

**Source:** TSG\_N WG2  
**Title:** Draft Meeting Report Phoenix  
**Agenda item:** 5.2.1  
**Document for:** Information

---

*3GPP TSG-N WG2*  
*Phoenix, Arizona, USA*  
*15 - 19 November 1999*

*Tdoc 3GPP N2-99xxx*

*Source:* MCC  
*monica hellman, franco settimo*  
*monica.hellman@etsi.fr*  
*franco.settimo@etsi.fr*

*Title:* Draft Meeting Report

*Document for:* Information

*Attention:* Agenda item <n>

---

## **1 Opening of the meeting and approval of the agenda**

Michel Grech welcomed participants on behalf of Lucent Technologies, supplying some logistic information about lunch, time schedules and available PCs. The absence of Ian Park was duly mentioned, in terms of missing not only Chairmanship but significant technical contributions as well.

### **Tdoc N2-99G41**

The Agenda was briefly scanned through and was approved with no changes.

## **2 Introduction & grouping of contributions**

Preliminary arrangements were carried out for allocation of documents to the relevant discussion session. Not yet available documents were duly postponed. Some documents, whose allocation was not straightforward, were then allocated to Working Groups.

## **3 Reports**

### **3.1 Review of reports from N2, Abiko (September 1999), N2A, Galway (October 1999) & N2B, Eton (October 1999) meetings**

#### **Tdoc N2-99D54**

The Abiko meeting report was noted.

#### **Tdoc N2-99G44**

N2B meeting report from Eton. A survey from the e-mail discussion was performed. Some revisions to the original documents were produced, some others were represented as they are. It was recommended to limit e-mail discussion to the relevant e-mail exploders, in order to avoid useless mail proliferation.

#### **Tdoc N2-99G43**

The Galway meeting report was approved. Siemens commented about the Action Point of producing SDLs for all GPRS Specs and remarked that their involvement was much more limited.

## **Tdoc N2-99J32**

List of N2B approved Liaison Statements, sent out from MCC to the relevant addresses. It was mentioned that the review of 23.012 scheduled for Nov 8 did not take place and it was also remarked that the content of F66 was approved, but the CR was formally rejected.

### 3.1.1 - *Mobility Management - Stage 2 and Stage 3*

#### **Tdoc N2-99J19**

CR 29.002-067 on Removal of Binterface services from the MAP specification, to delete description of MAP UPDATE LOCATION AREA in Location Management services from section 8. Presented by NEC. Removal of the B interface was found attractive, since it is an internal interface, but the impact on the existing specifications (with the existing references) was found significant as well.

The CR was initially approved, although some concern was expected at the CN level. Maybe a Change of the Subject, making it more specific, could help. A second solution, proposed by the Chairman, of combining two CRs (the second one is in H85) into one CR was preferred.

Hence, the content was approved, but the CR was formally rejected.

#### **Tdoc N2-99H85**

CR 29.002-065 on MAP Location Management Restructuring. Presented by Ericsson Nippon. Feedback was given (Alcatel and Vodafone, in addition to the companies working as editors) through e-mail discussion and reflected as much as possible into the document. Contents approved, unless severe objections were received during the meeting. At the end, it was agreed that the Editors will edit the document (combined with J19), provide it to the N2 mailing list and then send it to the CN plenary as an N2 approved document.

#### **Tdoc N2-99H84**

CR 23.012-001 on MAP Location Management Restructuring, tied to the approval of Tdoc N2-99H85. The Editor admitted that there is room for refinements in future iterations. Procedure Authenticate VLR should be included.

Alcatel found that some SDL diagrams are not synchronised. The CR was approved with an agreed modification (J50) to the procedure Update Location Area MSC. The Editor volunteered to also provide a modification to the Process Detach IMSI VLR.

### 3.1.2 - *Super Charger*

#### **Tdoc N2-99G95**

Changes to the original text of Super Charger Stage 2 WI (TS 23.116) were highlighted by Nortel Networks. Ericsson asked whether the text of this WI will be aligned with TS 23.012: this would involve importing SDLs from 23.012 or creating appropriate links between the two documents.

The document was approved. Version will be raised to 1.0.0, after N2 approval.

#### **Tdoc N2-99G83**

Presented by Nortel Networks, category was changed to B. Agreed to submit it to the CN plenary.

### 3.1.3 - *The Gateway Location Register*

#### **Tdoc N2-99G66**

3G TS 23.119: *GLR stage 2*.

Presented by NTT DoCoMo. The Editor proposed SDLs not to be a part of the normative text: Ericsson observed that it was agreed that SDLs belong to the normative part of a specification and, whenever there is additional text, this is to clarify. The Chairman showed his intention to present this TS only when SDLs were included.

Ver. 0.4.0 will be submitted to the N2 plenary for approval and then raised to ver. 1.0.0 for the CN plenary in Sophia Antipolis, with a disclaimer that SDLs will be added after the CN plenary. They will then be discussed and approved in the Kyoto meeting and in the forthcoming N2B ad hoc in February. It was clarified that a ver. 1.0.0 of a TS can be sent to the CN plenary for information and approval.

The floor was asked to approve the Spec and submit it to N2 (and then to CN) without SDLs, for information and approval, with the above disclaimer. DoCoMo and the Japanese delegates in general were confident in the substantial stability (at least 80%) of the document but Ericsson did not agree. The document will be anyway submitted to the N2 plenary. Some comments about the final text were eventually raised by Ericsson and achieved by NTT DoCoMo. New Tdoc number is J96

#### **Tdoc N2-99J96**

Revised GLR Stage 2. Updated to ver. 0.5.0 and approved for submission to N2. **Action Point Franco:** to contact Ian Doig asking for a TS number. (maybe it is already assigned). **Action Point Franco:** to clarify whether it goes to the CN plenary.

### **Tdoc N2-99J20**

GLR Stage 3 Specification v. 0.2.0 presented by NTT Comware. An excellent degree of completeness was reached, according to the Rapporteur. New Tdoc number (J98) was assigned to cope with a change to sect. 4.2, where some GPRS related issues were deleted.

### **Tdoc N2-99J98**

Approved. NTT Comware wants to submit it to the CN plenary for approval. **Action Point Franco:** to ask Ian Doig a TS number.

### **Tdoc N2-99H18**

GLR stage3 specification for GTP was presented by Fujitsu. **Action Point Franco:** ask Ian Doig a TS number. The intention is to send it to the CN plenary for approval.

#### *3.1.4 Combined Mobility Management*

### **Tdoc N2-99K00**

Withdrawn

### **Tdoc N2-99H13**

Withdrawn.

### **Tdoc N2-99H39**

New TS on Combined location update stage-2. Presented by NEC. **Action Point Franco:** to get a number from Ian Doig.

Ericsson remarked that the SDLs were changed extensively since the last N2B meeting and that there was not enough time to check them carefully. It was then recommended to read the document off line and feedback comment for the next session of discussion, during the meeting. A very lengthy and detailed discussion took place. Nokia observed that a clear separation between Circuit Switching and Packet Switching is not provided in the document. Ericsson, supported the concept but was against a phased approach (a part of the functionality in Release 99 and the other in Release 2000).

Alcatel volunteered in drafting a Liaison Statement (K02) to S2.

Combined Mobility Management cannot be finalised in Release '99 but N2 will recommend that the activity ~~will~~ proceeds as a part of Release 2000: the meeting agreed. NEC volunteered to withdraw Tdocs H41 to H44 inclusive.

### **Tdoc N2-99H41**

Withdrawn

### **Tdoc N2-99H42**

Withdrawn

### **Tdoc N2-99H43**

Withdrawn

### **Tdoc N2-99H44**

Withdrawn.

## **3.2 Multicall**

### **Tdoc N2-99H94**

LS from S2 presented by NTT Comware. No action from N2 to respond to the LS. The document was noted.

### **Tdoc N2-99H19**

CR 23.018-025r2 on Addition of the description for Multicall, based on the LS contained in H94. Presented by NTT Comware. The CR was agreed.

### **Tdoc N2-99H20**

CR 23.008-005r1 on Introduction of maximum number for CS. Presented by NTT Comware. The maximum session number was introduced after discussion in Eton. The CR was agreed.

### **Tdoc N2-99H21**

CR 23.016-005r1 on Introduction of maximum number for CS Presented by NTT Comware. Clarifications to Fig. 15 were requested by Ericsson and eventually the CR was agreed.

### **Tdoc N2-99H22**

CR 29.002-048r1 on Introduction of maximum number for CS. Presented by NTT Comware. The Chairman declared the WI Multicall finished in N2 for R99. A minor Change to the ASN.1 syntax was identified. Revised to Tdoc J54, which was agreed with no further discussion.

## **3.3 Out of Band Transcoder Control**

#### **Tdoc N2-99H40**

New TS on out-of-band transcoder control stage-2, presented by NEC. Lawful interception issues were added, and the new section 4 clarifies all issues raised during the Eton meeting. The mechanism used in second generation networks is TFO, out of Band Transcoder Control cannot be used because of limitations on the radio interface, not because of the core network. Two Liaison Statements to S2 and S4 (J564 and J586) were agreed: Ericsson/NEC will draft them.

A cover letter to this document will indicate the level of stability of the document, in particular the open issues. V.1.0.0 of the document will go the N2 plenary and then to the CN plenary *for information*.

#### **Tdoc N2-99J28**

LS to ITU-T Study Group 11. An Annex was missing: Ericsson will provide a revision (J60).

#### **Tdoc N2-99H98**

Liaison statement of Impact to TS24.008 by Out Band Transcoder Control received from N1. Presented by the N2B Chairman. Noted.

#### **Tdoc N2-99H97**

LS noted.

### **3.4 Security**

#### **Tdoc N2-99G46**

The CR was agreed.

#### **Tdoc N2-99G59**

Optimisation of Authentication Vector Retrieval was presented by Siemens. The proposal applies to Release '99. Ericsson and Nokia supported the capability as an Operator's option. Eventually the contribution was agreed as an optional capability for Release '99.

#### **Tdoc N2-99G67**

Enhanced User Identity Confidentiality was presented by Siemens proposing to remove part b of CR 29.002 045 (Ericsson and Nokia agreed). However, the Chairman noted that S3 should be informed that N2 is not going to implement User Requirement Confidentiality, since the requirements are not stable enough. The document was rejected on the basis that a more comprehensive discussion on requirements should take place in S3.

#### **Tdoc N2-99G87**

CR 29.002-045r2 on authentication enhancements for UMTS. Comments were raised by NTT Software. In sect. 7.6.7 a more specific description was needed, and this was agreed. Modification of the authentication length from 14 to 18 bytes was also proposed. Send Identification service: the proposal is to send it only with the IMSI and the response will be the Authentication vectors. Segmentation also needs to be added in the CR.

The Chairman noted that the drivers of service requirements were not clear and he was reluctant to accept them without sending a LS (J62), to be quickly drafted by NTT and reach S3 in time.

The old VLR should delete the authentication vectors, when the customer has moved, but this collides with Super Charger introduction: Nortel Networks suggested to remove the functionality, or to leave it optional. The LS will also include this issue.

A three network scenario, with different capabilities in terms of Super Charger and Sequence Identification, was presented to clarify the NTT requirements. Eventually, everyone agreed that, if the Send Identification is received and the Authentication vectors are sent out, then the Authentication vectors shall be deleted from the old VLR.

Editors of 23.012 were asked whether the agreement of the CR matches with the restructuring work of 29.002 and 23.012 but it is too early to say it with certainty.

A number of changes were raised during the discussion, e.g. segmentation, Optional IMSI at the SI response, alignment with the restructuring and other editorial issues: this justified a revision. Encrypted IMSI will also be deleted from the CR. The CR will be split in two parts: new Tdoc numbers are J64 (then revised to k58, which was agreed) and J66.

#### **Tdoc N2-99G68**

Nokia contribution on interworking of security between Release 98 and Release 99. A new optional parameter is proposed for MAP version 3, indicating the type of SIM used. A clarifying discussion took place afterwards on situations of 3G users roaming to 2G networks. Eventually, the document was withdrawn, waiting for further contributions from N1. Nokia will send the contribution directly to the next N1 on 2G/3G interworking, scheduled for next week.

#### **Tdoc N2-99H71**

CR 23.008-004r2 on Authentication Enhancements (revision of N2-99F82). Ericsson (and Nokia) proposed to remove the number of triplets (5) that are stored in the HLR/AuC, since this is an internal feature. The CR will be revised (new Tdoc J72) accordingly. Tdoc J72 was agreed.

### **Tdoc N2-99H72**

CR 23.007-002r2 on Authentication Enhancements (revision of N2-99F84). Presented by NTT Software and agreed with no further changes.

### **Tdoc N2-99H73**

CR 29.060-015r3 on Authentication Enhancements (revision of N2-99F86), still presented by NTT Software. No comments received by email discussion. A proposal to modify UMTS with 3G in the references was accepted. Editorial corrections only. No new Tdoc number needed. Agreed.

### **Tdoc N2-99J62**

Proposed LS to S3 on TS 33.102 section 6.3.4 Distribution of authentication vectors between VLRs. Drafted by NTT DoCoMo as a result of the discussion on security. Minor editorial amendment on a date. The Chairman was concerned with a potential misuse of the radio interface, if IMUI was transmitted over. The meeting agreed to update the LS accordingly (the Chairman will do it). Revised LS will be in Tdoc [J86](#).

### **Tdoc N2-99J66**

CR 29.002-072 on Enhanced User Confidentiality. Rejected after a lengthy and controversial discussion.

## **3.5. GPRS**

### **3.5.1 Stage 3 Drafts**

#### **Tdoc N2-99G85**

CR 29.060-021 on Parallel handling of multiple user application flows. Presented by Ericsson. The CR needed a revision (J74); the Work Item will be *GTP enhancements*.

#### **Tdoc N2-99G86**

CR 29.060-022 on MS and GGSN-initiated PDP context modification, presented by Ericsson. The document was accepted (CR formally rejected) and combined with a specific Change Request, according to the discussion about G85. Hence J74 will contain the combined CR.

#### **Tdoc N2-99J42**

CR 23.003-013 on Introduction of Reserved Service Labels in the APN, sent to N2 by N1, directly, instead of a Liaison Statement. Nortel Networks went through some of the changes suggesting further modifications, which were duly caught by Ericsson. The CR was revised (Tdoc 99J76) and an LS (Tdoc 99J78) was suggested by Nortel Networks to inform S2 of the N2 activity on Mobile IP. Standardised Service Labels: format is standardised, but content is left to Operators. The revised CR was agreed

#### **Tdoc N2-99G84**

Addition of PDP Context Identifier in PDP Context Information Element for 09.60-A074, presented by Motorola as a Release '99 issue. Contents were agreed but the CR was formally rejected, since other CRs related to the same WI are expected. An e-mail discussion group will be started and Motorola will collect the various contributions.

#### **Tdoc N2-99J74**

CR 29.060-021r1. Agreed.

#### **Tdoc N2-99J76**

CR 23.003-013r1 on Introduction of Reserved Service Labels in the AP. Presented by Ericsson. Agreed.

