

**3GPP TSG CN Plenary, Meeting #11
Palm Springs, USA. 14th - 16th March 2001**

Tdoc NP-010051

Source: CN2
Title: CN2#16 Meeting Report
Agenda item: 6.2.1
Document for: INFORMATION

**3GPP TSG_CN WG2#17
Sophia-Antipolis, France
26.th February - 2.nd March, 2001**

Tdoc N2-010126

Document for: APPROVAL



**Meeting Report
TSG CN WG2#16
Beijing, China
15 - 19 January 2001**

Chairman: Keijo Palviainen (Nokia)

Secretary: Per Johan Jorgensen (MCC)

Host: Ericsson, China and Ericsson, Sweden

List of participants: Annex A
Output documents: Annex B
Tdoc list (incl. the status): Annex C

Documents could be found on the 3GPP-server:

ftp://ftp.3gpp.org/TSG_CN/WG2_camel/Plenary/TSGN2_16_Beijing/Docs

1 Opening of the meeting and approval of the agenda

N2-010001 : CN2 chairman, Title: Proposed meeting agenda

Discussion : Reminder on IPR call is needed, will be in agenda item 5.

Conclusion : *Noted*

2 Allocation of documents to agenda items

N2-010002 : CN2 vice chairman, Title: Proposed document allocation

Discussion : Change of section numbers. Tdocs should be moved from late arrivals to appropriate place in the report from next meeting. 051 is withdrawn. 073 is an update of 039. 028 and 029 are withdrawn. 074 is for agenda item 7.4 and is a late arrival. 058 is withdrawn and replaced by 075. 045 is withdrawn. 055 is withdrawn. New agenda item CAMEL for Rel 4 will be 6 bis containing 029,039 and 073. 009 moved from 7.6 to 6.1 agenda item. Allocation of docs to agenda item is urged in the REQUEST Sheet, which requires the agenda available 3 weeks before the meeting. No joint activities with CN4 and CN1 is mentioned, and the chair will investigate.

Conclusion : *Agreed*

N2-010072 : MCC, Title: Tdoc list before CN2#16 starts

Discussion :

Conclusion : *Noted*

3 Reports

N2-010059 : MCC, Title: Draft Report TSG CN WG2#15, Paris

Discussion : Open headings should be filled with eg 'no business in this area'. CN plenary shall only be informed while the WG itself shall decide on when the report is approved. MCC sends it on the e-mail list with timelist for about 2 weeks for comments on the CN2 mailing list after which the approval shall take place. The report is then only presented to the following WG2 meeting, and controversial issues will be handled case by case. Aligning this procedure within CN WGs would be usefull.

Conclusion: *Approved*

N2-010060 : MCC, Title: Draft Report TSG CN#10, Bangkok

Discussion : Automatic numbering was wanted instead of manuel numbering on figures which is now introduced for 23.078 v3.7.0, and this discussion will be concluded in relation to Sumios Tdoc later in this meeting.

Conclusion: *Noted*

N2-010061 : MCC, Title: Draft Report TSG SA#10, Bangkok

Discussion : To be informed in WGs or not. Yes, tabeling the document is wanted. Summary of related discussions could be highlighted like use of CAMEL for multimedia. No decision were reached on this long discussion. IPtelephony was removed from CAMEL4 stage1.

How will 23.cde in control of CN1 evolve with respect to CAMEL content? Need a WI to draft anything on CAMEL for VoIP.

Conclusion: *Noted*

4 Input Liaison Statements

N2-010046 : CN1, Type: LS IN , Title: Response to Liaison Statement on IPT Basic Call Handling

Discussion : CN2 defines how to do basic call control, but not how to do VoIP control. Not desired to expand 23.018 though. Put this document on hold until CN1 meeting on this issue Tuesday evening. Already 23.cde contains too much

CAMEL information copied. Joint meetings with CN1, CN3 and CN4 was held, and proper action was taken (a LS OUT from Jan Park to SA1 and SA2.

Conclusion: *Noted*

N2-010047 : SA1, Type: LS IN , Title: Camel Phase 1 Support in Phase 2 further assumptions

Discussion : To be viewed together with 057. CN2 should have a view if CAMEL4 should still support CAMEL1 (or is it then obsolete)? Both the functional, protocol and implementation point of view should be adressed, though it was thought to be the total for supporting backward compatibility with dropping to that ealier CAMEL phase. CAMEL 3 support of earlier phase for GPRS are not relevant. A CN2 reaction should only be raised on technical basis of the SA1 decisions. Christian to write a response in LS OUT tdcoc 076, including CAMEL4 technical issues on backward compatibility.

Conclusion: *Noted. Response in LS OUT in N2-010076 by Christian Homann.*

N2-010076 : To TSG SA WG1, TSG SA WG1 CAMEL ad hoc , Type: LS OUT , Title: DRAFT LS “Support of earlier CAMEL phases”

Discussion : CN2 agrees with SA1 that CAMEL3 also means support for CAMEL2 and CAMEL1. CN2 will modify stage 2 accordingly. Same requirement on HLR? No since no CAMEL phases are referenced. SCP shall support the CAMEL phase in the CSI, implying support of earlier phases which however is the responsnibility of the home operator. The LS OUT will delete the VMSC part

Conclusion: *Revised to 111. Response to LS IN 047 from Christian Homann.*

N2-010111 : To TSG SA WG1, TSG SA WG1 CAMEL ad hoc , Type: LS OUT , Title: DRAFT LS “Support of earlier CAMEL phases”

Discussion :

Conclusion: *Agreed without presentation. Response to LS IN 047 from Christian Homann, revised from 076*

N2-010048 : T2, Type: LS IN , Title: Support for prepaid in MMS

Discussion : Any comment from CN2 perspective? All except USSD has mechanism for prepaid, or do we need mechanism for a higher layer (application)? This document will be handled in SA1 CAMEL ad hoc.

