	LS on Definition of Push Services	NTT DoCoMo, Lucent Technologies

Document S1-000831 contained a proposed CR to 22.060 on Push Services. This is a new work item and will require a WID. It is understood that S2 are working on this subject.

The CR provides a definition of a push service: i.e. a service type which delivers information (data/multimedia) initiated from a network node (which may be external to the PLMN) to the end user. The service will cause a PDP context to be activated if needed. What makes this a push service is that it is initiated from a network node.

A revision is required although it was agreed-to in principle and was revised on line. The revision was provided in S1-000842. It was agreed that this should be passed to SA2 and to SA #10 for approval. A liaison statement to indicate this was provided in S1-000832. This too was revised and provided in document S1-000843. The WI is called FS on push services.

Document S1-000843 was approved.

8 Work Items (Other Groups)

8.1 Location Services enhancements

Document Number	Title	Source
666	Draft meeting report for LCS ad hoc #1	Chairman
785	Draft meeting report for LCS ad hoc #1	Chairman
716	Location Services Functionality in 3GPP Specifications	GSM NA
769	Periodic Location Reporting	NTT DoCoMo
770	Privacy Exception List	NTT DoCoMo
771	Location Service Request	NTT DoCoMo
773	Clarification of Privacy Exception List	NTT DoCoMo
774	DEGA	France Telecom
776	Localised services	Nokia
777	Addition of achieved location information accuracy with reference to TS 23.032	Nokia
786	Draft meeting report for LCS ad hoc #2	Chairman
787	LCS Privacy Exception List	LCS Ad Hoc
788	Periodic Location Reporting	LCS Ad Hoc
789	LS to SA2 on LCS Open Interfaces for UMTS & GERAN	LCS Ad Hoc
790	LS to SA2 on Clarification of Privacy Exception List	LCS Ad Hoc
791	LCS Service Request	LCS Ad Hoc
800	LS on LCS Privacy Exception List	PBW/Nokia
803	Addition of achieved location information accuracy with reference to TS 23.032	Nokia
823	Draft meeting report for LCS ad hoc #2	Chairman

Document S1-000666 and S1-000785 both contained the meeting report from the first LCS ad hoc. This resulted in a number of CRs that went to email approval. The issues dealt with resulted from the Taastrup SA1 meeting as well as some new inputs. The result of email approval is provided in S1-000655.

The draft meeting report of LCS #2 was provided in document S1-000786. It was subsequently revised to S1-000823 and was noted.

The report gives the details. One issue is the work DEGA, which is listed in the workplan. This will not be done as there is not sufficient interest. It was decided to remove it from the work plan.

Documents S1-000769, S1-000770/S1-000773 and S1-000 771 and were looked at in the LCS ad hoc and were revised to S1-000788, S1-000787 (and LS in S1-000790) and S1-000791 respectively.

The output of the LCS ad hoc was:

Doc Number	LCS Doc Number	Result	To	Title
S1-000787	39	Approved, to go to SA1	SA1 #10	LCS Privacy Exception List
S1-000788	46	Approved, to go to SA1	SA1 #10	Periodic Location Reporting
S1-000789	47	Approved, to be passed to SA1 for ratification prior to being sent to SA2	SA1 #10	LS to SA2 on LCS Open Interfaces for UMTS & GERAN
S1-000790	48	To be reviewed and approved by SA1	SA1 #10	LS to SA2 on Clarification of Privacy Exception List
S1-000791	49	Approved, to go to SA1 for R4	SA1 #10	LCS Request

There was some concern that document S1-000787 is intended for R4, but that if not, then it will be put to R5. A liaison statement to this effect should be sent to SA2 asking if it is possible. If SA2 believe that this is possible for R4 if SA2 agree. If not, the CR will be put into R5. If there are no comments by SA2, then this CR will go to SA #10 for approval. This was agreed by the meeting.

A liaison statement to SA2 was provided in document S1-000800. This was approved and will be attached to S1-000787.