#### ~~**Tdoc N2-99J80**~~

~~CR 29.060-029 on New header for the new GTP version. Presented by Lucent and agreed.~~

#### ~~**Tdoc N2-99J82**~~

~~CR 29.060-020r2 on GTP Messages and the Signalling Plane (GTP-C) for GTP Release 99. Presented by Ericsson. Agreed.~~

### **3.5.2 GTP enhancements**

#### ~~**Tdoc N2-99J80**~~

~~CR 29.060-029 on New header for the new GTP version. Presented by Lucent and agreed.~~

#### ~~**Tdoc N2-99J82**~~

~~CR 29.060-020r2 on GTP Messages and the Signalling Plane (GTP-C) for GTP Release 99. Presented by Ericsson. Agreed.~~

#### **Tdoc N2-99G53**

CR on 29.060 (012r2) on New header for the evolved GTP version (Release 99). Presented by Ericsson. The CR was already provided in Eton. An editorial change was indicated by Ericsson.

#### **Tdoc N2-99G93**

CR 29.060-024 on Future compatibility for the R'99 GTP header. Presented by Vodafone. The basic Vodafone concern is that a GTP version which must be backwards compatible. Sensible modifications, ready to be included in

the Ericsson CR, were identified. The Change related to NPDU number was proposed for acceptance by the Chairman. The field descriptions (one more than in the Ericsson document) were accepted. The modifications to the extension header types were also accepted.

#### **Tdoc N2-99G94**

Still presented by Vodafone, who emphasised the introduced changes. The comments raised, motivated a revision, and Nokia suggested to combine the three CRs on GTP enhancements. Lucent took the Action Point of combining the Change Requests. Mechanisms related to bits 6, 7 and 8 of the extension header were not accepted for inclusion in the merged document.

#### **Tdoc N2-99J24**

Presented by Ericsson. Mostly editorial, the description of GTP messages has been made more clear for both GTP-C and GTP-U. Decision about the CR postponed after discussion of the Vodafone CR (G92). Lucent expressed technical concerns: introduction of an extra Cause value (name to be defined by the CR editor), NSAPI in Delete AA PDP Context Request is Mandatory (the sentence is to be modified consequently). In 7.5.4, only PDP Context and Private Extension are optional. Eventually, the CR was revised (J82).

#### **Tdoc N2-99G92**

Presented by Vodafone. CR to 29.060 on separation of C and U plane. Nokia objected about going one step further along the way of the two planes separation, although the reasoning behind was quite understandable: functional changes must be frozen by this meeting. This CR was consequently found not appropriate for Release '99.

Vodafone highlighted that many changes to the GTP signalling were proposed. Some were agreed and some were still being discussed. Some of the text in the agreed CRs may need further changes, however, the vast majority of the text is correct and it should be used as the basis for future work.

#### **Tdoc N2-99J27**

CR to 29.060-030 On Re-synchronisation of GTP-U Sequence Numbers was presented by Ericsson. Lucent was concerned on the approach of the CR: if packet synchronisation is lost, the first packet received is assumed to be in order. Recovery procedures, already defined for GPRS, are an acceptable solution, according to Lucent. The CR was rejected and for the time being, the current resynchronisation mechanisms have to be maintained.

### **3.6 Handover**

#### **Tdoc N2-99G96**

Open issues on 3G/2G handover were introduced by Lucent. It was agreed to send a Liaison Statement (drafted by Lucent) on 3G 2G PS domain handover to S2. LS will be in Tdoc J84.

#### **Tdoc N2-99H91**

LS from S2 on Inter System Handover for the PS domain. Noted.

#### **Tdoc N2-99H36**

Noted.

#### **Tdoc N2-99H37**

The CR was approved. Heinz Petter will provide a version with revision marks.

#### **Tdoc N2-99H38**

The Chairman did not find useful to go into the detail of 23.009. Delegates were encouraged to provide comments to the N1 colleagues so that the issue can be treated at the Oulu meeting.

### **3.7 Location Services**

#### **Tdoc N2-99H49**

Presented by T1P1.5. R99 mirror of a CR for Release 98 previously seen in Eton. Delegates were informed (on Nokia's requests) that references will be duly updated by MCC with the inclusion of 3GPP Specs. Some clarifications were given about the Location Services Gateway Package for which, according to Nokia, no Application Context version upgrade is necessary.

S2 should be briefed that they need to transfer as soon as possible 03.71 in such a way that it becomes 23.071. According to T1P1.5 this is not necessary, however Stephen Edge will informally send an e-mail about. The Chairman noted changes to sect. 4 of 09.02 and remarked that this section should be now under responsibility of S2. This motivated a revision (K52). **Action Point:** Yun Chao Hu to perform the changes and provide the revised document to MCC.

#### **Tdoc N2-99H65**

CR 23.003-011 on Support of VLR and HLR data restoration procedure with LCS, presented by T1P1. The additional changes to the version seen in Eton were presented by T1P1.5. Agreed.

#### **Tdoc N2-99H66**

CR 23.016-006 on Support of subscriber data management in the HLR and VLR for LCS. Agreed.

**Tdoc N2-99H89**

MCC explained that this is a mirror CR to an already transferred Spec, not produced in time. Agreed.

**Tdoc N2-99K38**

CR 09.08-Axxx on Changes due to LCS enhancements. **Action Point Franco**: CR number to be assigned. Agreed.

**Tdoc N2-99K40**

Brought to the attention of N2 for information only. Noted.

**Tdoc N2-99K44**

Agreed

**Tdoc N2-99K46**

Agreed.

**Tdoc N2-99K48**

Agreed.

**Tdoc N2-99K56**

Mirror CR to 23.008 (see K46). Agreed. Stephen Edge will provide it to MCC and MCC will then put it on the documents server.

**3.8 CAMEL Phase 3****Tdoc N2-99G69**

Combined CRs to 03.08 (but it should be 23.008) on CAMEL Phase 3, submitted by Alcatel. After a quick survey of the document, the content was agreed.

**Tdoc N2-99H00**

29.002 CR on CAMEL3 Location Services, briefly presented by Nokia. Contents were agreed but the CR was formally rejected.

**Tdoc N2-99H81**

Nokia remarked that acceptance of the CR involves an Application Context Upgrade, which would not be justified. NEC proposed to put the addition after the ellipsis, so that the AC upgrade is not necessary. Revised to K36.

**Tdoc N2-99K36**

Agreed.

**Tdoc N2-99G61**

CR to 29.002 on enhancements to Any Time Interrogation. Siemens presented it, indicating that the CR had been already analysed in the Eton meeting. This document was revised to Tdoc K28.

**Tdoc N2-99H25**

~~Discussion was postponed~~ Revised to J89.

**Tdoc N2-99H32**

Collective CR to 23.016 for CAMEL ph3 version 5. Presented by Siemens. Contents were agreed but the CR was formally rejected.

**Tdoc N2-99G51**

Presented by Nokia, who reminded that the CR includes previously agreed changes. Formally rejected, but contents were agreed.

**Tdoc N2-99H68**

Contribution for 3G TS 29.002 for Location Services. Presented by Ericsson, who reminded that some discussion took place in Eton. The changes were illustrated in some detail. Contents agreed. CR formally rejected. No need for formal rejection, since no CR number had been allocated.

**Tdoc N2-99H67**

Contribution for 3G TS 23.012 for Mobility Management. Adapted to the structure of 23.012, although in Eton the CR was addressing 29.002. Sect. 4.1.2.7 and Sect 4.2.1.8, as proposed by the Chairman, will be moved entirely to 23.078. Larry Richards and Toshiyuki Tamura were requested to note this decision. SCP shall be referred to as gsmSCF. New Tdoc number is K30, and contents were agreed.

**Tdoc N2-99J06**

Contribution on 29.002 mobility management. Presented in Eton last month. Revised to K34.

**Tdoc N2-99K28**

Siemens presented it. Ericsson remarked the presence of an Editor's note and asked to remove it. The necessity of specifying segmentation for Any Time Interrogation was raised by Nokia. Notification flags per CSI were proposed

and N2A should decide on this. SRI ack criteria for DP termination were proposed. A new dedicated Application Context package could be defined without the necessity of an AC upgrade.

**Tdoc N2-99K34**

Contents agreed, CR formally rejected.

**Tdoc N2-99H80**

CR to 29.002 on Indication of supported CAMEL Phases Source N2A. Contents agreed, formally rejected.

**Tdoc N2-99J91**

See notes of Yun Chao. Revised to K42.

**Tdoc N2-99J89**

See notes of Yun Chao.

**3.9 AOB for Release '99**

**3.9.2 Quality of Service**

**Tdoc N2-99J94**

Presented by an S2 colleague. The N2B Chairman asked whether QoS requirements for Stage 3 will be available, since the presentation seemed to be focused on Stage 2 issues.

Nik Allen, Alessio Casati, Wen Lin Tsao, Heinz Petter Keutzmann, Jean Alain Evenou (contact person for Alcatel), Einar Oltedal, Masahiro Sawada, Takeshi Igarashi expressed interest for an active participation in the QoS discussion. An LS to S2 should be sent to make sure that all the necessary CRs are finalised in the time period of two meetings. Lucent volunteered in drafting the Liaison Statement (Tdoc K04). A Task Force with the above delegates was established: Alessio will act as convenor, but S2 expertise/participation was recognised as essential.

**Tdoc N2-99G62**

CR 050r2 to 29.002 on QoS enhancements. Presented by Siemens. Data type name changed into GPRSEnhancementSupportIndicator. Impacts on sect. 7 and 8 should be included in the CR and the last reference to 24.008 changed. N2 needs to make sure that all the S2 requirements have been handled. Revised document: N2-99K06.

**Tdoc N2-99K32**

Source: Siemens (presentation), NTT DoCoMo, Nokia. QoS is not a subscriber option. Revised to K60.

**Tdoc N2-99K60**

Agreed.

~~**Tdoc N2-99K24**~~

~~Presented by Nortel Networks. Agreed.~~

**3.9.3 Long Forwarded to Numbers**

**Tdoc N2-99J17**

Vodafone presented CR 29.002-066 on Addition of FtN-AddressString, WI: Long Forwarded-to Numbers (Rev. of H50). Nortel requested to postpone the document to have more time to consider it. The changes were analysed one by one. If the upgrade discussed and agreed is not acceptable for CAMEL, the CR will be rejected. The content of the CR was agreed on the condition that the Application Context version upgrade can be justified by other features for Release '99.

**3.9.4 Follow me**

**Tdoc N2-99G60**

CR to 29.002 on introduction of Follow Me, presented by Siemens. No special SDLs were needed for this procedure, Siemens clarified to Nortel. It was also clarified that Follow Me is only applicable to USSD Phase 2. Steffen Habermann reminded that Follow Me belongs to ASCII (3GPP decision). It was also suggested to change the name of the HLR-HLR interface (currently named FM, for Follow Me).

A revision was found necessary (Tdoc J88). A Liaison Statement (Tdoc J90) to S2 as well, in order to stimulate them to introduce new interfaces in their architectural model.

**3.9.5 Mobile Number Portability**

**Tdoc N2-99J70**

Postponed to N2 plenary in Kyoto.

**Tdoc N2-99J44**

Postponed to N2 plenary in Kyoto.

#### **Tdoc N2-99J46**

Postponed to N2 plenary in Kyoto.

#### **4 Input liaison statements: allocation to subgroups as appropriate**

##### **Tdoc N2-99G4~~54~~**

Noted.

##### **Tdoc N2-99H96**

Noted.

##### **Tdoc N2-99H07**

~~Discussed in N2A~~ Noted.

##### **Tdoc N2-99H08**

Noted.

##### **Tdoc N2-99H09.**

Noted.

##### **Tdoc N2-99H92**

Noted.

##### ~~**Tdoc N2-99H91**~~

~~Discussed in N2B.~~

##### **Tdoc N2-99H93**

Originally it was proposed to simply note it. It was then agreed to discuss it in N2B in further detail. The proposed split of functionality seems agreeable: this means that N2 is not involved in Cell Broadcast specifications. No further action required.

##### **Tdoc N2-99H94**

Discussed in N2B and noted.

##### **Tdoc N2-99H97**

Noted.

##### **Tdoc N2-99J05**

Discussed in N2A.

#### **5 Work item management**

##### **Tdoc N2-99H95**

Definition and completion of Release 1999, source TSG Chairmen. Guidelines for freezing Specifications for Release '99, including how to fill an Annex indicating features that cannot be finalised for Release '99, although originally planned. The Annexes will be elaborated by Chairman/Deputy Chairmen/MCC quickly after the meeting, and then discussed by e-mail. Deadline for producing the documents to be circulated by e-mail: 6<sup>th</sup> December.

##### **Tdoc N2-99H79**

List of CRs approved in Eton. The two on Super Charger should be put on hold, in order to submit all the Super Charger related CRs in a single bunch. All the CRs will go to the CN plenary, with the exception of the two CRs on Super Charger.

##### **Tdoc N2-99G52**

GTP enhancement presented by Ericsson. The existence of it would allow a better place for related CRs. Amendments to the approval program were included in the final text, since approval of the WI occurs at the CN level. Revised to J36 and To be submitted to the CN plenary for approval.

##### **Tdoc N2-99G97**

Nokia proposed to rename CAMEL Phase 3 for Release 2000 as CAMEL Phase 4, to provide continuity with the naming history and to clearly distinguish the additional functionality. The idea was raised in Kyongju (although not written in the meeting report).

#### **6 Contributions related to Release 99**

##### **6.1 CAMEL Phase 3**

###### **6.1.8 Geodetic Location**

##### **Tdoc N2-99H82**

CR 29.002-037r2 on Addition of reference for Calling Geodetic Location. Prepared by Vodafone. Better understanding on the affected procedures by the introduction of Geodetic Information could be gained by discussion of Tdoc H83. The CR was agreed.

### **Tdoc N2-99H83**

CR 23.078 on addition of Calling Geodetic Location presented by Vodafone. Applicability to GPRS was questioned by Ericsson, although some positive answer was expected by the originator itself (but needed verification). It was eventually agreed to remove the Geodetic information from sect. 7.6.1.3.2 (GPRS for SMS). The CR needed to be revised ([J39](#)).

### **Tdoc N2-99H88**

CR 23.018 on addition of Calling Geodetic Location, still presented by Vodafone. Additions to the original CR were duly highlighted. A new reference to an ITU document, nearly finalised, was added: it was also clarified that only editorial changes to the ITU document will be accepted (it is nearly translated). Alcatel observed that there could be a duplication of the same information with the current approach. It was agreed to revise the CR ([Tdoc.J40](#)).

#### **6.1.11 Object identifiers**

It was debated whether the 3GPP object identifier tree could go under the ETSI registration procedure. Marconi volunteered to produce a document (J38) and a Liaison Statement will then follow.

## **8 Maintenance of GSM phase 2+**

### **8.1 - ~~Addressing~~**

#### **Tdoc N2-99H29**

CR to 09.02 (R97) -A276 on Use of SSN for GPRS was presented by Siemens. If approved, mirror CRs need to be provided by Siemens for Release 98 and Release 99. Nokia recommended to list explicitly the operations (Forward MO-SMS, Check IMEI) for which SGSN shall use MSC SSN: this will avoid interpreting the CR, believed to be too general in its current formulation. The CR needs to be revised (K08). K10 and K12 mirror the CR for the following releases.