Conclusion: *Noted*

5 Work item management & miscellaneous

An IPR declaration was announced by the chairman. IPRs does not need to be declared at the WG meeting but should go to the respective organization. No IPRs were declared.

N2-010028 : NEC, Type: WID , Title: Proposed Work Item Description for Release 4: ODB (Operator Determined Barring) for PS domain

Discussion :

Conclusion: *Withdrawn*

N2-010040 : Vodafone, Type: DISC , Title: The need for SDL source files

Discussion : The reminder on top is to be stroken out. SDT shall be used for SDL even though old specifications may be exceptions. CRs should be accompanied with SDL update. CN2 part of the annex is correct except for 03.78 v5.8.0 and 6.8.0 ? Members were asked to try tracking these SDLs and supply them to MCC, but R99 and maybe R97 should have them updated and included. Specifications with SDL attachment should have both on the 3GPP server.

Conclusion: *Noted*

N2-010056 : MCC, Type: WorkPlan , Title: 3GPP Workplan status before CN2#16

Discussion : For next meeting this discussion will take place in the latest part of the agenda. For this meeting the review of the workplan on Friday at the close of this meeting. A text doc could be produced at that time with updates to be implemented after this meeting, and 077 is that document.

Conclusion: Noted

N2-010077 : CN2 chairman Keijo, Type: WorkPlan , Title: Progress of CAMEL work, changes to Work plan status

Discussion : No changes to the WP progress listed here were required. Percentage complete should be used instead of completion rate. For any new items it should be given as input to MCC feature responsible, preferably after agreement with chairman and/or the WG. Also on other items comments can be made for consistency purpose.

Conclusion: Agreed as CN2 view to the update of the Work Plan

N2-010057 : Alcatel, Type: DISC , Title: Support of CAMEL phase N

Discussion : ACN is Application Context Name. Operator support for full recursion was expressed, and not for the proposed negotiation of possible 'n-1' negotiation. CAMEL3 is more global involving Organizational 3GPP partners, who may not have committed to earlier GSM phases. SA1 has however in TSG#10 agreed to this approach. How will the roaming aspect then be solved? An adopted 057 document should be brought to SA1 CAMEL ad hoc for CAMEL4 onwards. For R99 a decision is taken by SA1 that CAMEL3 shall support CAMEL2. No technical issue was seen against support of earlier phases. Location information could be ambiguous.

Conclusion: Noted

N2-010069 : Siemens, Type: DISC , Title: Reference handling in CAMEL3 and CAMEL4

Discussion : Item 1 agreed for CAMEL4 (CAMEL3 is frozen), or can be used in Bibliography clause in chapter 2 for useful information. Completeness as proposed in item 2 is agreed. Only ref. to CS 2 is used so for Q1224 ref [6] is changed to [30]. Agreed to introduce Recommendation in the body text for ITU... offline by Sumio. The principal of item 4 and 5 (with renumbering) was agreed.

Automatic numbering for CAMEL3 was required to ease CAMEL4 editing, and reference was made to 5.2.1a, 6.2.2 and H4 of TR 21.801. This issue should be taken to plenary to clear out the procedure if needed. For the time being this issue is left open.

Conclusion: Noted

6 CAMEL 3, Resolution of outstanding R99 issues

No business on this issue.

6.1 Miscellaneous

N2-010009 : 23.078 CR#257, Vodafone, Type: CR, Title: Update of References

Discussion : Should the full name of the title be referenced (3GPP) or not,- 23.078 uses both styles.

Conclusion : Agreed

N2-010032 : 29.002 CR#xxxRy, Ericsson, Type: CR , Title: Removing duplicate parameters from SS-CSI

Discussion : Last parenthesis should not be removed. Which category classification is applicable, error leading to frequent and serious misbehavior, wrong implementation of earlier CR or consensus ? Not critical but consensus CR.

Conclusion : Revised to078

N2-010078 : 29.002 CR#xxxRy, Ericsson, Type: CR , Title: Removing duplicate parameters from SS-CSI

Discussion : To be delivered to CN4 by Rogier, with changes done and no new presentation in CN2. The CN4 Tdoc and CR number to be provided.

Conclusion :Endorced. Revised from032

N2-010033 : 29.002 CR#xxxRy, Ericsson, Type: CR , Title: Adding EXPORT definition for LSAIdentity

Discussion : Classification proposed as essential, and agreed. Cover page changes added directly by Rogier and handed to CN4.

Conclusion : *Endorced*

N2-010062 : 23.078 CR#267, Ericsson, Type: CR, Title: Usage of MSISDN for CAMEL - USSD Information Flows

Discussion : Applies only for R99 version of MAP, and introduced because of 'follow me'. The note should be a part of the conditional description. Strike out the change in 'begin subscriber activity'. Classified as agreed by consensus.

Conclusion : *Revised to 081*

N2-010081 : 23.078 CR#267R1, Ericsson, Type: CR, Title: Usage of MSISDN for CAMEL - USSD Information Flows

Discussion :

Conclusion : *Agreed without presentation. Revised from 062*

N2-010063 : 23.078 CR#268, Rapporteur, Type: CR, Title: Correction of error implementing CR 23.078-118r2

Discussion : The text is moved to another sheet where it is not propriate.

Conclusion : *Revised to 082*

N2-010082 : 23.078 CR#268R1, Rapporteur, Type: CR, Title: Correction of error implementing CR 23.078-118r2

Discussion :

Conclusion : *Agreed without presentation. Revised from 063*

N2-010064 : 23.078CR#269, Siemens, Type: CR, Title: Correction of reference

Discussion :

Conclusion : *Revised to 070*

N2-010070 : 23.078CR#269R1, Siemens, Type: CR, Title: Correction of reference

Discussion : Do ITU Q1214 need to be included, or the ITU Recommendations at all ? The CS-1 reference [6] can be replaced by [30] consistenly. Same date on some ITU Recommendations are needed. Q1290 and Q850 is not referenced and willl be removed in CAMEL4. Agreed on consensus.