Document S1-000789 contained a liaison statement to SA2 on LCS Open Interfaces for UMTS & GERAN. This is a proposed Work Item Description for the provision of Open Location Services Interfaces in UMTS and GERAN.

Ericsson commented that there is a need for this, but they objected to the implementation. Indeed, it was for this reason that Ericsson objected to the previously provided liaison statements on this topic during email approval. Concern was expressed that the WID was too technically (architecturally) detailed, that lead for the work item should belong to SA2, and not SA1, and that therefore this might not be appropriate for SA1.

However, it was the consensus of the group that this item should be pursued with close working cooperation between SA1 and SA2, even if SA2 has the lead. It was further felt that it was not inappropriate for SA1 to consider high level architecture requirements, especially for features that were network features (such as CAMEL). It was further noted that the items expressed in the work item description reflected the clear requirements of the operator community, representing the consensus of the GSM Association.

Concern was expressed regarding the feasibility of including this functionality in the Release 4 timeframe. Some participants felt this would not be realistic, however others felt that if the interfaces between R99 and R4 are similar, then it may be possible to achieve this in the Release 4 timeframe.

It was noted that this WID should be used to kick off a feasibility study, with the outcome of the feasibility study to determine what could realistically be achieved in what timeframe.

It was agreed to provide a liaison statement to SA2 indicating SA1 supports this work item in principle with the intent of pursuing a feasibility study. The liaison statement was written and agreed upon to be sent to SA1 in document S1-000789 that contained the WID.

Another liaison statement to SA2 on Clarification of Privacy Exception List was provided in document S1-000790.

The next LCS ad hoc may be required on the first day of the SA1 plenary. It was approved and will be sent to SA2 and CN4.

Another CR was provided in document S1-000788. This was approved in the LCS ad hoc and was provided to SA1 for approval. However, it was understood that this should also be passed to SA2. It was agreed to send this to SA #10 and SA2.

Document S1-000851 was provided later in the meeting to augment S1-000788. It was agreed to send this to SA #10.

Document S1-000791 contained a CR to 22.071 to provide additional functionality for repositioning of a user if for some reason it is lost; e.g. when there is loss of coverage. It was agreed to send this to SA #10 and SA2.

Document S1-000716 contained a liaison statement from GSM NA on Location Services Functionality in 3GPP Specifications. This was dealt with in the LCS ad hoc. It was noted.

Document S1-000774 contained an input on DEGA. This was dealt with in the LCS ad hoc. It was noted.

Document S1-000777 contained a CR to 22.071. This has been superseded by document S1-000803. It was agreed that it will be sent to SA #10 for approval.

Document S1-000776 was dealt with in the LCS ad hoc. It was noted and not approved.

8.2 Multimedia Messaging

Document Number	Title	Source
664	Liaison Statement on Multimedia Messaging use cases	T2 SWG3 MMS AdHoc
739	Incorporating Instant Messaging Capabilities in MMS	Comverse
845	Incorporating Instant Messaging Capabilities in MMS	Comverse

Document S1-000664 contained a liaison statement from T on Multimedia Messaging use cases, which was copied to SA1. This is interesting, but does not impact the SA1 stage 1. It was noted.

A similar CR to that in S1-000739 was presented to the last meeting of SA1, and was discussed over email. In the email discussion, there was little discussion and it should be raised at this meeting for more detailed examination.

It was noted that this work may not be done in time by T2 and it was suggested that this CR not be agreed at this time, but wait until confirmation from T2 that the work can be completed. This was not agreed. As a general rule, if it is not sure that another group can achieve the work in time, then it should be put into the SA1 stage 1 and then taken out if the work is not done in time.

There were a number of comments to the document, some of which were accepted. However, it was noted that this has been seen for some time now at Taastrup and on the email exploder. It is a pity that the comments had not come during that time.

It was further commented that there is work ongoing in the IETF, which could make this a proprietary approach. This was taken on board and will be taken into account.