#### **Tdoc N2-99K08**

Presented by Siemens. Agreed.

### **8.2 ~~GPRS~~**

#### **Tdoc N2-99G48**

CR 09.02-A278 on Addition of GGSN number for the SRI for GPRS, source Nokia/Orange, was presented by Nokia. It proposes to add GGSN number as a mandatory parameter. Considered to fall into category C1 of corrective CRs. The CR was agreed, as well as G49 and G50, mirroring the CR for further releases.

#### **Tdoc N2-99J26**

Withdrawn.

#### **Tdoc N2-99G80**

CR 09.60 6.4.0-A078 (R97) on Clarification of GSN Address field. Presented by Ericsson. Some contradiction in the GSN address was noticed by Lucent. Revised to Tdoc K16 (K18 and K20 contain the mirror CRs to following releases). The revisions were agreed.

### **8.3 ~~USSD~~**

#### **Tdoc N2-99G82**

CR 09.02-A237r1 on Correction of the USSD procedure in the HLR. Presented by Nortel Networks. Alcatel proposed a Change of a response message, but Nortel preferred to stick to the original proposal. It was then requested to make the SDL more generic. Eventually agreed.

#### **Tdoc N2-99K22**

Mirror CR for Release '98 of G82. Agreed.

#### **Tdoc N2-99K24**

Mirror CR for Release '99 plus inclusion of Follow Me. Presented by Nortel Networks. Concerns were raised by Ericsson on the wording of primary and secondary HLR (confusion is likely with HLR redundancy). Agreed.

## **[940](#) Approval of output documents (Liaison statements, and formal endorsement of CRs already agreed under earlier agenda items)**

#### **Tdoc N2-99K70**

Proposed scope for CAMEL Phase 3 was presented by the N2A Chairman. To be also sent to the OSA-ad hoc. the LS was approved.

#### **Tdoc N2-99K68**

List of approved LSs from N2A. The table was approved, however two more Liaison Statements ([J87 and K03](#), not yet presented in N2A) needed to be discussed.

#### **Tdoc N2-99J87**

Approved.

#### **Tdoc N2-99J13**

Correction of CF Notification, by Siemens. It was reminded that for corrective CRs, three categories were identified in Kyongju. Hence the CRs to be discussed must fall in these three categories only.

The CR (category C3) was formally rejected. For the future, Change Requests for Release '97 and '978 on Network capabilities with no assigned category **will be formally rejected**.

#### **Tdoc N2-99K03**

The LS was presented by Vodafone and was approved. Tdoc K05 was also approved as a part of K03.

It was agreed that Change Requests to 23.008, 23.016, 23.018 elaborated by N2A can be sent to the CN plenary. They will be circulated by email by 29<sup>th</sup> November and email discussion will be closed by December 6<sup>th</sup>. E mail discussion will take place via the WG2 exploder, not simply the CAMEL one, to allow a broader discussion.

#### **Tdoc N2-99K72**

The list of approved CRs was scanned. Some discussion was raised by the CR in J17, which is conditioned on the creation of a new Application context. Vodafone (Ruth Hewson) will trigger the process of sending this CR to MCC.

All the LSs were approved: **Action Point Franco** to send them to Carole Rodriguez immediately.

All the Work Item Technical Specification are now in v. 1.0.0. **Action Point Franco** to update numbering.

#### **Tdoc N2-99J80**

Some comments from Chris Pudney were reported by Vodafone. A definition of Unknown Extension Type should be added. Encoding of the RLC PDU number still looks unnatural. The meeting hence agreed that this needs further investigations.

## **940.1**

### **Output liaison statements**

#### **Tdoc N2-99J60**

LS to ITU-T SG11 on Codec information, presented by Ericsson. It will also be sent in copy to S4.

#### **Tdoc N2-99J78**

Proposed Liaison Statement on the Introduction of Reserved Service Labels in the APN. It includes the CR of J76 (prepared by MCC). To be sent to S2.

#### **Tdoc N2-99J84**

LS on 3G-2G PS domain handover to S2/S1. Approved.

#### **Tdoc N2-99J90**

Some minor editorial changes. Approved.

#### **Tdoc N2-99J56**

Proposed LS on Out-of-Band Transcoder Control, with attachment. Approved.

#### **Tdoc N2-99J58**

Approved.

#### **Tdoc N2-99K04**

Proposed LS to S2 on establishment of a QoS taskforce. Approved.

#### **Tdoc N2-99K02**

A change was performed in order to specify that the work is transferred to Release 2000 (hopefully it will be also completed).

## **940.2**

### **New specifications**

#### **Tdoc N2-99G95**

**Action Point MCC:** The Super Charger document description will go to the CN plenary for information and approval.

#### **Tdoc N2-99H40**

**Action Point MCC:** to present it to the CN for information. Number is still needed: ask Ian Doig to provide one.

#### **Tdoc N2-99J96**

GLR stage 2 specification (23.119): agreed to upgrade it to v1.0.0 and to submit it to the CN plenary for information and approval. It was also agreed that SDL diagrams for Location Management will be added after CN#06 plenary. N2 also agreed that the document can be considered as finalised

#### **Tdoc N2-99J98**

GLR Stage 3 specification: agreed to send it for information and approval to the CN plenary

#### **Tdoc N2-99H18**

GLR specification for GTP: agreed to send it for information and approval to the CN plenary.

#### **Tdoc N2-99K54**

Cover letter to OoBTC TS containing open issues. The TS itself is attached to the file.

#### **Tdoc N2-99K64**

**Action Point MCC:** to attach the file received by M. Sawada and send it to the CN plenary.

#### **Tdoc N2-99J35**

Clarifications on unsuccessful TDPs. Approved.

## **940.3 Change Requests already handled in subgroups**

Approved CRs: H19, H20, H21, J54 (Multicall). J17 (Long Forwarded to numbers). K16, K18, K20, G48, G49, G50 (GPRS). H37 (Handover). G63, K14 (VLR Subscription Data). J52, J50 (Location Management Restructuring). G46, J72, H72, H73revised (Security). J76, J80, .....

For a detailed list, see Status in the Tdoc Table.

## **910.4 AOB**

### **Submission of documents**

The question of whether to set a deadline for the submission of original documents (hence, excluding revisions of existing ones) was debated, although the current N2 working procedures do not contemplate the case. It was agreed that documents received within 5 (five) working days before the meeting will take the risk of being postponed, without arguments, on simple request of a delegate.

### **Object Identifier**

A document (Tdoc N2-99K07) from Marconi with three options was presented by the Chairman, who suggested to adopt the third out of the three options proposed in the document. The options propose to allocate 3GPP under the ETSI identified organisations and use the same structure currently used in the mobile Domain of GSM Object Ids. The meeting decided that Option 3 implies interworking problems to different releases of UMTS and GSM. Option 2, which indicates that object Ids should be allocated in the current mobile Domain, was consequently preferred.

A Liaison Statement (Tdoc N2-99K76) will be drafted by the Chairman (supported by Nokia and T-Mobil), circulated by December 3<sup>rd</sup> and must be approved by December 6<sup>th</sup>.

## **104 Review of dates and hosts for future meetings**

### **Tdoc N2-99J29**

An additional N2B meeting in February was agreed, dedicated to Release 99 issues. Most likely to be done in Europe (host needed) Three full days: 14<sup>th</sup> - 16<sup>th</sup> February.

## **112 Closing of the meeting**

The Chairman expressed his personal thanks and the gratitude of the N2 plenary to Lucent for their availability in hosting the meeting and for the excellent overall organisation.

## N2A meeting report - Phoenix, Arizona

### General issues

#### Agenda allocation

##### Tdoc N2-99J30

General issues:

- J05 LS OSA/Vhe
- G63 03.60 VLR sub data
- Section 4.1 document is added Tdoc N2-99J41 Dialed services source T-mobil.
- 23.016 Tdoc N2-99H63 changes to agenda item T-BCSM.
- H62 and H61 have been changed in the document list.

Decision: The agenda was approved

##### Tdoc N2-99G97

The document ~~that~~ is a discussion paper for Naming of CAMEL in R99 and R2000. It was discussed in the plenary.

##### Tdoc N2-99J05

The document is Liaison statement on the interaction between MMS, SAT, MExE, non-MExE terminals and Camel/Open Service Architecture from OSA ad hoc meeting. Jane presented the document, since she participated in the OSA ad hoc meeting. They are asking about some expert help from CN, S2 and T2 and a second step is to see if there are additional things that have to be implemented in CAMEL. There is no time to discuss it at this meeting and it is too late to include it in the R99 of CAMEL. It could be an issue for R2000.

Decision: An answer will be sent to OSA ad hoc that it will be discussed further next year.

#### CAMEL Phase 2, Release 97

##### Tdoc N2-99G63

CR to Release 98 on Correction of VLR subscription Data in spec 03.16. From Ericsson.

Decision: The document was endorsed and will be forward to N2B.

##### Tdoc N2-99J13

The document is a CR of a Correction of CF notification proposed by Siemens. This input is a proposal to change three specifications of three releases. Several people tried to solve this, looping procedures in the SDLs. Due to the late contribution, Siemens proposal is that this should be discussed further at a later time when people have been looking into it in more detail. If endorsed Siemens, will prepare all the CRs.

Decision: The CR was accepted as it is. A presentation in the N2 plenary it will be presented once more.

##### Tdoc N2-99K01

The document is an explanation text for the problem with endless loops. It is the explain why the proposed CR in Tdoc N2-99J13 proposed a solution to the problem.

Decision: The document was noted.

#### CAMEL Phase 3, Release 99

#### GPRS interworking

##### Tdoc N2-99G70

Pierre presented the document from Alcatel on Principles behind the introduction of new charging information flows for GPRS support within CAMEL Phase 3. There were concerns about fraud aspects example when failure.

The difference in Alcatel's proposal, compared to the common way of charging, is that the charging will be done in the SSF instead of in the SCF.

Decision: The contribution was rejected.

**Tdoc N2-99G71**

Proposal for new operation: ProvideChargingResourcesGPRS from Alcatel.

Decision: The contribution was rejected.

**Tdoc N2-99G72**

Proposal for new operation: UpdateChargingResourcesGPRS from Alcatel.

Decision: The contribution was rejected.

**Tdoc N2-99G73**

Proposal for new operation: UpdateChargingResourcesGPRS Ack from Alcatel.

Decision: The contribution was rejected.

**Tdoc N2-99G74**

Proposal for new operation: RestoreChargingResourcesGPRS from Alcatel.

Decision: The contribution was rejected.

**Tdoc N2-99G75**

Proposal for new operation : RestoreChargingResourcesGPRS Ack from Alcatel.

Decision: The contribution was rejected.

Summary: The proposal is not stable enough to be a part of R99. There were some problems to understand the proposal. Moving the handling from SCF to the SSF will probably be a problem between the operators. It may solve the problem with the amount of TCAP. Forward this proposal to S1 for further considerations for release 2000. If Alcatel would like to work with this further, a proposal should be sent to S1.

**Tdoc N2-99H70**

Nokia presented a proposal to reduce the number of TCAP dialogues for GPRS CAP. They proposed to introduce it in R99 and it has no impact on stage 2 just on stage 3. There were some concerns to have it in R99. An off-line discussion among the involved delegates will come back to it tomorrow morning. If new concept will be added now, there must be the agreement of all the delegates. If not, the proposal will be rejected.

Decision: Postponed until tomorrow. Eventually rejected.

**Tdoc N2-99J73**

A proposal from Nokia of changes to 23.078 on GPRS interworking to reduce TCAP dialogues. Further consideration on the application context. The classification needs to be solved. The contribution will be used a working assumption. The issue has to be studied further.

Decision: Noted

**Tdoc N2-99J02**

Revised in Tdoc N2-99J59

**Tdoc N2-99J59**

The document is an Ericsson contribution on CAMEL/GPRS alignment to TS 23.060 v3.1.0 and final corrections.

Some modifications have to be done:

- Cancel will only affect that dialog in the cancel dialog.
- Disconnect has to be checked: in 6.4.3 the second table has to be checked.
- Some other comments will be provided by mail from alcatel. Renaming.

The new version of the document including the relevant comments will be presented in Tdoc N2-99J69.

Decision: Revised to document Tdoc N2-99J69

**Tdoc N2-99J69**

Revised version of Tdoc N2-99J59. Siemens had some comments of the naming of the DP.

Decision: The contribution was accepted and will be incorporated in the draft specification.

**Tdoc N2-99J01**

Jan Ellsberger (Ericsson) showed a PowerPoint presentation on CAMEL/GPRS interworking and the Basic principles of the GPRS SSF.

### **Tdoc N2-99J00**

Jan presented proposed SDLs for CAMEL/GPRS for 23.078. There were some comments, e.g. that expiration of the timer is missing. The SDLs will be revised.

Decision: Revised in document Tdoc N2-99J71

### **Tdoc N2-99J71**

The document is a Revised Version of document Tdoc N2-99J00. Jan will continue the work with the open issues and the discussion will continue on E-mail.

Decision: The document was agreed.

### **Tdoc N2-99H11**

Revision of document Tdoc N2-99E03 presented in Galway. Parts of it were agreed there. Clarification of GPRS TDP Handling presented by Siemens. The Note 2 was agreed by Sumio and Rogier, as proposed in Galway. Note one in table two is a new proposal by Siemens.

Decision: The document was agreed.

### **Tdoc N2-99J03**

Anders presented the contribution that further enhances and corrects the CAMEL/GPRS interwork in the draft 3G TS 29.078. The intention is to send 2 apply charging information, one for volume and one for time. It should be showed in the SDLs and it will be covered in J71. There were some comments from Kazuko and from Keijo and, together with the editor of the draft specification and the originator, they will incorporate it in the draft specification.

Decision: The document was agreed with one modification and will be an input to the draft specification.

### **Tdoc N2-99J10**

The document is a contribution to 29.078 on AC /ACR for GPRS from Siemens. It describes a new way to apply charging to the stage 3. The contribution was rejected and the originator is asked to come with new proposals for both stage 2 and stage 3.

Decision: The contribution was rejected.

### **Tdoc N2-99G51**

Keijo started to present the story at the coversheet. After that, he continued to present the proposed modifications to CAMEL3 MO SMS, GPRS and SoLSA on 29.002 from Nokia.

Decision: The document was noted. The document will be passed over to N2B.

## **Mobility Management**

### **Tdoc N2-99H67**

The document is a contribution for 3G TS 29.002 of Mobility Management. Rogier gave the delegates a brief overview and since the document is under the responsibility of N2B the document will be forwarded to them.

Decision: The document was noted.

### **Tdoc N2-99J06**

The CR of 29.002 mobility management is an updated version of a document presented in Eton, in document Tdoc N2-99D65. It specifies interworking between GSM Location Management processes and the CAMEL Mobility Management process. Related to the CSI, needs to be mentioned in the document. SCP shall be referred to as gsmSCF. The document will be handled further in N2B.

Decision: The document was noted.

Summary: The originator sees the mobility management description finalised in N2A. Therefore Mobility Management will be a part of CAMEL phase 3. Both CRs were endorsed by N2A.

## **SMS**

### **Tdoc N2-99H10**

The contribution is an improvement on SMS Connect Handling proposed by Ericsson.