Conclusion : *Revised to 098*

N2-010098 : 23.078CR#269R2, Siemens, Type: CR, Title: Correction of reference

Discussion :

Conclusion : *Postponed. Revised from 070*

6.2 ATM&ATSI

No business on this issue.

6.3 GPRS

N2-010003 : 23.078CR#256, Nokia, Type: CR , Title: Clarification on APN usage in the ConnectGPRS operation

Discussion : Various clarifications were done and editorials to be made. The APN should be sent to gsmSCF after the SGSN APN selection procedure is done, both for event and initial DP. But it was many views on when the DP should take place, beginning, middle or after the APN selection by SGSN. Should the gsmSCP be allowed to modify the APN eg for VPN, and when and what valid information will be available to the gsmSCP ? Or should initialDP be done first

and the HLR information could be available by the gsmSCF? No APN for Sec. PDP context. What about TFT 'Temporary Flow Template'? GPRS stage 2 needs to be checked and maybe modified.

Conclusion : Postponed

N2-010004 : 29.078CR#137, Nokia, Type: CR , Title: Clarification on APN usage in the ConnectGPRS operation

Discussion :

Conclusion : Postponed

N2-010006 : 29.078CR#138, Nokia, Type: CR , Title: Inconsistency between InitialDPGPRS procedure and generic GPRS procedure

Discussion : Replacement of 'of' to 'to'. Classification of consensus and/or essential to be added to the cover sheet.

Conclusion : Revised to 083

N2-010083 : 29.078CR#138R1, Nokia, Type: CR , Title: Inconsistency between InitialDPGPRS procedure and generic GPRS procedure

Discussion :

Conclusion : Agreed without presentation. Revised from 006

N2-010014 : 23.078CR#258, Ericsson, Type: CR , Title: Hand-over indication for GPRS

Discussion : Seen as an essential CR since otherwise the prepaid service will not work properly. Related to 054 and 015.

Conclusion : Revised to 084

N2-010084 : 23.078CR#258R1, Ericsson, Type: CR , Title: Hand-over indication for GPRS

Discussion :

Conclusion : Agreed without presentation. Revised from 014

N2-010015 : 29.078CR#139, Ericsson, Type: CR, Title: Hand-over indication for GPRS

Discussion : Initiating entity parameter with new values was questioned since it introduces compatibility problem in the gsmSCP. Choose a codepoint, leave it to implementation or state nothing. Agreed to state that the receiving entity may ignore this information element at inter-system SGSN handover.

Conclusion : Revised to 085

N2-010085 : 29.078CR#139R1, Ericsson, Type: CR, Title: Hand-over indication for GPRS

Discussion : Editorials discovered.

Conclusion : Revised to 112. Revised from 015

N2-010112 : 29.078CR#139R2, Ericsson, Type: CR, Title: Hand-over indication for GPRS

Discussion :

Conclusion : Agreed without presentation. Revised from 085

N2-010016 : 23.078CR#259, Ericsson, Type: CR , Title: Description of Entity Released GPRS

Discussion : Consensus agreement. CR number. Editorials.

Conclusion : Revised to 086

N2-010086 : 23.078CR#259R1, Ericsson, Type: CR , Title: Description of Entity Released GPRS

Discussion :

Conclusion :Agreed without presentation. Revised from 016

N2-010017 : 29.078CR#140, Ericsson, Type: CR, Title: Description of Entity Released GPRS

Discussion : Use of the word discontinuation should be avoided. Other editorials. Consensus agreement.

Conclusion : Revised to 087

N2-010087 : 29.078CR#140R1, Ericsson, Type: CR, Title: Description of Entity Released GPRS

Discussion :

Conclusion : Agreed without presentation. Revised from 017

N2-010034 : 29.078CR#142, Ericsson, Type: CR, Title: Correction to LocationInformationGPRS

Discussion : Classification to be added.

Conclusion :Revised to 088

N2-010088 : 29.078CR#142R1, Ericsson, Type: CR, Title: Correction to LocationInformationGPRS

Discussion :

Conclusion : Agreed without presentation. Revised from 034

N2-010035 : 23.078CR#263, Ericsson, Type: CR , Title: No Volume charging on GPRS Session (clarifying text)

Discussion : Some smaller corrections to be added and the CR agreed by consensus.

Conclusion :Revised to 089

N2-010089 : 23.078CR#263R1, Ericsson, Type: CR , Title: No Volume charging on GPRS Session (clarifying text)

Discussion :

Conclusion : Agreed without presentation. Revised from 035

N2-010036 : 29.078CR#143, Ericsson, Type: CR , Title: No Volume charging on GPRS Session (clarifying text)

Discussion : Rewording to be done to clarify where time and volume charging are applicable, plus consensus classification to be added.

Conclusion : Revised to 090

N2-010090 : 29.078CR#143R1, Ericsson, Type: CR , Title: No Volume charging on GPRS Session (clarifying text)

Discussion : Wording proposed: Charging for a PDP context may be on duration and/or on volume. Charging for a session may be on duration only. (Note: Charging for a PDP context on duration and volume applies to charging operations.)

Conclusion : Revised to 113. Revised from 036

N2-010113 : 29.078CR#143R2, Ericsson, Type: CR , Title: No Volume charging on GPRS Session (clarifying text)

Discussion :

Conclusion : Agreed without presentation. Revised from 090

N2-010044 : 29.078CR#144, Lucent, Type: CR, Title: Correction to MSNetwork Capability parameter length

Discussion : The CR# is wrong and shall be changed to CR#148R1. Add classification.