The revision was provided in S1-000845. There were some problems with this CR. It was suggested that the changes in section 5.0 implement MMS should be moved to an independent section. The changes up to section 4.0 were approved but there needs to be some work on the rest of the CR. The author requested that comments be sent rather than leaving it to the last meeting.

So, the CR up to section 4 were approved and will be sent to SA #10 for approval. The revision was provided in S1-000868.

8.3 Global Text telephony

8.4 Emergency call enhancements

8.5 CS multimedia services

9 Any Other Business

9.1 3G Vocabulary (21.905)

Document Number	Title	Source
731	Introduces ASCII definition	SAGEM
732	Introduces definition of called party pre-emption	SAGEM
736	Inclusion of GSM 01.04 v 7.0.0 acronyms and abbreviations in the vocabulary	One2one
846	Introduces definition of called party pre-emption	SAGEM
847	LS to encourage use of 21.905 for 3G and GSM	One2one

Document S1-000731 contained a CR to 21.905 to introduce the abbreviations and definitions for ASCII services. It was agreed to send this to SA #10 for approval.

Document S1-000736 contained a CR to 21.905 to include the abbreviations from GSM into the 3G document. It was asked if this means there will not be any 41.004. This was a good question. It was decided to accept this CR and not allow a 41.004 since there are a great many 3G specifications that refer to 4x series specifications.

Also, since many of the other groups seem to think that 21.905 is only for SA1 it was decided to have a liaison statement to indicate that this TR does cover all of the 3G specification set. It was decided to include the issue of stopping 41.004 in light of the CR above. This liaison statement was provided in document S1-000847.

Document S1-000732 contained a CR to 22.067 to include a definition of called party pre-emption. There was a problem with some of the text, and so it was decided to have a revision that was provided in document S1-000846. It was agreed to send this to SA #10 for approval.

10 Administration

There was no input on this subject, although the chairman did request that the rapporteurs list be updated. This will be done over email.

11 Approval of Outputs and Liaisons

Change Requests

Release	Spec No.	Doc. No.	Title	To
R4	21.905	736	Inclusion of GSM 01.04 v 7.0.0 acronyms and abbreviations in the vocabulary	SA #10
R4	21.905	731	Introduces ASCII definition	SA #10
R4	22.001	772	Subscription Check	SA #10
R4	22.003	866	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	SA #10
R5	22.038	862	LS on USAT local link mechanism and impact on TS 22.038	SA #10
R4	22.038	861	LS on USAT local link mechanism and impact on TS 22.038	SA #10
R99	22.041	852	Operator Determined Barring of Packet Oriented Services	SA #10
R99	22.041	853	Operator Determined Barring of Packet Oriented Services	SA #10
R4	22.060	842	Push Service	SA #10
R4	22.060	782	Removal of PTM-G service	SA #10
R4	22.067	846	Introduces definition of called party pre-emption	SA #10
R4	22.071	791	LCS Service Request	SA #10, S2
R4	22.071	787	LCS Privacy Exception List	S2
R4	22.071	788	Periodic Location Reporting	SA #10, S2