Decision: The proposed concept is accepted and the draft specification 23.078 will be updated accordingly.

### **Tdoc N2-99J63**

Rogier presented a document of General MO-SMS corrections. The proposed change to 7.7 is not applicable, therefore this section shall be deleted.

Decision: The document was accepted, excluding the changes in 7.7.

Summary: The SMS description in 23.078 is stable but the charging issue may have some impact. The SMS will be a part of R99.

## Charging

### **Tdoc N2-99G57**

The document is a proposal from Ericsson to introduce an explicit indication of 'pre-paid call release' in ACR (23.078) It should apply for GPRS and it has to be decided how it will be a part of it. The contribution is just related to Circuit Switched calls, not GPRS. The SDLs in the document are just for information and will be updated to show the handling.

Decision: The contribution is agreed with the modification of the SDLs. The editors and the originator will together incorporate it in the draft specification.

### **Tdoc N2-99G58**

Corresponding contribution of document Tdoc N2-99G57 on Introduction of an explicit indication of 'pre-paid call release' in ACR. It will be useful to have a description of the terminating side. Keijo suggested that a terminated dialog should be included in the prearranged end. An off-line discussion will take place and if it some changes are suggested a new version of the document will be presented later this week.

Decision: Document is endorsed and will be incorporated in the draft specification. An off line discussion will take place.

### **Tdoc N2-99H03**

The document is a proposal from Nokia to update the specification 23.078 with concatenated FCI. The purpose of the contribution is to align different parts of the FCI handling and to limit the total amount of data. Nokia propose 5 \* 160 octets. The assumptions of the maximum length for free format container and the max length of Free Format Data to 160. Introduction of error handling is missing (do we need it?) A document has to be prepared that will specify the maximum lengths. Keiji will prepare a new version of this contribution; interested parties will help him with the document.

Decision: A Revised Version of the document will be presented in Tdoc N2-99J47.

### **Tdoc N2-99J47**

Keijo presented the changes from the document Tdoc N2-99H03. The maximum octets per leg is defined to 160 for append free format data, the max free format data is 160 octets per logical call record and 160 octets per SMS. Rogier had some editorial comments: the limit is defined but it's not described what will happen if it's exceed. No error handling will be defined. Interested parties will come together and write some nice explanation text.

Decision: A revision of the document will be presented in Tdoc N2-99J75.

### **Tdoc N2-99H04**

Withdrawn.

### **Tdoc N2-99H05**

The document is provided for information by Nokia and is a CR to 32.005 on Charging modifications due to concatenated CAMEL3 FCI. The specification is not under the remit of N2A. Keijo will present a new CR to the responsible group, including the comments from this meeting.

Decision: The document was noted.

### **Tdoc N2-99J12**

Sumio presented a contribution on gsmSSF correction for FCI for CAMEL Phase 3 from Siemens. The contribution was presented for CAMEL phase 2 in Galway but was rejected since R97 is frozen. Now, it is being represented for CAMEL phase 3. The general concept was changed and an introduction of the abandon DP as an EDP-R was included. Siemens will draft a new contribution

Decision: A Revised Version will be presented in Tdoc N2-99J49.

### **Tdoc N2-99J49**

Decision: Rejected due to that the issue has been covered in the Tdoc N2-99J65.

### **Tdoc N2-99H06**

Nokia had a contribution to 23.078 on Tac (ApplyCharging) timer. They suggested to implement the description in the stage 2 & 3 descriptions.

Decision: The contribution was agreed with editorial modifications.

## Location services

### Tdoc N2-99G98

The document is a contribution to 23.078 on CAMEL3 Location Services from Nokia. The contribution includes changes in the information flow. Due to security reason there were concerns about including the MSC number. The MSC number will be left in for the time being. Information elements, which should be conditional, are: geographical number, Age Of Location Information and MSC-number. Geographical information will be changed to C.

Decision: The contribution will be implemented with the change of GI to C.

### Tdoc N2-99G99

Contribution from Nokia is a CR to 29.078 on CAMEL3 Location Services & SoLSA

Decision: The contribution was agreed.

### Tdoc N2-99H00

The contribution from Nokia. is a CR to 29.002 on CAMEL3 Location Services. Keijo will crosscheck references in 29.002 with the references in 23.078. No reference has to be modified yet in the contribution and references to MAP modules need to be checked..

Decision: A Revised Version will be presented to N2B included the suggested changes. The new version does not need to be represented in N2A.

### Tdoc N2-99J51

Revised version of Tdoc N2-99H00.

Decision: Withdrawn

### Tdoc N2-99H68

Rogier presented Ericsson's contribution for 3G TS 29.002 on Location Services. It specifies the GMLC as recipient for the Any Time Interrogation message and contains updates of comments in N2B.

Decision: The document was noted and further handling will take place in N2B.

Summary: No outstanding topics and therefore the Location Services WI is considered finalised. It will be included in R99.

## Destination Number Modification Check

### Tdoc N2-99H15

Contribution from Nokia presented by Keijo. The document is a proposed change to 23.078 on removal of destination number check, and clarification on OBCSM creation. The removal av number check in DP 12 was discussed a long time. The check will be removed due to number portability. S1 has said that the check shall be removed due to incompatibility with North America Equal access but the requirement is not for DP12. In the procedure camel mt at page 9 the check is needed. The contribution will be modified with the introduction of numbercheck for called MSISDN of the terminating handling. Christian will take care of the updating.

Decision: Document was agreed with some modifications.

### Tdoc N2-99H16

The document is a CR to 23.018 on removal of destination number check, and clarification on OBCSM creation from Nokia. It is related to the Dialed services but it's also clarifies OBCSM to Camel phase 2. NCSA and dialed services will be handled later on and in the document it will be marked as "for further studies".

Decision: The document was agreed.

### Tdoc N2-99H35

Called Party Number Modification Check in CAMEL is a contribution from Alcatel. The proposed changes are covered in Tdoc N2-99H15.

Decision: Rejected.

## Continue With argument

### Tdoc N2-99G55

Rogier presented the document on Introduction and continue with arguments. It is a proposal to change it, to allow the North American equal access. A list of continue with argument parameters will be prepared off line. It was proposed to base it on R2000 of 23.078. The list of continue with arguments will be presented in Tdoc N2-99J53.

Decision: Revised in Tdoc N2-99J53

### Tdoc N2-99J53

Rogier presented the document on Introduction of Continue With Argument in 23.078. There will be an Off-line discussion of the wordings. If no one comes up with a change the contribution will be agreed.

Decision: The document was agreed.

#### **Tdoc N2-99G56**

Introduction and continue with arguments in 29.078 was presented by Ericsson. Further progress is needed. Sequences will be added in 29.078 according to this contribution. If someone would like to do more changes they should come up with new contributions and align it with the changes of G55.

Decision: Revised in document Tdoc N2-99J55.

#### **Tdoc N2-99J55**

The revision on Tdoc N2-99G56, 29.078 Introduction and continue with arguments was presented by Ericsson. Use of the tag numbering was discussed and the document will be revised in the document Tdoc N2-99J77.

Decision: New revision in Tdoc N2-99J77

#### **Tdoc N2-99J77**

The revision of document Tdoc N2-99J55 was presented.

Decision: Agreed

#### **Tdoc N2-99H02**

Keijo presented the contribution to 29.078 CR on Clarification on Connect & ContinueWithArgument flow. CPH is not a part of R99 and has to be removed. Description .of continue argument will be modified and relation to the stage 2 are going to be checked.

There were some open issues that need to be studied further:

- Indication:service indicator handling has to be clarified.
- Usage of continue argument with reconnection scenarios
- The error handling needs to be clarified.

Decision: Partly agreed. The editor will take care of the implementation of the contribution into the specification.

#### **Tdoc N2-99J67**

Alcatel's contribution's of Introduction of Continue With Argument in the SDL in the draft specification 23.078 was presented and agreed.

Decision: The document was agreed.

#### **Tdoc N2-99J57**

CSI-specific Negotiated CAMEL Capability Handling, source Ericsson, presented by Rogier. Editorial comments will be done when the contribution is incorporated in the draft specification.

Decision: Agreed.

### **Geodetic Location**

#### **Tdoc N2-99H82, Tdoc N2-99H83 & Tdoc N2-99H88**

The documents were discussed in the plenary, not in the N2A meeting.

### **Other Stage 2 issues**

#### **Tdoc N2-99J64 & Tdoc N2-99J65**

J64 & J65 are already covered in the current draft of 23.078. Therefore withdrawn.

Decision: Withdrawn

#### **Tdoc N2-99G76**

Alcatel presented a contribution on Current cell retrieval in PSI result- CAMEL phase3 to specification 23.018.

Decision: the document was noted.

#### **Tdoc N2-99G77**

Decision: the document was noted.

#### **Tdoc N2-99G88**

Decision: The document was noted

#### **Tdoc N2-99G89**

Decision: The document was noted

#### **Tdoc N2-99G90**

Withdrawn

#### **Tdoc N2-99G91**

N2B must see the document before the final decision.

Decision: Endorsed by N2A.

Summary: There are two different proposals from Alcatel and France Telecom and they will together discuss it for the specifications 23.018 & 23.078.

#### **Tdoc N2-99J61**

The document is the Alternative solution for ALR proposed by Alcatel and France Telecom.. Operation to clear the call is the Clear command. Concerns about the competition of the LCS. The group has been working on it in the past. From N2 point of view it is now finalised. N1 has answered a LS sent to them: yes, it is possible to include it in R99. N2 will send them an LS and ask about clarification of signalling procedures and impact of mobile station.

Decision: The work of the feature is finalized and will be a part of R99.

#### **Tdoc N2-99J16**

A contribution from Siemens on Correction of process gsmSSF under consideration of outstanding requests. One modification of the page 3 needs to be done before it will be incorporated in the draft specification.

Decision: The document was agreed with the modification.

#### **Tdoc N2-99J65**

Siemens and Alcatel proposed introduction on the Abandon DPs DP O\_Abandon and DP T\_Abandon as EDP-R in addition to the currently available EDP-Nsn in 23.078.

Decision: the contribution was accepted.

### **TS 23.008**

#### **Tdoc N2-99G69**

Combined CR to 23.008 on CAMEL Phase 3 from Alcatel. One open issue of handling of the negotiated CAMEL phase per CSI. Further editorial modification is needed in section describing the T-CSI. Later on it will be clarified whether further changes are needed.

Decision: *The document was noted.*

#### **Tdoc N2-99J11**

A Siemens contribution of Storing of SGSN and VLR CAMEL Capabilities in HLR was presented by Sumio. The proposal is to store in the HLR CAMEL Capabilities reported by both VLR and SGSN. Not remove the negotiated CAMEL phase handling but include the Supported CAMEL Phases in VLR.

Decision: The document was partly agreed.

#### **Tdoc N2-99J14**

Negotiated CAMEL Capability Handling is a contribution that has been presented in the Galway meeting. The general concept of the document was agreed but not the contribution. Related parts of negotiated CAMEL phase in this document should be presented in a new contribution. The document new number is Tdoc N2-99J57.

Decision: The document was noted.

### **TS 23.016**

#### **Tdoc N2-99H32**

The document is a collective CR to 23.016 for CAMEL ph3 version 5 from Siemens. There were some editorial modifications from Ericsson, e.g. to check the abbreviation SMS TDP data. Rogier and Sumio will together go through all the proposed editorial comments.

Decision: The document was noted.

#### **Tdoc N2-99J23**

Sumio presented the CR from Siemens of specification 23.016 on Correction of OCSI for CAMEL ph3. The meeting decided to keep the existing structure in order to cooperate with the subscriber data. And therefore the idea in the document is not supported. The delegates were asked to study this further until the next meeting.

Decision: The document was rejected.

### **TS 23.078**

#### **Tdoc N2-99H33**

Christian and Sumio presented the status of the draft specification. They pointed out that open issues must be indicated. The delegates were asked to study the draft specification and to indicate errors in the implementation of their contributions.

Decision: The document was noted.

#### **Tdoc N2-99H99**

Jan presented the latest version of 29.078. A Reversion will be presented later on this meeting. Thereafter a final editorial meeting will take place before the next plenary.

Decision: The document was noted.

### Stage 3 issues

#### Tdoc N2-99H81

NEC presented the CR to 29.002 on Introduction of Extension Container in O-BcsmCamelTDP-Criteria. It is an issue of N2B and the document will be represented in N2B.

Decision: The document was noted in N2A.

#### CAMEL Phase 3

#### Status to be determined

#### Dialled services

##### Tdoc N2-99H30

Kazuhiko presented a document for Discussion of multiple TDP trigger modelling from NTT. There were concerns about charging:the stage 1 description is very limited and there are no charging requirements.

Decision: The document was noted.

##### Tdoc N2-99H31

Clarification of DP processing rule and gsmSSF behaviour for additional TDPs a contribution from NTT on 23.078. There was a comment that criteria check has to be removed in the draft specification. Christian will take over some modifications for the process gsmSSF.

Decision: Rejected in favour of Tdoc N2-99J31.

##### Tdoc N2-99J31

A contribution from T-mobil about the dialled services for CAMEL phase 3. When the contribution was drafted, the continue with argument was not agreed but it has to be considered. The concept in the document was accepted. The SDLs are descriptions for Stage 2. Since there is some interworking on FCI and continue with argument, the SDLs have consequently to be updated. The FCI and release calls will be kept as it is.

A lot of work is still required:

- Information flows need to be updated.
- A description in the stage 2 will be implemented.
- An LS has to be sent to SA1 & SA5 about introduction of new capabilities in Dialled services.

Steffen will draft it and present it in Tdoc N2-99J87.

Decision: The document was agreed.

##### Tdoc N2-99H69

The document is a contribution from NTT on Clarification of N-CSI and O-CSI interaction.

Decision: The document was noted.

##### Tdoc N2-99H74

The doc. is a contribution from NEC about Clarification of EventTypeBCSM and RequestReportBCSMEvent in CAMEL Phase3.

Decision: The document was noted.

##### Tdoc N2-99H75

Withdrawn

##### Tdoc N2-99H76

The CR 29.002-064 on Modification to description of GCSI ASN.1 structure, a contribution from NEC. The structure will be modified

Decision: The document was rejected.

##### Tdoc N2-99H78

A contribution on Clarification of analysed\_info and collected\_info DP handling Relation to CAMELfor 23.078 from NEC was presented. The concept of the new chack\_criteria procedurs was accepted. Introduction of analysed info in O-CSI was accepted in favour of the D-CSI. O-CSI handling will be discussed further.

Decision: The document was partly agreed.

##### Tdoc N2-99H90

A contribution from Alcatel about DP Handling

Decision: The document was noted.

### **Tdoc N2-99J15**

Siemens presented an Introduction of New CSI for Dialed Services. The proposal also includes a new mechanism, invoking a new BCSM for the dialed services, which was a quite interesting and useful information for the complete separation. It simplifies the whole handling of the dialed services. The CSI is called Roaming CSI in the document. The meeting was not in favour of the name R-CSI and it will be changed to D-CSI. It will be stored in the VLR and in the GMSC. Definition has to be updated. Handling in the GMSC has to be solved. The network CSI will be called N-CSI.

Decision: In general the meeting was in favour of the proposal but the name will be changed.