Conclusion :Revised to 091

N2-010091 : 29.078CR#144, Lucent, Type: CR, Title: Correction to MSNetwork Capability parameter length

Discussion :

Conclusion : Agreed without presentation. Revised from 044

N2-010054 : 23.078CR#266, Siemens, Type: CR, Title: Using SGSN for Hand-over indication to Detach and Disconnect

Discussion : This addition to 14 changes the semantic of an information.

Conclusion : Withdrawn

N2-010055 : 29.078CR#146, Siemens, Type: CR, Title: Using SGSN for Hand-over indication to Detach and

Discussion :

Conclusion : Withdrawn

N2-010065 : 23.078CR#270, Siemens, Type: CR, Title: Clarification of APN change in PDP Context Established

Discussion : Is the proposal to prohibit something in the SSF, ignore it or advice to service logic designers? SCP shall not send APN for network initiated PDP context. Consensus.

Conclusion : Revised to 092

N2-010092 : 23.078CR#270R1, Siemens, Type: CR, Title: Clarification of APN change in PDP Context Established

Discussion : Note that Should follow the ETSI style of note, which is to be checked with ETSI guidance to use of English. Accept the CR unless evidence found to the contrary.

Conclusion : Agreed. Revised from 065

N2-010066 : 23.078CR#271, Siemens, Type: CR, Title: Correction on GPRS related information flows

Discussion : Delete example. Classification changed to consensus.

Conclusion : Revised to 093

N2-010093 : 23.078CR#271R1, Siemens, Type: CR, Title: Correction on GPRS related information flows

Discussion :

Conclusion : Agreed without presentation. Revised from 066

N2-010067 : 29.078CR#147, Siemens, Type: CR, Title: Correction on GPRS related information flows

Discussion : Is the difference on U-ABORT and P-ABORT visible. Yes, the difference is user and TC origin. New wording proposed: If GPRS reference number is not active the TC-user in the gprsSSF will instruct TC to that

Conclusion : Revised to 100

N2-010100 : 29.078CR#147R1, Siemens, Type: CR, Title: Correction on GPRS related information flows

Discussion :

Conclusion : Agreed without presentation. Revised from 067

N2-010103 : Ericsson, Type: DISC, Title: Open issues on CAMEL control of GPRS

Discussion : Only shortly presented. For people to study back home.

Conclusion : Noted

6.4 SMS

N2-010051 : 23.078CR#265, Ericsson, Type: CR, Title: Correction to MO-SMS

Discussion :

Conclusion : Withdrawn

N2-010052 : 29.078CR#145, Ericsson, Type: CR, Title: Correction to MO-SMS

Discussion : One editing error detected during presentation to be corrected by adding the classification of this CR. TpShortMessage..... left unchanged would have no impact as technical issue, and these editorials raised objection from Siemens. Inconsistencies in naming must however be corrected.

Conclusion : *Revised to 094*

N2-010094 : 29.078CR#145R1, Ericsson, Type: CR, Title: Correction to MO-SMS

Discussion : IdCAP value 16 is already in use in CAMEL4, and there it must be changed to value 17 (in phase 4).

Conclusion : *Agreed. Revised from 052*

6.5 Call Related

N2-010018 : 23.078CR#260, Ericsson, Type: CR, Title: Correction to description of 'O-CSI Applicable' parameter

Discussion : How much impact would adding N-CSI mean? Felt to be mandatory. Some terminology use as 'is; versus 'shall' were discussed. The principal is to use 'is' when it is described somewhere else, and 'shall' when it is described here. Classification is essential CR.

Conclusion : *Revised to 095*

N2-010095 : 23.078CR#260R1, Ericsson, Type: CR, Title: Correction to description of 'O-CSI Applicable' parameter

Discussion : No N-CSI for terminated calls, but for Forwarding calls was clarified.

Conclusion : *Agreed. Revised from 018*

N2-010019 : 29.078CR#141, Ericsson, Type: CR, Title: Correction to description of 'O-CSI Applicable' parameter

Discussion : Classification is to be added.

Conclusion : *Revised to 096*

N2-010096 : 29.078CR#141R1, Ericsson, Type: CR, Title: Correction to description of 'O-CSI Applicable' parameter

Discussion :

Conclusion : *Agreed without presentation. Revised from 019*

N2-010020 : 23.078CR#261, Ericsson, Type: CR, Title: Restriction on SS-CSI to VLR - no marking for CCBS

Discussion : Related to 021. Is both 020 and 021 needed? Both or none seems to be the logic. The other way around is to specify that VLR could silently discard a possible inclusion of CCBS from HLR, or send a notification. No change to stage 2 is needed, only stage 3 was also proposed. No change done agreed by consensus. Editorial to be updated with the cover page.

Conclusion : *Revised to 079*

N2-010079 : 23.078CR#261R1, Ericsson, Type: CR, Title: Restriction on SS-CSI to VLR - no marking for CCBS

Discussion :

Conclusion : *Agreed without presentation. Revised from 020*

N2-010021 : 29.002CR#xxxRy, Ericsson, Type: CR, Title: Restriction on SS-CSI to VLR - no marking for CCBS

Discussion : See 020. Only just add a comment to the CR that if VLR receives CCBS marking this code shall be discarded. Comment style to be corrected.

Conclusion : *Revised to 080*

N2-010080 : 29.002CR#xxxRy, Ericsson, Type: CR, Title: Restriction on SS-CSI to VLR - no marking for CCBS

Discussion :

Conclusion :Endorced without presentation. Revised from 021.

N2-010053 : 23.078CR#264, Alcatel, Type: CR, Title: Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.

Discussion : Should avoid 'invoke' in this CR. Concern that the state machine has knowledge of the SSF process state. The tables are for information only. Revision of decision box. The interpretation of gsmSSF invoke is an issue for discussion. What about the second dialogue?

Conclusion :Revised to 097

N2-010097 : 23.078CR#264R1, Alcatel, Type: CR, Title: Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.