R4	22.071	803	Addition of achieved location information accuracy with reference to TS 23.032	SA #10
R4	22.071	851	Periodic Location Reporting	SA #10
R5	22.078	754	Criteria for the Mid-Call event detection point	SA #10
R5	22.078	753	Introduction of IP multimedia sessions control in CAMEL Phase 4	SA #10 comment in report
R99	22.078	810	Support of CAMEL Phase 1 and 2	SA #10
R5	22.078	752	Introduction of Call Party Handling	SA #10
R99	22.078	751	Alignment with stage 2 & 3, and editorial clarification	SA #10
R4	22.078	783	Enhancement to the Mid Call event to include out band information	SA #10
R99	22.078	750	Removal of Volume charging for GPRS Session	SA #10
R98	22.078	809	Support of CAMEL Phase 1 and 2	SA #10
R99	22.078	855	Introduction of GGSN Address	SA #10
R4	22.078	856	Introduction of GGSN Address	SA #10
R5	22.078	857	Introduction of GGSN Address	SA #10
R97	22.078	808	Support of CAMEL Phase 1 and 2	SA #10
R4	22.101	798	Deleting Encrypted USIM-ME interface	SA #10
R99	22.101	797	Deleting Encrypted USIM-ME interface	SA #10
R5	22.101	799	Deleting Encrypted USIM-ME interface	SA #10
R4	22.101	859	Support of UMTS AKA for GSM only mobiles	SA #10
R5	22.101	860	Support of UMTS AKA for GSM only mobiles	SA #10
R99	22.105	812	Alignment of delay definition	SA #10
R4	22.105	850	Correction to list of access dependent features.	SA #10
R4	22.129	864	Handover requirements	SA #10
R99	22.129	863	Handover requirements	SA #10
R4	22.140	868	Incorporating Instant Messaging Capabilities in MMS	SA #10

Specs

Release	Doc No	Title	To
R5	815	Updated 22.228 after the ad hoc	SA #10 (with 794)

Email of issues dealt with in meeting

Release	Doc No	Title	To

Email of issues NOT dealt with in meeting

Release	Doc No	Title	To

Ad Hocs

Release	Doc No	Title	To

Approved Liaison statements

Docu	Title	To	Copy
714	All IP Network End-to-End Delay QoS Feasibility Study	TIPHON. SA2	
733	LS on WID-Support of IP multimedia services	MCC. project	
764	Liaison Statement on OSA function desired for Release 4	S2 VHE. CN5	
789	LS to SA2 on LCS Open Interfaces for UMTS & GERAN	S2	
790	LS to SA2 on Clarification of Privacy Exception List	S2. CN4	
800	LS on LCS Privacy Exception List	S2	
814	Support of CAMEL phase 1 and/or CAMEL phase 2	CN2	CN
817	SAT/USAT Control of IP Multimedia Services	T3	
829	LS to T2 on OSA Interface Information	T2	S2 VHE ad-
843	LS on Definition of Push Services	SA2	
844	Response to LS R2 and R4 on Time measurement accuracy	RAN2	RAN4
847	LS to encourage use of 21.905 for 3G and GSM	SA. RAN. CN.	
854	LS on Operator Determined Barring of Packet Oriented	CN4	CN. SA. S2
865	Reply to "LS on Service Modification without pre-notification"	S2	CN3
867	Support of UMTS AKA for GSM only mobiles	T3. SA3	T. T2. S2. N1

12 Future meetings

The meeting schedule, was reviewed in the meeting. Proposals for hosts would be gratefully received.

S1#11	6-9 February 2001	Capetown, South Africa, hosted Vodacom
S1#12	7-11 May 2001	Helsinki, Finland, hosted by Sonera
S1#13	9-13 July 2001	North America, hosted by
S1#14	5-9 November 2001	Japan, hosted by NTT DoCoMo

On the subject of meeting #11, it was suggested that only 4 days may be required. It was decided to start work on Tuesday morning and to go on until Friday evening. This was agreed and the chairman will accept the offer.

It was requested to move S1#12 to one week later. This was not agreed and the dates stand.

13 Closure of Meeting

The chairman thanked the delegates for their contributions to the meeting and for their hard work. He thanked the host, Qualcomm, for all the facilities at the meeting.

The secretary indicated that he had gone mad!