### **Tdoc N2-99J09**

Siemens presented the CR to 23.008 on Introduction of R-CSI. The R-CSI has to be renamed to D-CSI.

Decision: Agreed and will handled in N2B

### **Tdoc N2-99J21**

The CR to 29.002 on Introduction of Dialed Services CSI from Siemens was presented. It s an issue for N2B and the document will therefore be passed to them.

Decision: The document was endorsed in N2A and will be handed over to N2B

Summary: We would like to see it in R99 even though there are some open issues.

## **MSP**

### **Tdoc N2-99H51**

Revised to J97

### **Tdoc N2-99J97**

CR 23.018-005r3 on Inclusion of the Service Interaction Indicators Two parameter. A proposal from Vodafone Airtouch to put the call forwarding issue in the call forwarding procedure.

Decision: The contribution was agreed.

### **Tdoc N2-99H52**

A contribution to 23.078 on Inclusion of the Service Interaction Indicators Two parameter from Vodafone Airtouch.. Revised in Tdoc N2-99J22

### **Tdoc N2-99J22**

Revised version on document Tdoc N2-99H52 on Inclusion of the Service Interaction Indicators Two parameter. Revised in Tdoc N2-99J95

### **Tdoc N2-99J95**

Inclusion of the Service Interaction Indicators Two parameter is a rev. version of Tdoc N2-99H52. Proposed by Vodafone Airtouch.

Decision: The contribution was agreed.

### **Tdoc N2-99J43**

The document is a proposal to 29.078 on Inclusion of the Service Interaction Indicators Two parameter from Vodafone Airtouch. It is a revised version of Tdoc N2-99H53.

Decision: The contribution was agreed.

Summary: The handling of Service interaction indicator two parameter is stable and will be a part of R99. Call forwarding might be an issue for SA1.

### **Tdoc N2-99H59 & Tdoc N2-99J81**

CR 23.078 on Addition of CCBS to the SS Invocation Notification from Vodafone Airtouch, H59 & J89 are alternative solutions. The H59 solution is clearer but it could imply major changes to MAP. The HLR based version is the preferred solution.

Decision: Tdoc N2-99H59 is withdrawn and Tdoc N2-99J81 was agreed.

### **Tdoc N2-99H60 & Tdoc N2-99J83**

The documents contain two alternative solutions to CR 29.002-A041r1 on Addition of CCBS to the SS Invocation Notification. The MSC based solution is described in Tdoc N2-99H60 and an HLR based version is in Tdoc N2-99J83. The HLR version is the preferred solution.

Decision: Tdoc N2-99H60 was withdrawn and Tdoc N2-99J83 was agreed.

#### **Tdoc N2-99H58**

Ruth presented the CR 23.008 on Addition of CCBS to the SS Invocation Notification from Vodafone Airtouch.

Decision: The document was agreed.

Summary: It is endorsed by N2A to be a part of R99 but it also depends on N2B.

#### **Tdoc N2-99H61**

Ruth presented the contribution from Vodafone Airtouch on Inclusion of CUG handling in CAMEL Phase 3 in 23.078. The functional description of interworking with CUG has to be clarified. Therefore SS ad hoc has to be involved. There was one editorial change in the document

Decision: For further study. The discussion will continue on E-mail.

#### **Tdoc N2-99H62**

Ruth presented a contribution from Vodafone Airtouch on Inclusion of CUG handling in CAMEL Ph. 3 in 29.078.

Decision: For further study. The discussion will continue on E-mail.

#### **Tdoc N2-99H64**

Revised to Tdoc N2-99J79

#### **Tdoc N2-99J79**

A CR to 29.002 on Inclusion of handling of the SII Two parameter (rev. of H64) from Vodafone Airtouch.

Decision: The document was noted.

Summary: Included in R99 but some open issues have to be solved.

#### **Tdoc N2-99H57**

Proposed LS to TSG-S1: CLIR provisioning per profile for an MSP subscriber. There were concerns about the regulator's wish but this is not an issue for CN. It has to be controlled by the Home operators. CLI is only allowed to be set from presentation allowed to presentation restriction. The same shall not be applicable to dialled services. The LS has to be updated during this meeting and the other related document will be updated and sent out on E-mail.

Decision: An updated version will be presented in Tdoc N2-99K03.

#### **Tdoc N2-99H54**

The document is a proposed CR to 22.078 on CSE ability to change CLI PI for an MO call from Vodafone Airtouch. It was noted and a revised version will be sent together with the LS in Tdoc N2-99K05

Decision: Will be revised to Tdoc N2-99K05.

#### **Tdoc N2-99H55**

A contribution to 23.078 on gsmSCF ability to change CLI PI for MO call from Vodafone Airtouch.

Decision: discussion will continue by E-mail.

#### **Tdoc N2-99H50**

Revised in Tdoc N2-99J17.

#### **Tdoc N2-99J17**

Ruth presented the CR 29.002-066 on Addition of FtN-AddressString, Work Item: Long Forwarded-to Numbers from Vodafone Airtouch.

Decision: discussion will continue by E-mail.

#### **Tdoc N2-99H56**

Revised in Tdoc N2-99J18

#### **Tdoc N2-99J18**

Ruth presented the contribution from Vodafone Airtouch on gsmSCF ability to change CLI PI for an MO call.

Decision: discussion will continue by E-mail..

### **Active Location Retrieval**

#### **Tdoc N2-99H07**

The document is an answer from N1 to a LS from N2 on Active Location Retrieval in CAMEL Phase 3. The answer is that N1 does not see major difficulties to implement it in the proposed way.

Decision: The document was noted.

## Any time interrogation

### **Tdoc N2-99D79**

The contribution from Siemens on CSI Modification for NCSD was sent to Galway. There was no time to handle the documents. About the allocation of the notification flag , it is an open issue.

Decision: The document was noted.

### **Tdoc N2-99D83**

The document was sent to Galway where there was no time to handle it; therefore it was presented in Phoenix. It is a contribution from Siemens on Notification on Change of Subscriber Data. There were some editorial comments and one change has to be done to the SDL.

Decision: The document was noted.

### **Tdoc N2-99D85**

Notification on Change of Subscriber Data from Siemens was another document on ATI that wasn't presented at the Galway meeting. One comment about the document is that the usage of the ATI is an open issue.

Decision: The document was noted.

### **Tdoc N2-99D99**

The CR to 23.008 for NCSD was also a left over document due to lack of time inGalway. Sumio presented the document.

Decision: The document was noted.

### **Tdoc N2-99G61**

The document is a CR to 29.002 from Siemens on enhancements to Any Time Interrogation to the MAP specification. If ATI will be included in R99 the document shall be forwarded to N2B. Call barring data shall be mandatory but N2B will handle this further. Separated operations are preferred solution to solve the interworking and for enhancements in the future.

Decision: The document was noted.

### **Tdoc N2-99H23**

Toshio presented the document of Clarification of any time modification procedure from NTT Communicationware. The document is a summary of the requirements of ATI, ATM and NCSD. There is one open issue; which operation should be used by ATM. The working assumptions for the Notification flag is that it shall be defined per TDP.

Decision: The document was noted. The document will be kept as a reference document in N2A.

### **Tdoc N2-99H24**

NTT Commware proposes to change the current description of any time modification procedure inTS 23.078.

Decision: The modification was accepted.

### **Tdoc N2-99H25**

The document is a CR 29.002 related to Any Time Modification proposed by NTT Commware. The contribution will be modified: The description shall be included in the stage two description in SDL form.

Decision: The document was noted. Some issues are still outstanding.

### **Tdoc N2-99H26**

The document is a CR to 29.002 on Notify Subscriber Data Change from NTT Commware . The content of the document is covered in Tdoc N2-99F60 that was presented in Eton.

Decision: withdrawn.

### **Tdoc N2-99H27**

The CR to 23.008 for Any Time Interrogation/Modification and Notify Subscriber Data Change from NTT Commware was presented. The document contains the TIF is definition.

Decision: The document was noted.

### **Tdoc N2-99H28**

Withdrawn

### **Tdoc N2-99H77**

The document is a contribution from NTT Commware on Correction of Notify Subscriber Data Change procedure. The content has been agreed before the but the SDLs was not available now it has been written with the SDT.

Decision: The document was agreed.

Summary: ATI and ATM will be a part of R99. Working assumptions: The ATI will be discussed via E-mail and if no one has major concerns it will be incorporated in the draft specification.

#### **T-BCSM in VMSC**

##### **Tdoc N2-99J45**

The document is a Revision of Tdoc N2-99J07 from Vodafone Airtouch. Alcatel had some notes in the SDLs.

Decision: The document was noted. Rev. version in document Tdoc N2-99J93.

##### **Tdoc N2-99J93**

The revised version of Tdoc N2-99J45 was presented.

Decision: The document was noted

##### **Tdoc N2-99H01**

A contribution from Nokia to 23.078 on Information flows for VMSC T-BCSM is similar to the Alcatel contribution. The differences were highlighted and the Location information will be discussed when the Alcatel contribution is presented. It was pointed out that the location information will be conditional but if they are available they shall be sent.

Decision: The document was noted.

##### **Tdoc N2-99H34**

Alcatel presented a contribution on Completion of 23.078 for T\_BCSM in the VMSC.

Decision: The document was noted.

##### **Tdoc N2-99H63**

A CR to 23.016 on Introduction of the VT-CSI for the TBCSM in the VMSC source Vodafone Airtouch was presented.

Decision: The document was noted.

##### **Tdoc N2-99H14**

A contribution from Nokia. to 29.078 on SCI & eparameters in the terminating VMS. The handling of apply charging is accepted.

Decision: The document was noted.

##### **Tdoc N2-99F68**

T\_BCSM in the VMSC & Introduction of new TDPs and Criteria for CAMEL#3. The document was presented in Eton and Galway and there was some editorial comments. The document was approved via e-mail.

Summary: No open issues. Send charging information is not well defined but it will be a part of release 99.

#### **Call Gap**

##### **Tdoc N2-99H48**

Call Gap and Security for CAMEL Phase 3 was presented by France Telecom. It will be provided in R99 if there are acceptable contribution of the topic. An E-mail discussion will take place.

Decision: The document was noted.

##### **Tdoc N2-99K36**

The revised document was noted.

## **CAMEL Phase 4**

### **CAMEL control of VoIP**

#### **Tdoc N2-99G47**

David from BT/Cellnet presented a CAMEL Control of VoIP Services Feasibility TR from BT/Cellnet and lucent. The final version of the report and shall be sent to SA1, SA2 and CN plenary.

Decision: The document was agreed

### **Output documents – CRs & Liaison statement.**

#### **Tdoc N2-99J99**

Proposed coversheet to 23.078 revised for CAMEL Phase 3 Release 1999.

Decision: Agreed.

#### **Tdoc N2-99J85**

The document includes a LS with the feasibility study of CAMEL Control of VoIP. It will be sent to SA, SA1, SA2 and CN.

Decision: The LS was agreed.

#### **Tdoc N2-99J37**

Nokia presented a proposed LS of the name of next release of CAMEL. N2 propose to call it CAMEL phase 4 instead of Release 2000.

Decision: The LS was agreed

#### **Tdoc N2-99J41**

The document is an answer to the OSA/VHE ad hoc group. They have sent a LS presented in Tdoc N2-99J05.

Decision: The LS was agreed.

#### **Tdoc N2-99K09**

Liaison Statement on Active Location Retrieval in CAMEL Phase 3

Decision: The LS was agreed.

#### **Tdoc N2-99J87**

LS on Dialed Services in CAMEL Phase 3

Steffen will prepare it for the plenary.

### Summary of the R99:

Planned list for include in R99:

- Support of SoLSA (22.078 section 1).
- MO/MF calls: CSI criterion applicable at call setup for subscribed dialled services (22.078 section 5.2.1.2).
- MO/MF calls: CSI criterion applicable on detection of unsuccessful call establishment (22.078 section 5.2.1.3).
- MO/MF calls: Procedure for subscribed dialled services (22.078 section 5.3.2).
- MO/MF calls: Procedure for unsuccessful call establishment (22.078 section 5.5)
- MT calls: CSI criterion applicable on detection of unsuccessful call establishment in the GMSC (22.078 section 6.2.2).
- MT calls: Procedure for unsuccessful call establishment (22.078 section 6.5)
- Procedures for serving network dialled services (22.078 section 7).
- Procedures for SMS (22.078 section 9).
- Procedures for GPRS data transmission (22.078 section 10).
- Mobility management (22.078 section 12.1).
- Notification to CSE of change of subscriber data (22.078 section 12.2).
- Enhancements to Any Time Interrogation (22.078 section 13.1)

- Any Time Modification (22.078 section 13.2).
- T-BCSM in the VMSC and terminating AoC (22.078 section 15.1)
- Interworking with Location Services.
- Procedures for Multiple Subscriber Profile
- Procedures for Active Location Retrieval
- Call Gapping

**Title: Liaison Statements agreed in CN WG2 SWG-A**

<b>TDoc</b>	<b>Title</b>	<b>To:</b>	<b>CC:</b>
N2-99J37	Naming of CAMEL in R99 and R2000	TSG SA WG2, TSG SA WG1	
N2-99J41	Response to Liaison "Interaction between MMS, SAT, MExE, non MExE terminals and Camel Open Service Architecture"	TSG CN OSA ad hoc	TSG SA WG2, TSG T WG2, TSG SA WG1
N2-99J85	CAMEL Control of VoIP Services FTR	TSG CN	TSG SA, TSG-SA WG1, TSG-SA2 WG2
N2-99J87	LS on Dialed Services in CAMEL Phase 3 <i>–presented in the plenary</i>	TSG SA WG1, TSG SA WG2	
N2-99K03	CLIR provisioning per profile for an MSP Subscriber <i>–presented in the plenary</i>	TSG-SA WG1	
N2-99K09	Liaison Statement on Active Location Retrieval in CAMEL Phase 3	TSG CN WG1	
N2-99K70	LS on the scope of CAMEL Phase 3 <i>–presented in the plenary</i>	TSG SA WG1	TSG CN, TSG SA