Discussion : gsmSSF invoke decision box is not necessarily needed in Idle state and can be taken out (already stated in earlier 1.st page SDL). That decision box is not global and needed only in every relevant SDL. Where to put the explanation of what that decision box is? The rapporteurs proposal was accepted.

Conclusion : Revised to 114. Revised from 053

N2-010114 : 23.078CR#264R2, Alcatel, Type: CR, Title: Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.

Discussion :

Conclusion : Agreed without presentation. Revised from 097

6bis CAMEL for Release 4

N2-010029 : 23.078CR#262, NEC, Type: CR , WI: ODB, Title: Add new ODB data for the PS Domain in ATSI and NSDC IFs

Discussion :

Conclusion : Withdrawn

N2-010039 : 29.078CR#144, Ericsson, Type: CR, WI: SS7IP, Title: Introduction of CAP over IP for Core Network release R4

Discussion :

Conclusion : Revised to N2-010073

N2-010073 : 29.078CR#144R1, Ericsson, Type: CR, WI: SS7IP, Title: Introduction of CAP over IP for Core Network release R4

Discussion : A requirement on Rel-4 but applicable to all ealier phases of the CAMEL (and versions). Should it go into another document, maybe separate. This would still be a Rel-4 document not automatically read by eg an implementer. Same approach as CN4 for MAP should be sought. 29.078 chapter 12 is services from lower layers as TC and SCCP, so where to state no impact on CAP for IP based transport? A short joint session with CN4 during this week was proposed. Link by link configuration on MTP based or IP based transport. The editors style note can not be implemented, only ETSI style note. 2 abreviations on IP is questioned. Reformulate SS7 underlying network and similar. Postponed until CN4 response is known. The MOM from CN4 is the official on the CAP over IP issue (seems to go for one combined MAP/CAP new specification without SUA in Rel-4 ?). Needs to be concluded in the February meeting where such a TS for transport mechanism should be available. It has to be rejected to terminate the CR number, but the spirit of the CR was accepted.

Conclusion : Rejected. Revised from N2-010039.

7 CAMEL4, Release 5

No business on this issue.

7.1 Review of CAMEL 4 Stage 1 draft

No business on this issue.

7.2 Miscellaneous CAMEL 4 issues

N2-010058 : 23.008CR#xxxRy, Alcatel, Type: CR, Title: 23.008 Collective phase4 CR

Discussion :

Conclusion : Withdrawn. Replaced to 075

N2-010075 : 23.008CR#xxxRy, Alcatel, Type: CR, Title: 23.008 Collective phase4 CR

Discussion : New CR to Rel5 even the version number in the history says 4.0.0, which actually is filled out after approval in CN plenary when implementing the CR. Should have the 3G to 3GPP etc. modifications in Rel4, which should be initiated by CN4 by the vice chair or rapporteur on 23.008. Other TS's are also needed for Rel-4. Isabel as rapporteur is asked to issue proper CRs to raise relevant specifications to Rel4. A next version with comments included will be available to CN2#17.

Conclusion : Noted. Comments agreed shall be added to the next version.

N2-010068 : Rapporteur, Type: TS , Title: Draft 23.078 (R00) Vx.4.2

Discussion : Changing R00 to Rel-5 in the next version coming in a week or two. CRs expected on mid-call related to note 5,- and any other issues are requested. Accepted as basis for future work, ie to include agreed CRs from this meeting into it.

Conclusion : Agreed. CRs from this meeting to be included before the next version.

N2-010071 : 23.078CR#xxxRy, Siemens, Type: , Title: Correction of reference for CAMEL phase 4

Discussion : Q1214 will be deleted from the ref. list.

Conclusion : Revised to 099

N2-010099 : 23.078CR#xxxRy, Siemens, Type: , Title: Correction of reference for CAMEL phase 4

Discussion :

Conclusion : Postponed. Revised from 071

7.3 Optimum routing

N2-010011 :23.079CR#016R2, CN4 , Type: CR, Title: CAMEL support for OR

Discussion : VMSCA and GMSCA are integrated with internal interface between them. A GMSC can not use Optimal routing on early Call Forwarding received from the HLR. Optimal routing is an optional feature. An MSC ignores the parameter related to BOR if the feature is not supported, which might be clarified. Comments from CN2 to CN4 is handed over by Ian Park.

Conclusion : Endorced

N2-010110 : Vodafone, Type: INFO, Title: *Corrections to CAMELA support of OR*

Discussion : Given only for information. New number must be asked for if this will be presented in the next meeting.

Conclusion : Postponed

7.4 Call Party Handling

N2-010007 : 23.018CR#xxxR1, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4

Discussion :

Conclusion :Postponed

N2-010008 : 23.078, Vodafone, Type: CR, Title: Change of name: Process gsmSSF to Process CS_gsmSSF

Discussion :

Conclusion : Postponed

N2-010010 : 23.078, Vodafone, Type: CR, Title: Introduction of CPH operations

Discussion :

Conclusion : Postponed

N2-010012 : 23.018, Vodafone, Type: CR, Title: Introduction of CPH operations

Discussion :

Conclusion : Postponed

N2-010013 : Vodafone, Type: DISC , Title: CPH Modelling

Discussion : Why was alerting phase the breaking point? From stage 1. Spawning on a criteria versus always (option 4) is because of processing load and easy criteria detection. But this is modelling and has not necessarily any relation to implementation. In option 3 when moving leg2 back to leg 1 the processes will remain seperated. Move leg is in active and alert phase while the split leg could be in active phase. The intention with this proposal was to have only 2 BCSMs, never 3. The new complexity should be handled by CAMEL processes outside the 23.018 modelling. Option 1 is very difficult to manage due to commands from different directions, not a tree structure. But is option 3 leg 2 and leg 1 in one BCSM (process) with 2 call state models ? No clear answer seemed to be agreed. If option 3 by spawning and collapsing could lead to option 2 it is not agreed by Nokia.