ANNEX A – Table of documents

Doc. No.	Title	Source	Doc Pack
645	LS to SA on Handling of emergency call	Vodafone	
651	Recall Capability for Emergency call	NTT DoCoMo	
652	Report of SA1 meeting #9	MCC	
653	Agenda for SA1 meeting #10	MCC	
654	Report of SA meeting #9	MCC	
655	Email summary	MCC	
656	Removal of the Requirement on Network to Tear Down Calls to Accept EC in Multicall	Ericsson	
657	Addition of Ncs_MT limitation to number of MPTY members	Ericsson	
658	Reply to LS on Guidance on future work for T2 SWG5, Multi-mode terminals	Telia	
659	Reply to LS on Security issues with ME user input and DTMF tones	S3	
660	Clarification of UMTS-AKA for GSM R'99 Mobiles	S3	
661	VHE/OSA presentation	T2	
662	Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	CN1	
663	Terminal Capability Negotiation	T2 SWG3 MMS AdHoc	
664	Liaison Statement on Multimedia Messaging use cases	T2 SWG3 MMS AdHoc	
665	Response to LS (N1-000997) on Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	RAN2	
666	Draft meeting report for LCS ad hoc #1	Chairman	
667	Provision of Velocity for Location Services	LCS Ad Hoc	
668	Correction of constraint of LCS functionality to the Access Network	LCS Ad Hoc	
669	Removal of the restrictive sentence and modification for specific high level requirement	LCS Ad Hoc	
670	External LCS client identity	LCS Ad Hoc	
671	Privacy Control for LCS	LCS Ad Hoc	
672	PS Session Support for LCS	LCS Ad Hoc	
673	Clarifications to LCS on privacy and Service response	LCS Ad Hoc	
674	Geographic Location	LCS Ad Hoc	
675	Adding statement on "active" and "idle" UE in chapter 4.13	LCS Ad Hoc	
676	Radio Access Network support for LCS	LCS Ad Hoc	
677	Identification of a Target UE using IP addresses	LCS Ad Hoc	
678	LCS: LCS Open Service Architecture (OSA) and Application Programming Interface.	LCS Ad Hoc	
679	Liaison Statement to RAN2 regarding Open Interfaces within the UTRAN for LCS Support	LCS Ad Hoc	
680	Liaison Statement to TSG-GERAN regarding Open Interfaces within the GERAN for LCS Support	LCS Ad Hoc	
681	LS on Priority of ME resources for WAP and SIM toolkit applications	T3	
682	Emergency Call Indication in the network (Copy SA1)	T3	
683	Encrypted USIM-ME interface	T3	
684	Terminal Local Model (copy S1)	T3	
685	LS on Support of Bookmarks / VHE User Profiles	T3	
686	T3 work item for use of local link as a bearer for USAT (copy S1)	T3	
687	Clarification of UMTS-AKA for GSM R'99 Mobiles	T3	
688	re: SAT/USAT Control of IP Multimedia Services (ref S1-000630)	T3	
689	Global Text Telephony, Stage 1 description (22.226)	Ericsson	
690	Answer to LS New SIM toolkit feature: "Auto-answer & Mute-ringing"	SA3	
691	Liaison Statement on preventing unciphered writing/overwriting of pre-configuration fields by the HPLMN (Copy SA1)	GERAN	
692	Liaison Statement Answer to Proposal of exchange of the terms "in GSM" and "in UMTS" (Copy SA1)	GERAN	