3GPP TSG-N WG2  
Phoenix, Arizona, USA  
15 - 19 November 1999

ANNEX B  
List of Participants

Name	Organisation	Tel	e-mail
AIKAWA Shinichiro	Fujitsu	+81 44 754 4196	Aikawa@ss.ts.fujitsu.co.jp
ALFANO Nicholas	Motorola	+1 604 241 6002	Nicholas.Alfano@Motorola.Com
ALLEN Nicholas	Nortel Networks	+44 1628 434493	nallen@nortelnetworks.com
BELFORT Véronique	Alcatel France	+33 1 30 77 86 11	Veronique.Belfort@alcatel.fr
BRUCH Diemo	Alcatel SEL	+49 711 821 47594	D.Bruch@alcatel.de
CASATI Alessio	Lucent Technologies	+44 1793 883861	acasati@lucent.com
DRONNE François	France Télécom	+33 145296274	francois.dronne@cnet.francetelecom.fr
ELLSBERGER Jan	Ericsson	+46 707 222 796	Jan.Ellsberger@lmd.ericsson.se
ENBERG Dan	Telia	+46 706 56 79 47	Dan.g.enberg@telia.se
EVENOU Jean-Alain	Alcatel France	+33 130773992	Jean-Alain.Evenou@alcatel.fr
GRECH Michel	Lucent Technologies	+44 1793 736110	grech@lucent.com
HABERMANN Steffen	T-Mobil, N2A Chairman	+49 228 936 3324	Steffen.habermann@t-mobil.de
HAMEL Eric	France Télécom	+33 145296863	eric.hamel@cnet.francetelecom.fr
HELLMAN Monica	ETSI	+33 4 92 94 42 31	monica.hellman@etsi.fr
HEWSON Ruth	Vodafone Airtouch	+44 1635 673148	ruth.hewson@vf.vodafone.co.uk
HOMANN Christian	Alcatel SEL AG	+49 711 821 45632	C.Homann@alcatel.de
HU Yun-Chao	Ericsson N2B Chairman	+46 8 508 781 53	Yun-Chao.Hu@era.ericsson.se
HUMPHREY Jane	Marconi Communications	+44 1202 853757	Jane.humphrey@marconicomms.com
IGARASHI Takeshi	NTT Software	+81-45-317-7018	rassy@po.ntts.co.jp
ISHIHARA Masakazu	NEC	+81 471 85 7168	ishihara@mcs.abk.nec.co.jp
JANSSON Anders	Ericsson	+46 (0)8 58533022	Anders.n.jansson@era.ericsson.se
KAIN Albert	Siemens AG	+ 43 5 1707 21319	Albert.Kain@siemens.at
KEUTMANN Heinz-Peter	Ericsson LM	+49 2407 575 132	Heinz- Peter.Keutmann@eed.ericsson.se
KIKUCHI Masahiro	NTT Communicationware	+81 43 211 2708	kikuchi.masahiro@promote.nttcom.co.jp
KYMÄLÄINEN Kimmo	Sonera Corp.	+358 405 300 848	Kimmo.Kymalainen@sonera.com
LÓPEZ Luis	Ericsson LM	+34 91 339 2656	luis.lopez-soria@ece.ericsson.se
MÄKINEN Teemu	Nokia	+358 40 5077283	Teemu.Makinen@Nokia.com
MITAMURA Kazuo	NTT Communicationware	+81 43 211 2708	mitamura.kazuo@promote.nttcom.co.jp
MIYAGAWA Sumio	Siemens KK	+81 3 5423 6745	Miyagawa@twics.com
MOILANEN Iris	Sonera Corp.	+358 2040 71250	iris.moilanen@sonera.com
MUHONEN Ahti	Nokia	+358 405318469	Ahti.Muhonen@Nokia.com
NAKADA Kazuhiko	NTT	+81 422 59 2945	nakada.kazuhiko@lab.ntt.co.jp
NOLDUS Rogier	Ericsson	+31 161 249400	rogier.noldus@etm.ericsson.se
NORIMATSU Toshio	NTT Communicationware	+81 43 211 2708	norimatsu.toshio@promote.nttcom.co.jp
OLTEDAL Einar	Ericsson	+47 37293762	Einar.oltedal@eto.ericsson.se
PALVIAINEN Keijo	Nokia	+358 9 51169669	Keijo.Palviainen@Nokia.com
PIERRE Jean-Paul	Alcatel	+33130770735	Jean-paul.pierre@alcatel.fr
RICHARDS Larry	Nippon Ericsson K.K.	+81 3 5216 9082	Larry.richards@nrj.ericsson.se
SAWADA Masahiro	NTT DoCoMo	+81 468 40 3332	masahiro@nw.yrp.nttdocomo.co.jp
SCHNEYER Sean	Ericsson Inc	+1 972 583 8329	Sean.Schneyer@ericsson.com
SETTIMO Franco	ETSI MCC, N2 Secretary	+33 4 9294 42 38 +39 348 999 85 84	franco.settimo@etsi.fr
SMITH David G.	BT Cellnet	+44 1473 604551	David.g.smith@bt.com
SOEJIMA Miyuki	NTC	+81 44 900 7313	miyuki@mob.ntc.co.jp
TAMURA Toshiyuki	NEC	+81 471 85 6954	Tamurato@e1sf.ncos.nec.co.jp
TIAINEN Vesa	Nokia	+358951169712	Vesa.tiainen@nokia.com
VERCELLINO Giovanni	CSELT	+39 011 228 7042	giovanni.vercellino@cselt.it

<b>WAKABAYASHI Kiyohisa</b>	Nokia Japan	+813 5510 0900	<a href="mailto:kiyohisa.wakabayashi@nokia.com">kiyohisa.wakabayashi@nokia.com</a>
<b>WEN-Lin Tsao</b>	CiscoSystems	+1 408 527-7647	<a href="mailto:wtsao@cisco.com">wtsao@cisco.com</a>
<b>WILD Peter</b>	Mannesmann	+492115333798	<a href="mailto:peter.wild@d2mannesmann.de">peter.wild@d2mannesmann.de</a>
<b>YAMAZAKI Hiroshi</b>	<b>NEC</b>	<b>+81 471 85 7168</b>	<a href="mailto:yamazaki@mcs.abk.nec.co.jp">yamazaki@mcs.abk.nec.co.jp</a>

**3GPP TSG-N WG2**  
**Phoenix, Arizona, USA**  
**15 - 19 November 1999**

**ANNEX B**

**List of Temporary Documents**

<b>Tdoc</b>	<b>Title</b>	<b>Item</b>	<b>Source</b>	<b>Status</b>
<b>N2-99B05</b>	CR to 23.016004r3 on Introduction of the Super-Charger Concept	Super-charger	Nortel	<b>Agreed</b>
<b>N2-99B06</b>	CR to 23.008-003r1 on Introduction of the Super-Charger Concept	Super-charger	Nortel	<b>Agreed</b>
<b>N2-99D54</b>	Meeting report from Abiko		MCC	Noted
<b>N2-99D79</b>	CSI Modification for NCSD	CAMEL phase 3	Siemens	
<b>N2-99D83</b>	Notification on Change of Subscriber Data	CAMEL phase 3	Siemens	Noted
<b>N2-99D85</b>	Any Time Interrogation	CAMEL phase 3	Siemens	Noted
<b>N2-99D99</b>	Changes to 23.008 for NCSD	CAMEL phase 3	Siemens	Noted
<b>N2-99F68</b>	CR to 29.002 on T_BCSM in the VMSC & Introduction of new TDPs and Criteria for CAMEL#3	CAMEL phase 3	Alcatel	
<b>N2-99G41</b>	Agenda		N2 Chairman	
<b>N2-99G42</b>	Tdoc allocation to agenda items		N2 Chairman	
<b>N2-99G43</b>	N2A meeting report - Galway		MCC	Noted
<b>N2-99G44</b>	N2B meeting report - Eton		MCC	Noted
<b>N2-99G45</b>	Response to LS on Service/Baseline Implementation Capabilities		TSG-CN WG3	
<b>N2-99G46</b>	CR 23.008-009 on Authentication Enhancements	Security	Ericsson	<b>Agreed</b>
<b>N2-99G47</b>	CAMEL Control of VoIP Services Feasibility TR		BT Cellnet, Lucent	<b>Approved: go to CN</b>
<b>N2-99G48</b>	CR 09.02-A278 on Addition of GGSN number for the SRI for GPRS	GPRS	Nokia, Orange	<b>Agreed</b>
<b>N2-99G49</b>	CR 09.02-A279 on Addition of GGSN number for the SRI for GPRS (09.02 R98)	GPRS	Nokia, Orange	<b>Agreed</b>
<b>N2-99G50</b>	CR 29.002-070 on Addition of GGSN number for the SRI for GPRS	GPRS	Nokia, Orange	<b>Agreed</b>
<b>N2-99G51</b>	CAMEL3 MO SMS, GPRS and SoLSA modifications to 29.002	CAMEL phase 3	Nokia	Formally rejected (contents OK)
<b>N2-99G52</b>	Proposed Work Item Description: GTP Enhancements	GTP Enhancements	Ericsson	Revised to J36
<b>N2-99G53</b>	CR on 29.060 (012r2) on New header for the evolved GTP version for Release 99	GTP Enhancements	Ericsson	Revised/merged
<b>N2-99G54</b>	CR on 29.060 (020r1) on GTP messages and the Signalling Plane (GTP-C) for GTP Release 99	GTP Enhancements	Ericsson	Revised to J24
<b>N2-99G55</b>	23.078 Introduction and continue with arguments	CAMEL phase 3	Ericsson	Revised to J53
<b>N2-99G56</b>	29.078 Introduction and continue with arguments	CAMEL phase 3	Ericsson	Revised to J55
<b>N2-99G57</b>	Introduction of an explicit indication of 'pre-paid call release' in ACR (23.078)	CAMEL phase 3	Ericsson	Agreed
<b>N2-99G58</b>	Introduction of an explicit indication of 'pre-paid call release' in ACR (29.078)	CAMEL phase 3	Ericsson	Agreed
<b>N2-99G59</b>	Optimization of Authentication Vector Retrieval		Siemens	Contents agreed
<b>N2-99G60</b>	CR 29.002-075 on introduction of Follow Me	Follow Me	Siemens	Revised to J88
<b>N2-99G61</b>	CR to 29.002 on enhancements to Any Time Interrogation		Siemens	Revised to K28
<b>N2-99G62</b>	CR 050r2 to 29.002 on QoS enhancements		Siemens	Revised to K06
<b>N2-99G63</b>	CR 039 to 03.16 V7.1.0- Correction of VLR subscription data (C2 category)		Ericsson	<b>Agreed</b>
<b>N2-99G63</b>	CR 0 on 3.16 V7.1.0- Correction of VLR subscription data		Ericsson	Endorsed
<b>N2-99G64</b>	Clean up the CSCV from CAMEL phase 3 stage 2	CAMEL phase 3	Nokia	
<b>N2-99G65</b>	Proposal to remove the Table 4.7 "FSM for CS transition table for valid FSM for CS transitions	CAMEL phase 3	Nokia	

<b>N2-99G66</b>	3G TS 23.119: GLR stage 2	GLR	NTT DoCoMo	Revised to J96
<b>N2-99G67</b>	Enhanced User Identity Confidentiality		Siemens	Rejected
<b>N2-99G68</b>	Security interworking between release 98 and 99 MSC/VLRs for roaming USIMs		Nokia	Withdrawn
<b>N2-99G69</b>	Combined CR against 23.008- Camel phase3	CAMEL Phase 3	Alcatel	Contents agreed
<b>N2-99G70</b>	GPRS/CAMEL phase3 contribution 1 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	
<b>N2-99G71</b>	GPRS/CAMEL phase3 contribution 2 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G72</b>	GPRS/CAMEL phase3 contribution 3 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G73</b>	GPRS/CAMEL phase3 contribution 4 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G74</b>	GPRS/CAMEL phase3 contribution 5 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G75</b>	GPRS/CAMEL phase3 contribution 6 Camel phase3 stage2 (23.078)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G76</b>	Current cell retrieval in PSI result- CAMEL phase3 (23.018)	CAMEL Phase 3	Alcatel	Rejected
<b>N2-99G77</b>	Current cell retrieval in ATI and PSI result- CAMEL phase3 (23.078)	CAMEL Phase 3	Alcatel	Noted
<b>N2-99G78</b>	CR 0960 6.4.0 rel 97: Adding of PDP Context ID to the PDP Context IE		Ericsson	Withdrawn
<b>N2-99G79</b>	CR 0960 6.4.0 rel 97- A076: Re-synchronisation of GTP packets	GPRS	Ericsson	Revised to J26
<b>N2-99G80</b>	CR 09.60-A078: Clarification of GSN Address field	GPRS	Ericsson	Revised to K16
<b>N2-99G81</b>	LS on Service/Baseline Implementation Capabilities		TSG CN WG1	Withdrawn
<b>N2-99G82</b>	CR 09.02-A237r1 on Correction of the USSD procedure in the HLR		Nortel	<b>Agreed</b>
<b>N2-99G83</b>	CR 23.012-002 on Introduction of Super-Charger into TS 23.012	Super-Charger	Nortel	<b>Agreed</b>
<b>N2-99G84</b>	CR 09.60-A074 on Addition of PDP Context Identifier in PDP Context Information Element	GTP Enhancements	Motorola	Formally rejected (contents OK)
<b>N2-99G85</b>	CR 29.060-021 on Parallel handling of multiple user application flows		Ericsson	Revised to J74
<b>N2-99G86</b>	CR 29.060-022 on MS and GGSN-initiated PDP context modification		Ericsson	
<b>N2-99G87</b>	CR on 29.002-045r2 on authentication enhancements for UMTS		Siemens/FT	Revised to j64 and J66
<b>N2-99G88</b>	Alternative solution for Active Location Retrieval : triggering of a paging procedure upon receipt of MAP_ATI message		France Telecom	Noted
<b>N2-99G89</b>	CR on 23.078-031 on Active Location Retrieval		France Telecom	Noted
<b>N2-99G90</b>	CR on 23.018-026 on Active Location Retrieval		France Telecom	Withdrawn
<b>N2-99G91</b>	CR on 29.002-059 on Active Location Retrieval		France Telecom	Endorsed
<b>N2-99G92</b>	CR 29.060-023 on Proper separation of C and U plane	GTP Enhancements	Vodafone Airtouch	Rejected
<b>N2-99G93</b>	CR 29.060-024 on Future compatibility for the R'99 GTP header (completion of CR12r2)	GTP Enhancements	Vodafone Airtouch	Revised/merged
<b>N2-99G94</b>	RLC PDU sequence number in R'99 GTP header	GTP Enhancements	Vodafone Airtouch	Revised/merged
<b>N2-99G95</b>	Super charger stage 2	Super charger	Nortel	<b>Approved (go to CN)</b>
<b>N2-99G96</b>	Open issues on 3G to 2G handover	GTP evolution	Lucent	LS drafted
<b>N2-99G97</b>	Discussion paper for Naming of CAMEL in R99 and R2000	CAMEL phase 3	Nokia	<a href="#">Revised to J37</a>
<b>N2-99G98</b>	23.078 CR on CAMEL3 Location Services	CAMEL phase 3	Nokia	<b>Agreed</b>
<b>N2-99G99</b>	29.078 CR on CAMEL3 Location Services & SoLSA	CAMEL phase 3	Nokia	<b>Agreed</b>
<b>N2-99H00</b>	29.002 CR on CAMEL3 Location Services	CAMEL phase 3	Nokia	Revised to J51
<b>N2-99H01</b>	23.078 CR on Information flows for VMSC T-BCSM	CAMEL phase 3	Nokia	<b>Agreed</b>
<b>N2-99H02</b>	29.078 CR on Clarification on Connect & ContinueWithArgument flow	CAMEL phase 3	Nokia	<b>Agreed</b>
<b>N2-99H03</b>	23.078 CR on concatenated FCI	CAMEL phase 3	Nokia	Revised to J47