Option 3 could be agreed to be the way forward by Alcatel,- if 1 BCSM is attached to leg2 and 1 BCSM is attached to leg3 without a BCSM attached to leg1.

Conclusion : Noted. Option 3 with the qualification: “There is 1 BCSM for each leg which does not serve an MS. If the leg which serves an MS is not connected to another leg, there is an additional BCSM for the leg which serves the MS.” is agreed to be the working assumption.

N2-010022 : 23.078, Alcatel, Type: CR , Title: Correction of Process CSA_gsmSSF

Discussion :

Conclusion : Postponed

N2-010023 : 23.078, Alcatel, Type: CR , Title: Correction of Process CAMEL_Subsequent_CS_MSC

Discussion :

Conclusion : Postponed

N2-010024 : 23.078 CR#xxxR2, Alcatel, Type: CR , Title: Introduction of gsmSCF initiated new calls: SIC process

Discussion :

Conclusion : Postponed

N2-010025 : 23.078, Alcatel, Type: CR , Title: Addition of Initiate New Call handling for Process CSA_gsmSSF

Discussion :

Conclusion : Postponed

N2-010026 : 23.078 CR#xxxR2, Alcatel, Type: CR , Title: Introduction of the Initiate Call Attempt and Continue With Argument Information Flow

Discussion :

Conclusion : Postponed

N2-010027 : 23.078 CR#xxxR2, Alcatel, Type: CR , Title: Interfaces and modelling for gsmSCF initiated new calls and parties

Discussion :

Conclusion : Postponed

N2-010074 : Alcatel, Type: DISC , Title: CPH Modelling evaluation

Discussion : Intended for discussion, but option 2 may be the preferred option from Alcatel. However option 2 can not be accepted by Nokia. What is the upper limit of legs in O-BCSM in this modelling ? More processes is created. Common understanding of BCSM was sought. Lengthy discussions took place on number of call legs related to states and related processes, and moving of call segments.

Conclusion : Noted. See the related Tdoc 013.

7.5 IP Telephony

N2-010045 : Lucent, Type: DISC , Title: Support of Legacy services in IMS

Discussion :

Conclusion : Withdrawn

7.6 Other call related issues

N2-010037 : 23.078, Ericsson, Type: CR, Title: Introduction of Mid-call DP

Discussion : Mid Call Criterion is the terminology. No mid call arming permitted without criterion was not desired, so triggering on first digit as in this CR was accepted. Any criteria to what detail stage 2 should be written concerning parameters?

Conclusion : Revised to 104.

N2-010104 : 23.078, Ericsson, Type: CR, Title: Introduction of Mid-call DP

Discussion : Proposed to have Maximum Number of Digits as Mandatory in order to have a default value in stage 3. This however does not require 'mandatory'. String as term was discussed and preferred to substitute (or to be added after?) digit after eg cancel in the IE name table. Alignment with prompt and collect should be checked (new CR?) before any rule is decided.

Conclusion : Postponed. Revised from 037

N2-010038 : 29.078, Ericsson, Type: CR, Title: Introduction of Mid-call DP

Discussion : Where to place coding of digits etc.? Is it mid call specific criteria or mid call control info? Mid call control info as in stage 2 will be used. 'If then...' is the correct writing. GenericDigits refer to ETSI encoding rules, but the datatypes shall be referred to as digits. The modelling text need only describe what to do. Align this CR with 23.018.

Conclusion : Revised to 105

N2-010105 : 29.078, Ericsson, Type: CR, Title: Introduction of Mid-call DP

Discussion :

Conclusion : Postponed. Revised from 038

N2-010049 : 23.078, Ericsson, Type: CR, Title: FTN in forwarding notification to SCP

Discussion : The scenarios are not in stage 1 but is also not needed. Deflected to number can be transported to SCP as for FTN. Overdecadic numbers are not possible. Long Forwarded To Number is not a limitation. Should FTN also be for the no-answer situation? Yes both from GMSC and VMSC. Where the Initial DP information flow may contain the FTN was discussed.

Conclusion : Revised to 106

N2-010106 : 23.078, Ericsson, Type: CR, Title: FTN in forwarding notification to SCP

Discussion :

Conclusion : Agreed without presentation. Revised from 049. Will be available by e-mail latest Wednesday24/1-01 at 24:00

N2-010050 : 29.078, Ericsson, Type: CR,, Title: FTN in forwarding notification to SCP

Discussion : An error found, 'ChargeNumber {boud}' shall be corrected, and the missing letter shall be introduced in Tdoc 094 for CAMEL3. The rapporteur to check the tagging 51 versus 52 on page 6, which seems to be use of wrong specification version as base. Modify text to include call deflection,- also for stage 2.

Conclusion : Revised to 107

N2-010107 : 29.078, Ericsson, Type: CR,, Title: FTN in forwarding notification to SCP

Discussion :

Conclusion : Agreed without presentation. Revised from 050. Will be available by e-mail latest Wednesday24/1-01 at 24:00

7.7 MT-SMS

N2-010005 : 29.002 CR#A194R2, Nokia, Type: CR, Title: Introduction of CAMEL4 MT SMS to MAP

Discussion : CAMEL4 seems to be one initiating Rel-5 of 29.002 when submitted. The collective CR could be during late summer or fall. Some spaces to be replaced by TABs. Stage 1 uses O-SMS-CSI and T-SMS-CSI. This CR is the first CR in a collective CR to 29.002 to be updated regularly from next meeting on.