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693	LS on Priority of ME resources for WAP and SIM toolkit applications	T2	
694	RE: Applications on external devices (response to Tdoc T2-000382 (S1-00611) and T2-000386 (SP-000353))	T2	
695	Request for OSA Interface Information	T2	
696	LS on Draft TS 23.227, Terminal Local Model. Response to T2-000498 (T3-000434)	T2	
697	Comments to the different documents concerning "Handling of interactions between applications requiring the access to UE resources"	France Telecom	
698	Numbering Principles (revision of 597 CR#47)	Ad Hoc	
699	IM Number portability	Ad Hoc	
700	General corrections and clarifications to 22.101 for Release 4 (revision of 618 CR#42)	Ad Hoc	
701	Introduction of IM CN Subsystem	Ad Hoc	
702	IP multimedia services	Ad Hoc	
703	TS22.228 v 0.6.0 "Service requirements for the IP Multimedia Core Network"	Ad Hoc	
704	Subscription	Siemens	
705	Roaming	SA1	
706	Response LS to TSG-SA on Call Control Applications in External Devices	SA4	
707	Liaison Statement to S1 on Connectivity Management	CN5	
708	Liaison Statement to S1 on the concept of Enterprise Operator	CN5	
709	Reply to LS on Support of VHE User Profiles	CN2	
710	Standardisation of Service Operation Management	SERG /ISG	
711	Report of R00 ad hoc meeting #6	Chairman	
712	Answer to LS on 32 kbit/s UDI/RDI multimedia	TSG GERAN Convenor	
713	List of S1 specifications with Rapporteur names	MCC	
714	All IP Network End-to-End Delay QoS Feasibility Study	GSM NA	
715	Regarding the Proposal to Change IMEI Encoding	GSM NA	
716	Location Services Functionality in 3GPP Specifications	GSM NA	
717	Convergence of QoS approaches in 3GPP and TIPHON	TIPHON	
718	Work Items for SA1	MCC	
719	Response to LS (R4-000763) on Time measurement accuracy	RAN2	
720	LS on positive authentication reporting (Copy SA1)	N4	
721	Answer to Proposal of exchange of the terms "in GSM" and "in UMTS"	SA2	
722	Reply LS on Support of VHE User Profiles	SA2 (VHE/OSA)	
723	Proposed LS on work split between 3GPP TSG SA WG 1, 3GPP TSG SA WG 2 and 3GPP TSG CN WG 5	SA2	
724	Reply to "LS on Service Modification without pre-notification"	SA2	
725	LS on SA1's CR for Bearer Modification without Pre-notification	CN3	
726	Reply to "LS on Service Modification without pre-notification"	CN3	
727	LS requesting clarification on Synchronous Bearer Services in UMTS (WITHDRAWN FOR NOW)	CN3	
728	Liaison on provisionally approved SA5 Work Item Description (BB): "Subscription Management (for approval at SA#10)"	SA5	
729	Questions concerning impact on charging of Release 4 architecture	SA5	
730	Operation, Administration, Maintenance & Charging regarding IM CN subsystem	SA5	
731	Introduces ASCI definition	SAGEM	
732	Introduces definition of called party pre-emption	SAGEM	
733	LS on WID-Support of IP multimedia services	CN1	
734	Support of Push and Pull capabilities for multimedia services in the IM CN Subsystem	Motorola	
735	Alignment of delay definition	BT	
736	Inclusion of GSM 01.04 v 7.0.0 acronyms and abbreviations in the vocabulary	One2one	
737	Display of service provider name in the UE	One2one	
738	Display of service provider name in the UE	One2one	
739	Incorporating Instant Messaging Capabilities in MMS	Comverse	