N2-99H04	29.078 CR on concatenated FCI	CAMEL phase 3	Nokia	Withdrawn
N2-99H05	32.005 Charging modifications due to concatenated CAMEL3 FCI	CAMEL phase 3	Nokia	Noted
N2-99H06	23.078 CR on Tac (ApplyCharging) timer	CAMEL phase 3	Nokia	Agreed
N2-99H07	Liaison Statement on Active Location Retrieval in CAMEL Phase 3		3GPP TSG N1	Noted
N2-99H08	Liaison Statement on 5 or 6 digit IMSI		3GPP TSG N1	Noted
N2-99H09	LS on Service/Baseline Implementation Capabilities		3GPP TSG N1	Noted
N2-99H10	Improvement on SMS Connect Handling	CAMEL phase 3	Ericsson	Agreed
N2-99H11	Clarification of GPRS TDP Handling		Siemens	Agreed
N2-99H12	Handling of Combined MAP in the GLR(stage2)		NTC	Revised to J08
N2-99H13	Handling of Combined MAP in the GLR(stage3)		Fujitsu	Withdrawn
N2-99H14	29.078 CR on SCI & e-parameters in the terminating VMSC	CAMEL phase 3	Nokia	Agreed
N2-99H15	23.078 Removal of destination number check, and clarification on O-BCSM creation	CAMEL phase 3	Nokia	Agreed
N2-99H16	Removal of destination number check, and clarification on O-BCSM creation	CAMEL phase 3	Nokia	Agreed
N2-99H17	GLR stage3 specification for MAP	GLR	NTT Comware	Revised to J20
N2-99H18	GLR stage3 specification for GTP	GLR	Fujitsu, NTT Comware	Approved: send to CN
N2-99H19	CR 23.018-025r2 on Addition of the description for Multicall	Multicall	NTT Comware	Agreed
N2-99H20	CR 23.008-005r1 on Introduction of maximum number for CS	Multicall	NTT Comware	Agreed
N2-99H21	CR 23.016-005r1 on Introduction of maximum number for CS	Multicall	NTT Comware	Agreed
N2-99H22	CR 29.002-048r1 on Introduction of maximum number for CS	Multicall	NTT Comware	Revised to J54
N2-99H23	Clarification of any time modification procedure	CAMEL phase 3	NTT Comware	Noted
N2-99H24	Working assumptions on Any Time Interrogation/Modification and Notify Subscriber Data Change	CAMEL phase 3	NTT Comware	Agreed
N2-99H25	CR to 29.002 for Any Time Modification	CAMEL phase 3	NTT Comware	Postponed/Revised to J89
N2-99H26	CR to 29.002 for Notify Subscriber Data Change	CAMEL phase 3	NTT Comware	Withdrawn
N2-99H27	CR 23.008-008 for Any Time Interrogation/Modification and Notify Subscriber Data Change	CAMEL phase 3	NTT Comware	Noted
N2-99H28	CR to 23.016 for Any Time Interrogation/Modification and Notify Subscriber Data Change	CAMEL phase 3	NTT Comware	Withdrawn
N2-99H29	CR to 09.02-A276 on Use of SSN for GPRS		Siemens	Revised to K08
N2-99H30	Discussion of multiple TDP trigger modeling		NTT	Noted
N2-99H31	Clarification of DP processing rule and gsmSSF behaviour for additional TDPs		NTT	Rejected
N2-99H32	Collective CR to 23.016 for CAMEL ph3 version 5	CAMEL phase 3	Siemens	Formally rejected (contents OK)
N2-99H33	CAMEL phase 3, Stage 2, Release 1999; 3G TS 23.078 v. X.8.2 (1999-11-05)	CAMEL phase 3	Alcatel/Siemens	Noted
N2-99H34	Completion of 23.078 for T_BCSM in the VMSC	CAMEL phase 3	Alcatel	Agreed
N2-99H35	Called Party Number Modification Check in CAMEL	CAMEL phase 3	Alcatel	Rejected
N2-99H36	Proposal for updates to 29.010	Handover	Ericsson	Noted
N2-99H37	CR to 29.010-001 on UMTS / GSM Interworking	Handover	Ericsson	Agreed
N2-99H38	Proposal for updates to 23.009	Handover	Ericsson	
N2-99H39	New TS on combined location update stage-2		NEC	
N2-99H40	New TS on out-of-band transcoder control stage-2	OoBTC	NEC	Go to CN plenary (for info)
N2-99H41	CR on 23.003-009r1 New SSN allocation for UMSC		NEC	Withdrawn
N2-99H42	CR on 23.003-010r1 Add description about UMSC number		NEC	Withdrawn
N2-99H43	CR on 23.008-006r1 Add new subscriber data for combined location update (MAP)		NEC	Withdrawn
N2-99H44	CR on 29.002-049r1 Add all MAP impacts by the combined location update (MAP)		NEC	Withdrawn

N2-99H45	CR to 03.66-A010 on Change of IN interface	MNP	Ericsson	Revised
N2-99H46	CR to 03.66-A011 on Treatment of Database Mismatch Error	MNP	Ericsson	Withdrawn
N2-99H47	CR to 29.002-063 on MNP Database Mismatch	MNP	Ericsson	
N2-99H48	Call Gap and Security for CAMEL Phase 3	CAMEL Phase 3	France Telecom	Noted
N2-99H49	CR for 29.002-060 on MAP impacts for location services	LCS	T1P1	Revised to K52
N2-99H50	CR 29.002-066 on Addition of FtN-AddressString, Forwarded-to Numbers (N2B)	Work Item: Long	Vodafone Airtouch	Revised to J17
N2-99H51	Inclusion of the Service Interaction Indicators Two parameter	MSP	Vodafone Airtouch	Revised to J97
N2-99H52	Inclusion of the Service Interaction Indicators Two parameterer	MSP	Vodafone Airtouch	Revised to J22
N2-99H53	Inclusion of the Service Interaction Indicators Two parameter	MSP	Vodafone Airtouch	Revised to J43
N2-99H54	CR 22.078 on CSE ability to change CLI PI for an MO call	MSP	Vodafone Airtouch	Revised to K05
N2-99H55	CR 23.078 on gsmSCF ability to change CLI PI for MO call	MSP	Vodafone Airtouch	E-mail discussion
N2-99H56	CR 29.078 on gsmSCF ability to change CLI PI for an MO call	MSP	Vodafone Airtouch	Revised to J18
N2-99H57	Proposed LS to TSG-S1: CLIR provisioning per profile for an MSP subscriber	MSP	Vodafone Airtouch	Revised to K05
N2-99H58	CR 23.008 on Addition of CCBS to the SS Invocation Notification	MSP	Vodafone Airtouch	
N2-99H59	CR 23.078 on Addition of CCBS to the SS Invocation Notification	MSP	Vodafone Airtouch	Withdrawn
N2-99H60	CR 29.002-A041r1 on Addition of CCBS to the SS Invocation Notification	MSP	Vodafone Airtouch	Withdrawn
N2-99H61	Inclusion of CUG handling in CAMEL Phase 3	MSP	Vodafone Airtouch	E-mail disc.
N2-99H62	Inclusion of CUG handling in CAMEL Phase 4	MSP	Vodafone Airtouch	E-mail disc.
N2-99H63	CR 29.002 on Inclusion of handling of the SII Two parameter	CAMEL phase 3	Vodafone Airtouch	Endorsed
N2-99H64	CR 23.016 on Introduction of the VT-CSI for the T-BCSM in the VMSC	CAMEL phase 3	Vodafone Airtouch	Revised to J79
N2-99H65	CR 23.003-011 on Support of VLR and HLR data restoration procedure with LCS	LCS	T1P1	<b>Agreed</b>
N2-99H66	CR 23.016 -006 on support of subscriber data management in the HLR and VLR for LCS	LCS	T1P1	<b>Agreed</b>
N2-99H67	Contribution for 3G TS 29.002 for Mobility Management	CAMEL Phase 3	Ericsson	Revised to K30
N2-99H68	Contribution for 3G TS 29.002 for Location Services	CAMEL Phase 3	Ericsson	<del>Formally rejected</del> Content s agreed
N2-99H69	Clarification of N-CSI and O-CSI interaction	CAMEL Phase 3	NTT	Noted
N2-99H70	Reduction in number TCAP dialogues for GPRS CAP		Nokia	Rejected
N2-99H71	CR 23.008-004r2 on Authentication Enhancements revised N2-99F82	Security	NTT Soft. Corp.	Revised to J72
N2-99H72	CR 23.007-002r2 on Authentication Enhancements revised N2-99F84	Security	NTT Soft. Corp.	<b>Agreed</b>
N2-99H73	CR 29.060-015r3 on Authentication Enhancements revised N2-99F86	Security	NTT Soft. Corp.	<b>Agreed</b>
N2-99H74	Clarification on EventTypeBCSM and RequestReportBCSMEvent in CAMEL Phase3	CAMEL Phase 3	NEC	Noted
N2-99H75	Modification to description of CAMEL subscriber information	CAMEL Phase 3	NEC	Withdrawn
N2-99H76	CR 29.002-064 Modification to description of O-CSI ASN.1 structure	CAMEL Phase 3	NEC	Rejected
N2-99H77	Collection of Notify Subscriber Data Change procedure	CAMEL Phase 3	NTT Comware	<b>Agreed</b>
N2-99H78	CR 23.078 Clarification of analyzed_info and collected_info DP handling	CAMEL Phase 3	NEC	<b>Agreed</b>
N2-99H79	Change Requests agreed by N2B (Eton)		MCC	Noted
N2-99H80	Indication of supported CAMEL Phases	CAMEL Phase 3	N2A	Formally rejected
N2-99H81	CR 29.002-076 on Introduction of Extension Container in O-BcsmCamelTDP-Criteria	CAMEL Phase 3	NEC	Revised to K36

<b>N2-99H82</b>	CR 29.002-037r2 on addition of reference for Calling Geodetic Location	CAMEL Phase 3	Vodafone Airtouch	<b>Agreed (and included in L20)</b>
<b>N2-99H83</b>	CR 23.078 on addition of Calling Geodetic Location	CAMEL Phase 3	Vodafone Airtouch	Revised <a href="#">to J39</a>
<b>N2-99H84</b>	CR 23.012-001 on MAP Location Management Restructuring		Ericsson, NEC	Revised to J50
<b>N2-99H85</b>	CR 29.002-065 on MAP Location Management Restructuring		Ericsson, NEC	Revised
<b>N2-99H86</b>	Cr for 09.60 7.2.0-A079: Clarification of GSN Address field	GPRS	Ericsson	
<b>N2-99H87</b>	Cr for 29.060 3.1.0-025: Clarification of GSN Address field	GPRS	Ericsson	
<b>N2-99H88</b>	CR 23.018 on addition of Calling Geodetic Location	CAMEL Phase 3	Vodafone Airtouch	Revised
<b>N2-99H89</b>	CR to 23.007-003 on Support of VLR and HLR Data Restoration procedures with LCS	LCS	MCC/T1P1.5	<b>Agreed</b>
<b>N2-99H90</b>	DP Handling		Alcatel	Noted
<b>N2-99H91</b>	LS on Inter System Handover for the PS domain		S2	Noted
<b>N2-99H92</b>	LS on usage of E interface in 2G-3G inter-working network		S2	Noted
<b>N2-99H93</b>	LS on CBC-RNC Protocol Responsibility		S2	Noted
<b>N2-99H94</b>	Comments on the Multicall stage1 (22.135)		S2	Noted
<b>N2-99H95</b>	Definition and completion of Release 1999		TSG Chairmen	Noted
<b>N2-99H96</b>	LS on Service/Baseline Implementation Capabilities		N SS ad hoc	Noted
<b>N2-99H97</b>	Response to the N2 Liaison on Codec Types & Configuration and Codec compatibility		TSG-S4	Noted
<b>N2-99H98</b>	Liaison statement of Impact to TS24.008 by Out Band Transcoder Control		N1	Noted
<b>N2-99H99</b>	Draft stage 3(29.078)	CAMEL Phase 3	Ericsson	Noted
<b>N2-99J00</b>	SDLs for GPRS/SSF	CAMEL Phase 3	Ericsson	Revised to J71
<b>N2-99J01</b>	GPRS tutorial	CAMEL Phase 3	Ericsson	Noted
<b>N2-99J02</b>	CAMEL/GPRS alignment to 3G TS 23.060 and final modifications	CAMEL Phase 3	Ericsson	Revised to J59
<b>N2-99J03</b>	Updates to stage 3 CAMEL/GPRS	CAMEL Phase 3	Ericsson	<b>Agreed</b>
<b>N2-99J04</b>	3G TR 30.802 Bearer&QoS, version 1.1.0		S2	
<b>N2-99J05</b>	LS on the interaction between MMS, SAT, MExE, non-MExE terminals and CAMEL/OSA		OSA ad hoc	Noted
<b>N2-99J06</b>	CR to 29.002 on mobility management	CAMEL phase 3	Ericsson	Revised to K34
<b>N2-99J07</b>	CR 23.018-??? on introduction of the V-T-BCSM	CAMEL phase 3	Vodafone Airtouch	Revised to J45
<b>N2-99J08</b>	Handling of Combined MAP in the GLR(stage2) Revision of document N2-99H12	CAMEL phase 3	NTC	
<b>N2-99J09</b>	Introduction of R-CSI into 23.008	CAMEL phase 3	Siemens	Endorsed
<b>N2-99J10</b>	29.078: AC /ACR for GPRS	CAMEL phase 3	Siemens	Rejected
<b>N2-99J11</b>	23.008: Storing of SGSN and VLR CAMEL Capabilities in HLR	CAMEL phase 3	Siemens	<b>Agreed</b>
<b>N2-99J12</b>	gsmSSF correction for FCI for CAMEL Phase 3	CAMEL phase 3	Siemens	Revised to J49
<b>N2-99J13</b>	CR on Correction of CF notification	CAMEL phase 2	Siemens	Formally rejected
<b>N2-99J14</b>	Negotiated CAMEL Capability Handling	CAMEL phase 3	Siemens	Revised to J57
<b>N2-99J15</b>	Introduction of New CSI for Dialed Services	CAMEL phase 3	Siemens	Partly agreed
<b>N2-99J16</b>	Correction of process gsmSSF under consideration of outstanding requests	CAMEL phase 3	Siemens	<b>Agreed</b>
<b>N2-99J17</b>	CR 29.002-066r1 on Addition of FtN-AddressString (Rev. of H50)	Long Forwarded-to Numbers	Vodafone Airtouch	<b>Agreed</b>
<b>N2-99J18</b>	CR 29.078 on gsmSCF ability to change CLI PI for an MO call (Rev. of H56)	MSP	Vodafone Airtouch	E-mail discussion
<b>N2-99J19</b>	CR 29.002-067on Removal of B-interface services from the MAP specification	29.002-23.012 restructuring	NEC	Formally rejected
<b>N2-99J20</b>	GLR stage3 specification for MAP(version0.2.0) (Rev. of H17)	GLR	NTT Comware	Revised to J98
<b>N2-99J21</b>	CR to 29.002 on Introduction of Dialed Services CSI	CAMEL phase 3	Siemens	Endorsed
<b>N2-99J22</b>	Inclusion of the Service Interaction Indicators Two parameter (Rev. of H52)	MSP	Vodafone Airtouch	Revised to J95
<b>N2-99J23</b>	23.016: Correction of O-CSI for CAMEL ph3	CAMEL phase 3	Siemens	Rejected