Conclusion : Agreed for the collective CR

N2-010030 : 23.078, Ericsson, Type: CR , Title: Corrections to CAMEL control of MT-SMS

Discussion : Are some of the corrections (like making conditional the Age of Location Information) also needed as usefull/essential for CAMEL3 as well ? No since these IE was not seen as important, even if MO-SMS has it mandatory. Avoiding change to R99 for this CR was preferred. Equal CAMEL3 and 4 was requested with respect to the Location Number and Age of location information, from Siemens (Alcatel to consult home). Remove the sentence: The SMS-GMSC may be co-located with the MSC or with the SMSC. Rearrangement of MO-SMS and MT-SMS is acceptable for the procedures. Leave out the IE in a revised CR

The used notation (page 18) should be consistent throughout the IF definitions, and if possible the same method used (eg, C, C1 & C2 etc., Note, general description or ...).Proposal to use C1, C2 etc. per IF local definition. Available global proposed is – (dash), C, M and O, while C1, C2 etc would be local definitions per IE. Mutual exclusive is valid within local tables ? To be aligned by the rapporteur with input from Ian P. and provided in the draft with marking.

Conclusion :Revised to 108

N2-010108 : 23.078, Ericsson, Type: CR , Title: Corrections to CAMEL control of MT-SMS

Discussion : After e-mail distribution it was agreed to postpone the CR to the next meeting since Location Number and AgeOfLocationInformation was changed to Mandatory and no change to CAMEL3 was anticipated.

Conclusion : Postponed. Revised from 030. Will be available by e-mail latest Wednesday 24/1-01 at 24:00

N2-010031 : 29.078, Ericsson, Type: CR , Title: Corrections to CAMEL control of MT-SMS

Discussion : A note to table B1 with reference to 23.040 shall be added. Table B2 left column shall change from Connect to eventReport.

Conclusion : Revised to 109

N2-010109 : 29.078, Ericsson, Type: CR , Title: Corrections to CAMEL control of MT-SMS

Discussion : See 108.

Conclusion : Postponed. Revised from 031. Will be available by e-mail latest Wednesday 24/1-01 at 24:00

7.8 Announcement

N2-010041 : 23.078, Lucent, Type: CR, Title: Introduction of flexible tones in ApplyCharing Information Flow

Discussion : Cleaning up on terminology was requested. Both the burst length and the number of bursts can be variable. The modified 043 diagram to be included.

Conclusion : Revised to 101

N2-010101 : 23.078, Lucent, Type: CR, Title: Introduction of flexible tones in ApplyCharing Information Flow

Discussion : Tie timer when playing the burst list to the end of a call period. There should be difference to the name of the IE as in the CR, and more detailed explanations given in the text. Several editorials was agreed.

Conclusion : Revised to 115. Revised from 041

N2-010115 : 23.078, Lucent, Type: CR, Title: Introduction of flexible tones in ApplyCharing Information Flow

Discussion :

Conclusion : Agreed without presentation. Revised from 101

N2-010042 : 29.078, Lucent, Type: CR, Title: Introduction of flexible tones in ApplyCharing Information Flow

Discussion : All parameters are mandatory, but what shall the interval be if the number of tone or burst is only 1 ? Proposed solution is to have the tone and burst intervals starting from 0, or made optional. Optional was preferred, and proposed also to state default values for the remaining parameters. Renaming 'tone' to 'number of tones per burst'. A proposal to set default values in a way to avoid the tone parameters was not supported. To have backward compatibility the double tagging should be avoided,- new economical ta. Also proposed to have 2 parameters where one is 'the traditional' tone understood by MSC as today and another new burstlist parameter. One parameter with choice was the other way. New reasonable max values to be proposed.

Conclusion : Revised to 102

N2-010102 : 29.078, Lucent, Type: CR, Title: Introduction of flexible tones in ApplyCharing Information Flow

Discussion : Take all stage 2 comments into account. Values for default needs more discussion.

Conclusion : Postponed. Revised from 042

N2-010043 : Lucent, Type: DISC , Title: Discussion document on the introduction of flexible tones in ApplyCharing Information Flow

Discussion : It should run to the beginning of the next burst in the diagram. A proper picture in one dimension is proposed in either 22.078 or 23.078 (preferred). One applied charging applies to only one burst list was intended by Lucent? The tone and burst service requirements from stage 1 is used as guidance. Tone burst list is meant to be burst list. Health warning to service designers about choosing proper parameter values.

Conclusion : Noted

8 Maintenance of earlier CAMEL phases

No business on this issue.

8.1 CAMEL phase 1

No business on this issue.

8.2 CAMEL phase 2

No business on this issue.

Review of dates and hosts for future meetings

Any ad-hoc needed for eg. Call Party Handling as a whole during this spring/summer? Delegates expressed views that it could be usefull but against the principal of no extra meetings apart from CN2 plenaries already agreed. During last full week of April was the possible date. 3-5/4-2001 was agreed.

Meeting schedule for 2001

3GPP Meeting	Date	Place	Host
N2#16	15-19 January 2001	Beijing, China	Ericsson, China
N2#17	26 February –2 March 2001	Sophia Antipolis	ETSI
TSG#11	14-22 March 2001	USA, Palm Springs	T1P1
<u>N2-ad hoc (CPH for CAMEL4)</u>	<u>3-5 April</u>	<u>?</u>	<u>?</u>
N2#18	14-18 May 2001	USA	
TSG#12	13-21 June 2001	Stockholm, Sweden	Ericsson
N2#19	09-13 July 2001	Dusseldorf Dresden, Germany	Mannesmann
TSG#13	26 Sep – 4 Oct 2001	Beijing, China	Lucent Technologies, CWTS
N2#20	15-19 October 2001	UK	Vodafone, BT
N2#21	26-30 November 2001	T.B.D	T.B.D
TSG#14	12-20 December 2001	T.B.D <u>Kyoto, Japan</u>	T.B.D

10 Closing of the meeting (16:00 Friday)

The chairman delayed the predecided meeting with ½ hour in accordance with meetings agreement. Contributions which could not be finalized in this meeting is postponed, but can be dealt with in the next meeting CN2#17 in Sophia Antipolis by requesting a Tdoc number with a Request sheet.

Then he thanked the host Ericsson for well arranged meeting facilities and a splendid social event. And of course the participants for contributions and discussions as well as for the MCC support.