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740	Support of UMTS AKA for GSM only mobiles	France Telecom	
741	Not used		
742	Minutes of the VHE adhoc#3 meeting held in Windsor	VHE Ad Hoc group	
743	Scope of VHE in Release 2000	VHE Ad Hoc group	
744	Summary of email discussion	VHE Ad Hoc group	
745	Editorial Changes to TS 22.121, to align all references	VHE Ad Hoc group	
746	VHE R4	FUJITSU EUROPE TELECOM	
747	Result of Email Discussion (completed 3rd November) For Information and comment	VHE Ad Hoc group	
748	Output of Ad Hoc meeting	VHE Ad Hoc group	
749	Meeting Report of SA1 CAMEL Ad Hoc 30th/31st October 2000	CAMEL Ah Hoc	
750	Removal of Volume charging for GPRS Session	CAMEL Ah Hoc	
751	Alignment with stage 2 & 3, and editorial clarification	CAMEL Ah Hoc	
752	Introduction of Call Party Handling	CAMEL Ah Hoc	
753	Introduction of IP multimedia sessions control in CAMEL Phase 4	CAMEL Ah Hoc	
754	Criteria for the Mid-Call event detection point	CAMEL Ah Hoc	
755	CAMEL control of IP Multimedia Sessions - Revision of TS 22.078 CRs 051, 052, 053, 055 and 057	CAMEL Ah Hoc	
756	The UMTS Third Generation Market - Structuring the Service Revenues Opportunities	UMTS Forum	
757	Meeting Report of SA1 adhoc on Open Service Access #2	OSA Ah Hoc	
758	Liaison Statement on connectivity management and virtual operator concept, answer to N5-000182 and N5-000183	OSA Ah Hoc	
759	Stage 1 Service Requirement for the Open Services Access (OSA) (22.127) v0.4.0	OSA Ah Hoc	
760	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access	OSA Ah Hoc	
761	Stage 1 Service Requirement for the Open Services Access (OSA) (22.127) v1.1.0	OSA Ah Hoc	
762	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access	OSA Ah Hoc	
763	Meeting Report of SA1 adhoc on Open Service Access #3	OSA Ah Hoc	
764	Liaison Statement on OSA function desired for Release 4	OSA Ah Hoc	
765	OSA stage 1, 22.127 version 1.1.1.	OSA Ah Hoc	
766	CAMEL service inter working	Siemens	
767	Comments on CAMEL CPH description	Siemens	
768	Comments on CAMEL support for IM CN subsystem based Multimedia services	Siemens	
769	Periodic Location Reporting	NTT DoCoMo	
770	Privacy Exception List	NTT DoCoMo	
771	Location Service Request	NTT DoCoMo	
772	Subscription Check	NTT DoCoMo	
773	Clarification of Privacy Exception List	NTT DoCoMo	
774	DEGA	France Telecom	
775	CAMEL 4 features as part of UMTS Release 4	Siemens	

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776	Localised services	Nokia	
777	Addition of achieved location information accuracy with reference to TS 23.032	Nokia	
778	Changing VHE stage 1 TS 22.121 version 4 into a TR	Nokia	
779	Fixed Dialling Numbers (FDN)	Nokia	
780	Correction to list of access dependent features.	Nokia	
781	Specification sets for Release 99 and Release 4	Lucent	
782	Removal of PTM-G service	Lucent	
783	Enhancement to the Mid Call event to include out band information	NTT DoCoMo/Lucent	
784	Handover requirements	Orange	
785	Draft meeting report for LCS ad hoc #1	Chairman	
786	Draft meeting report for LCS ad hoc #2	Chairman	
787	LCS Privacy Exception List	LCS Ad Hoc	
788	Periodic Location Reporting	LCS Ad Hoc	
789	LS to SA2 on LCS Open Interfaces for UMTS & GERAN	LCS Ad Hoc	
790	LS to SA2 on Clarification of Privacy Exception List	LCS Ad Hoc	
791	LCS Service Request	LCS Ad Hoc	
792	List of S1 specifications with Rapporteur names	MCC	
793	Work Items for SA1	MCC	
794	Examples of IP multimedia application scenarios	Ericsson	
795	Support of UMTS AKA for GSM only mobiles	France Telecom	
796	New SIM toolkit feature: "Auto-answer & Mute-ringing"	France Telecom	
797	Deleting Encrypted USIM-ME interface	Vodafone	
798	Deleting Encrypted USIM-ME interface	Vodafone	
799	Deleting Encrypted USIM-ME interface	Vodafone	
800	LS on LCS Privacy Exception List	PBW/Nokia	
801	Information Exchange on TSG-SA WG5 Issues	TSG-SA WG5 Chair	
802	SA5 concept of Subscription Management	TSG-SA WG5 Chair	
803	Addition of achieved location information accuracy with reference to TS 23.032	Nokia	
804	Meeting report of Release 5 ad hoc #7	R4 ad hoc	
805	Support of UMTS AKA for GSM only mobiles	France Telecom	
806	Support of UMTS AKA for GSM only mobiles	France Telecom	
807	Support of CAMEL phase 1 and/or CAMEL phase 2	CN2	
808	Support of CAMEL Phase 1 and 2	CN2	
809	Support of CAMEL Phase 1 and 2	CN2	
810	Support of CAMEL Phase 1 and 2	CN2	
811	Handover requirements	Orange	
812	Alignment of delay definition	BT	
813	Response to LS R2 and R4 on Time measurement accuracy	Rapporteur	
814	Support of CAMEL phase 1 and/or CAMEL phase 2	CN2	
815	Updated 22.228 after the ad hoc	R5 ad hoc	
816	Design objectives of the IMS Rel5, A comparison of views	Services Workshop	
817	SAT/USAT Control of IP Multimedia Services		
818	LS on USAT local link mechanism and impact on TS 22.038	T3	
819	USAT interpreter stage 1	T3	
820	Introduction of features from the CPHS for 3G R4	T3	
821	Enhancement of CPHS Network Operator Name Feature for 3G R4	T3	
822	Re-transmission of authentication request using the same quintet (Copy S1)	T3	