N2-99J24	CR on 29.060 (020r2) on GTP messages and the Signalling Plane (GTP-C) for GTP R99 (rev. of G54)	GTP Enhancements	Ericsson	Revised to J82
N2-99J25	Meeting report CN#5, Kyongju		MCC	Noted
N2-99J26	CR 09.60-A076r1: Re-synchronisation of GTP packets (rev. of G79)	GPRS	Ericsson	Withdrawn
N2-99J27	CR to 29.060-030 On Re-synchronisation of GTP-U Sequence Numbers	GTP	Ericsson	Rejected
N2-99J28	Proposed LS towards ITU-T SG11 on Codec Information		Ericsson	<del>To be r</del> Revised to J60
N2-99J29	Current status of hosting offers for N2 meetings		N2 vice chairman	Noted
N2-99J30	Proposed Agenda of the N2A meeting		N2 Vice Chairman	Agreed
N2-99J31	Dialled services in CAMEL phase 3	CAMEL Phase 3	T-Mobil	Agreed
N2-99J32	N2B Eton Summary		N2B Chairman	Contents approved
N2-99J33	N2B Agenda		N2B Chairman	Agreed
N2-99J34	N2B Tdoc allocation		N2B Chairman	Noted
N2-99J35	Clarification of unsuccessful TDPs	CAMEL Phase 3	Siemens	Approved
N2-99J36	Revision of G52 (Work Item on GTP enhancements)	GTP Enhancements	Ericsson	Go to CN plenary
N2-99J37	LS on CAMEL Phase 4 to S1, S2 from Nokia	CAMEL Phase 3	Nokia	Approved
N2-99J38	Object Identification Tree	Marconi	Marconi	Revised to K07
N2-99J39	CR 23.078r1 on addition of Calling Geodetic Location		Vodafone Airtouch	
N2-99J40	CR 23.018 on addition of Calling Geodetic Location		Vodafone AirTouch	
N2-99J41	Answer to LS J05	OSA	Marconi	Approved
N2-99J42	CR 23.003-013 on Introduction of Reserved Service Labels in the APN		Ericsson	Revised to J76
N2-99J43	Inclusion of the Service Interaction Indicators Two paramet (rev. of H53)	MSP	Vodafone Airtouch	Agreed
N2-99J44	CR to 23.066-005 on Treatment of Database Mismatch Error		Ericsson	Postponed to Kyoto
N2-99J45	CR 23.018-??? on introduction of V-T-BCSM (rev. of J07)	CAMEL phase 3	Vodafone Airtouch	Revised to J93
N2-99J46	Revision of H47, applicable to Release '99		Ericsson	Postponed to Kyoto
N2-99J47	23.078 CR on concatenated FCI (rev. of H03)	CAMEL phase 3	Nokia	Revised to J75
N2-99J48	N2B meetings for the year 2000		N2B Chairman	Noted
N2-99J49	gsmSSF correction for FCI for CAMEL Phase 3 (rev. of J12)	CAMEL phase 3	Siemens	Rejected
N2-99J50	CR 23.012-001r1 on MAP Location Management Restructuring (Revision of H84)		Ericsson	Agreed
N2-99J51	29.002 CR on CAMEL3 Location Services (Rev. of H00)	CAMEL phase 3	Nokia	Withdrawn
N2-99J52	CR 29.002-074 on Restructuring of MAP Location Management Procedures for the Circuit Switched		Ericsson	Agreed
N2-99J53	Introduction of ContinueWithArgument (rev. of G55)		Ericsson	Revised to K13
N2-99J54	CR 29.002-048r2 on Introduction of maximum number for CS (Revision of H22)	Multicall	NTT Comware	Agreed
N2-99J55	29.078 Introduction and continue with arguments (Rev. of G56)		Ericsson	Revised to J77
N2-99J56	Proposed LS on Out-of-Band Transcoder Control		NEC/Ericsson	Approved
N2-99J57	CSI-specific Negotiated CAMEL Capability Handling (Rev. of J14)		Ericsson	Agreed
N2-99J58	LS to S4 on Out-of-Band Transcoder Control		NEC/Ericsson	Approved
N2-99J59	CAMEL/GPRS alignment to 3G TS 23.060 and final modifications (rev. of J02)	CAMEL Phase 3	Ericsson	Revised to J69
N2-99J60	Proposed LS towards ITU-T SG11 on Codec Information (Revision of J28)		Ericsson	Approved
N2-99J61	Alternative solution for ALR	CAMEL Phase 3	Fr. Telecom/Alcatel	Agreed
N2-99J62	LS to S3 on TS 33.102 sect. 6.3.4 Distribution of authentication vectors between VLRs		NTT	Revised
N2-99J63	General MO-SMS corrections		Ericsson	
N2-99J64	CR 29.002-045r3 on Authentication Enhancements	Security	France Telecom	Revised to K58
N2-99J65	DP_abandonas EDP-R (23.078)		Alcatel/Siemens	Agreed
N2-99J66	CR 29.002-072 on Enhanced User Confidentiality	Security	France Telecom	Rejected

<b>N2-99J67</b>	Introduction of continue with argument in the SDLs (23.078)		Alcatel	Agreed
<b>N2-99J68</b>	Need of the Length field in the GTP header	GTP enhancements	Lucent Technologies	
<b>N2-99J69</b>	CAMEL/GPRS alignment to 3G TS 23.060 and final modifications (rev. of J59)	CAMEL Phase 3	Ericsson	Agreed
<b>N2-99J70</b>	CR 23.066-004	MNP	Ericsson	Postponed to Kyoto
<b>N2-99J71</b>	SDLs for GPRS/SSF (rev. of J00)	CAMEL Phase 3	Ericsson	Agreed
<b>N2-99J72</b>	CR 23.008-004r3 on Authentication Enhancements (Revision of H71)		NTT Soft. Corp.	<b>Agreed</b>
<b>N2-99J73</b>	23.078 GPRS interworking to reduce TCAP dialogs	CAMEL Phase 3	Nokia	<b>NotedFFS</b>
<b>N2-99J74</b>	CR 29.060-021r1 on Parallel handling of multiple user application flows (Revision of G85)		Ericsson	<b>Agreed</b>
<b>N2-99J75</b>	Rev. of the chapter of charging information.		Nokia	E-mail
<b>N2-99J76</b>	CR 23.003-013r1 on Introduction of Reserved Service Labels in the APN (Revision of J42)		Ericsson	<b>Agreed</b>
<b>N2-99J77</b>	29.078 Introduction and continue with arguments (Rev. of J55)		Ericsson	Agreed
<b>N2-99J78</b>	Proposed LS to S2 on the Introduction of Reserved Service Labels in the APN		Nortel Networks	<b>Approved</b>
<b>N2-99J79</b>	CR 29.002 on Inclusion of handling of the SII Two parameter (rev. of H64)	MSP	Vodafone Airtouch	<b>Agreed</b>
<b>N2-99J80</b>	CR 29.060-029 on New header for the new GTP version for Release 99		Lucent Technologies	<b>Agreed</b>
<b>N2-99J81</b>	CR 23.078 on Addition of CCBS to the SS Invocation Notification alt. Solution	MSP	Vodafone Airtouch	<b>Agreed</b>
<b>N2-99J82</b>	CR 29.060-020r2 on GTP Messages and the Signalling Plane (GTP-C) for GTP Release 99 (Rev. of J24)		Ericsson	<b>Agreed</b>
<b>N2-99J83</b>	CR 29.002-A041r1 on Addition of CCBS to the SS Invocation Notification alt. Solution	MSP	Vodafone Airtouch	<b>Agreed</b>
<b>N2-99J84</b>	LS on 3G - 2G PS domain handover to S2/S1		Lucent Technologies	<b>Approved</b>
<b>N2-99J85</b>	Proposed LS to CN plenary on CAMEL control of VoIP services		BT Cellnet	<b>Approved</b>
<b>N2-99J86</b>	Revision of J62 (LS)		Ericsson	<b>Approved</b>
<b>N2-99J87</b>	LS to S1, S2 on Dialed Services in CAMEL Phase 3	CAMEL Phase 3		<b>Approved</b>
<b>N2-99J88</b>	CR 29.002-075r1 on introduction of Follow Me (Revision of G60)	Follow Me	Siemens	<b>Agreed</b>
<b>N2-99J89</b>	CR to 29.002 for Any Time Modification (rev. of H25)	CAMEL phase 3	NTT Comware	<b>Revised to K50</b>
<b>N2-99J90</b>	LS to S2 on introduction of Follow Me for the transferred Chapter 4 of 29.002		Siemens	<b>Approved</b>
<b>N2-99J91</b>	CR to 29.002 on enhancements to Any Time Interrogation		NTT Comware	
<b>N2-99J92</b>	CR 29.002-068 on Update of SDLs to support Super Charger	Super Charger	Nortel Networks	<b>Agreed</b>
<b>N2-99J93</b>	CR 23.018-??? on introduction of the V-T-BCSM (rev. of J45)	CAMEL phase 3	Vodafone Airtouch	Agreed
<b>N2-99J94</b>	Presentation on S2 QoS work	QoS enhancements	S2	LS drafted ad TF established
<b>N2-99J95</b>	Inclusion of the Service Interaction Indicators Two parameter (Rev. of J22)	MSP	Vodafone Airtouch	Agreed
<b>N2-99J96</b>	Revision of G66: GLR Stage 2 TS v. 0.5.0	GLR	DoCoMo	<b>Approved (go to CN)</b>
<b>N2-99J97</b>	Inclusion of the Service Interaction Indicators Two paramet (rev. of H51)	MSP	Vodafone Airtouch	Agreed
<b>N2-99J98</b>	GLR stage3 specification for MAP (version0.3.0) (Rev. of J20)	GLR	NTT Comware	<b>Approved (go to CN)</b>
<b>N2-99J99</b>	23.078 revised for CAMEL Phase 3 Release 1999		Siemens/Alcatel	Agreed
<b>N2-99K00</b>	Revision of J08		NTC	Withdrawn
<b>N2-99K01</b>	Explanatory text for N2-99J13		Siemens	Noted
<b>N2-99K02</b>	Proposed Liaison Statement to S2 on Combined Mobility Management		Alcatel	
<b>N2-99K03</b>	LS to TSG-S1:CLIR provisioning per profile for an MSP	MSP Phase 2		<b>Approved</b>

	Subscriber			
N2-99K04	Proposed LS to S2 on establishment of a QoS taskforce	QoS	Ericsson	
N2-99K05	CR 22.078 on CSE ability to change CLI PI for an MO call (rev. of H54)	MSP	Vodafone Airtouch	
N2-99K06	CR 29.002-050r3 on QoS enhancements (Revision of G62)	QoS enhancements	Siemens	Revised to K32
N2-99K07	Object Identifier options (Rev. of J38)		Marconi	
N2-99K08	CR 09.02-A276r1 on Use of SSN for GPRS (Revision of H29)	GPRS	Siemens	Agreed
N2-99K09	LS sent to N1		France Telecom	Approved
N2-99K10	CR 09.02-A280 on Use of SSN for GPRS (same as K08 for Release '98)	GPRS	Siemens	Agreed
N2-99K11	Mobility manager procedures	CAMEL phase 3	Ericsson	
N2-99K12	CR 29.002-077 on Use of SSN for GPRS (same as K08 for Release '99)	GPRS	Siemens	Agreed
N2-99K13	Introduction of continue with argument (rev. of J53)	CAMEL phase 3	Ericsson	
N2-99K14	Mirror CR 23.016-009 on Correction of VLR subscription Data (Tdoc G63 for Release '99)	CAMEL Phase 2	Ericsson	Agreed
N2-99K16	CR 09.60-A078r1 on Clarification of GSN Address field	GPRS	Ericsson	Agreed
N2-99K18	CR 09.60 7.2.0-A079r1: Clarification of GSN Address field	GPRS	Ericsson	Agreed
N2-99K20	CR 29.060-025r1 on Clarification of GSN Address field	GPRS	Ericsson	Agreed
N2-99K22	CR 09.02-A277 on Correction of the USSD procedure in the HLR	USSD	Nortel Networks	Agreed
N2-99K24	Same as K22 for Release '99 plus Follow Me		Nortel Networks	Agreed
N2-99K26	CR 050r2 to 29.002 on QoS enhancements			
N2-99K28	CR to 29.002 on enhancements to Any Time Interrogation (Revision of G61)		Siemens	
N2-99K30	Revision of H67		Ericsson	Contents agreed
N2-99K32	CR 29.002-050r4 on QoS-Subscribed field modification (Revision of K06)	QoS enhancements	Siemens/DoCoMo/Nokia	Revised to K60
N2-99K34	Revision of J06		Ericsson	Formally rejected
N2-99K36	CR 29.002-076r1 on Introduction of Extension Container in O-BcsmCamelTDP-Criteria		NEC	Agreed (and included in L20)
N2-99K38	CR 09.08-Axxx on Changes due to LCS enhancements	LCS	T1P1.5	Agreed (to N1)
N2-99K40	CR 03.71 A001r2 on Addition of further LCS functionality in GSM Release 98	LCS	T1P1.5	Noted
N2-99K42	Revision of J91			E-mail approval
N2-99K44	CR 03.03-A034 on Support of VLR and HLR Data Restoration procedures with LCS	LCS	T1P1.5	Agreed
N2-99K46	CR 03.08-A029 on Organization of Subscriber Data for LCS	LCS	T1P1.5	Agreed
N2-99K48	CR 03.16-A038 on Support of Subscriber Data Management in the HLR and VLR for LCS	LCS	T1P1.5	Agreed
N2-99K50	Revision of J89			E-mail approval
N2-99K52	CR 29.002-060r1 (revision of H49)	LCS	T1P1.5	Agreed
N2-99K54	OoBTC Stage 2 v.1.0.0	OoBTC	Ericsson	To CN plenary
N2-99K56	Mirror CR 23.008 of K46 (to be supplied by Stephen Edge)	LCS	T1P1.5	Agreed
N2-99K58	CR 29.002-045r4 on Authentication Enhancements	Security	France Telecom	Agreed
N2-99K60	CR 29.002-050r5 on QoS-Subscribed field modification	QoS enhancement	Siemens/DoCoMo/Nokia	Agreed
N2-99K62	N2B output documents		N2B Chairman	Approved
N2-99K64	Cover letter to the GLR Stage 2	GLR Stage 2	NTT DoCoMo	Approved
N2-99K66	Revision of K02		Alcatel	Approved
N2-99K68	SWG A agreed LS		N2 vice chairman	Approved
N2-99K70	LS on CAMEL Phase 3		N2 vice chairman	Approved
N2-99K72	Revised K62 (REFERENCE DOCUMENT FOR THE CN PLENARY)		N2B Chairman	
N2-99K74	Revision of J79			
N2-99K76	Liaison Statement to CN on Object Identifiers		N2B Chairman	

<b>N2-99K78</b>	Combined CRs for GTP enhancements	GTP Enhancement	Ericsson	
-----------------	-----------------------------------	-----------------	----------	--

**3GPP TSG-N WG2**  
**Phoenix, Arizona, USA**  
**15 - 19 November 1999**

**ANNEX C**

**List of Approved Change Requests**

**3GPP TSG-N WG2**  
**Phoenix, Arizona, USA**  
**15 - 19 November 1999**

**ANNEX D**

**List of Approved Liaison Statements**