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823	Draft meeting report for LCS ad hoc #2	Chairman	
824	Reply to "LS on Service Modification without pre-notification"	BT	
825	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	CN3	
826	LS requesting clarification on Circuit Switched Bearer Services in UMTS	CN3	
827	Scope of Open Interface for Service Provision in Release 2000 the Open Service Access		
828	Virtual Home Environment (VHE) and Open Services Access (OSA)		
829	LS to T2 on OSA Interface Information		
830	Proposal for way forward with TS 22.121	Lots of companies	
831	Push Service	NTT DoCoMo, Lucent Technologies	
832	LS on Definition of Push Services	NTT DoCoMo, Lucent Technologies	
833	Design objectives of the IMS Rel5, A comparison of views	BT	
834	Introduction of GGSN number in CAMEL Phase 3 GPRS Operations	CN2	
835	DRAFT LS on Operator Determined Barring of Packet Oriented Services	CN4	
836	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson	
837	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson	
838	Clarification on Circuit Switched Bearer Services in UMTS	Lucent/Siemens	
839	Display of service provider name in the UE	One2one	
840	Display of service provider name in the UE	One2one	
841	Display of service provider name in the UE	One2one	
842	Push Service	SA1	
843	LS on Definition of Push Services	NTT DoCoMo, Lucent Technologies	
844	Response to LS R2 and R4 on Time measurement accuracy	Rapporteur	
845	Incorporating Instant Messaging Capabilities in MMS	Comverse	
846	Introduces definition of called party pre-emption	SAGEM	
847	LS to encourage use of 21.905 for 3G and GSM	One2one	
848	LS about USIM support in GSM only terminals (AKA)	S3	
849	Handover requirements	Orange	
850	Correction to list of access dependent features.	Nokia	
851	Periodic Location Reporting	Telia	
852	Operator Determined Barring of Packet Oriented Services	Vodafone	
853	Operator Determined Barring of Packet Oriented Services	Vodafone	
854	LS on Operator Determined Barring of Packet Oriented Services	Vodafone	
855	Introduction of GGSN Address	D1	
856	Introduction of GGSN Address	D1	
857	Introduction of GGSN Address	D1	
858	Support of UMTS AKA for GSM only mobiles	France Telecom	
859	Support of UMTS AKA for GSM only mobiles	France Telecom	
860	Support of UMTS AKA for GSM only mobiles	France Telecom	
861	LS on USAT local link mechanism and impact on TS 22.038	Orange	
862	LS on USAT local link mechanism and impact on TS 22.038	Orange	
863	Handover requirements	Orange	
864	Handover requirements	Orange	
865	Reply to "LS on Service Modification without pre-notification"	BT	
866	Removal of TS61 and TS62 in NT mode from GSM in Rel-4 and later releases	Nokia/Ericsson	
867	Support of UMTS AKA for GSM only mobiles	France	

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		Telecom	
868	Incorporating Instant Messaging Capabilities in MMS	Comverse	
869			
870			

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