Annex A Participants list

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Annex B Output Documents

Agreed Change Requests for CAMEL Phase 3

TDoc #	Spec	CR	Rev	Cat	Versio	Title	Type	WI	Rel	Conclusio
N2-010009	23.078	257		F	3.7.0	Update of References	CR	CAMEL3	R99	Agreed
N2-010084	23.078	258	1	F	3.7.0	Hand-over indication for GPRS	CR	CAMEL3	R99	Agreed
N2-010086	23.078	259	1	F	3.7.0	Description of Entity Released GPRS	CR	CAMEL3	R99	Agreed
N2-010095	23.078	260	1	F	3.7.0	Correction to description of 'O-CSI Applicable' parameter	CR	CAMEL3	R99	Agreed
N2-010079	23.078	261	1	F	3.7.0	Restriction on SS-CSI to VLR - no marking for CCBS	CR	CAMEL3	99	Agreed
N2-010089	23.078	263	1	F	3.7.0	No Volume charging on GPRS Session (clarifying text)	CR	CAMEL3	R99	Agreed
N2-010114	23.078	264	2	F	3.7.0	Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.	CR	CAMEL3	R99	Agreed
N2-010081	23.078	267	1	F	3.7.0	Usage of MSISDN for CAMEL - USSD Information Flows	CR	CAMEL3	R99	Agreed
N2-010082	23.078	268	1	F	3.7.0	Correction of error implementing CR 23.078-118r2	CR	CAMEL3	R99	Agreed
N2-010092	23.078	270	1	F	3.7.0	Clarification of APN change in PDP Context Established	CR	CAMEL3	R99	Agreed
N2-010093	23.078	271	1	F	3.7.0	Correction on GPRS related information flows	CR	CAMEL3	R99	Agreed

N2-010083	29.078	138	1	F	3.6.0	Inconsistency between InitialDPGPRS procedure and generic GPRS procedure	CR	CAMEL3	R99	Agreed
N2-010112	29.078	139	2	F	3.6.0	Hand-over indication for GPRS	CR	CAMEL3	R99	Agreed
N2-010087	29.078	140	1	F	3.6.0	Description of Entity Released GPRS	CR	CAMEL3	R99	Agreed
N2-010096	29.078	141	1	F	3.6.0	Correction to description of 'O-CSI Applicable' parameter	CR	CAMEL3	R99	Agreed
N2-010088	29.078	142	1	F	3.6.0	Correction to LocationInformationGPRS	CR	CAMEL3	R99	Agreed
N2-010113	29.078	143	2	F	3.6.0	No Volume charging on GPRS Session (clarifying text)	CR	CAMEL3	R99	Agreed
N2-010094	29.078	145	1	F	3.6.0	Correction to MO-SMS	CR	CAMEL3	R99	Agreed
N2-010100	29.078	147	1	F	3.6.0	Correction on GPRS related operation	CR	CAMEL3	R99	Agreed
N2-010091	29.078	148	1		3.6.0	Correction to MSNetwork Capability parameter length	CR	CAMEL3	R99	Agreed

CRs for e-mail agreement

No business on this issue.

N4 Documents Endorsed by N2

TDoc #	Spec	CR	Rev	Cat	Versio	Title	Type	WI	Rel	Conclusio
N2-010033	29.002			F	3.7.0	Adding EXPORT definition for LSAIdentity	CR	CAMEL3	R99	Endorced

N2-010080	29.00 2			F	3.7.0	Restriction on SS-CSI to VLR - no marking for CCBS	CR	CAMEL3	99	Endorced
N2-010078	29.00 2			F	3.7.0	Removing duplicate parameters from SS-CSI	CR	CAMEL3	R99	Endorced

Approved Liaison Statement

TDoc #	Spec	CR	Rev	Cat	Versio	Title	Type	WI	Rel	Conclusio
N2-010111						LS "Support of earlier CAMEL phases"	LS OUT	CAMEL3		Agreed

Agreed and endorced Change Requests for CAMEL Phase 4

TDoc #	Spec	CR #	Rev	Rel	Versio n	Title	Cat	Conclusio n	WI
N2-010115	23.07 8			Rel-5		Introduction of flexible tones in ApplyCharing Information Flow		Agreed	CAMEL4
N2-010106	23.07 8			Rel-5	3.7.0	FTN in forwarding notification to SCP	B	Agreed	CAMEL4
N2-010005	29.00 2	A19 4	2	R99	3.5.2	Introduction of CAMEL4 MT SMS to MAP	B	Agreed	CAMEL4
N2-010107	29.07 8			Rel-5	3.6.0	FTN in forwarding notification to SCP	B	Agreed	CAMEL4
TDoc #	Spec	CR #	Rev	Rel	Versio n	Title	Cat	Conclusio n	WI
N2-010011	23.07 9	016	2	Rel-5	3.6.0	CAMEL support for OR	B	Endorced	CAMEL4

Annex C List of Documents

TDoc #	Type	Title	Source	WI	CR #	Rev	Cat	Spec	Rel	Versio n	Conclusio n
N2-010001	AGE NDA	proposed agenda	CN2 chairman	-				-			Noted

N2-010002	AGE NDA	proposed document allocation	CN2 chairman	-				-			Agreed
N2-010003	CR	Clarification on APN usage in the ConnectGPRS operation	Nokia	CAMEL3	256		F	23.078	R99	3.7.0	Postponed
N2-010004	CR	Clarification on APN usage in the ConnectGPRS operation	Nokia	CAMEL3	137		F	29.078	R99	3.6.0	Postponed
N2-010005	CR	Introduction of CAMEL4 MT SMS to MAP	Nokia	CAMEL4	A194	2	B	29.002	R99	3.5.2	Agreed
N2-010006	CR	Inconsistency between InitialDPGPRS procedure and generic GPRS procedure	Nokia	CAMEL3	138		F	29.078	R99	3.6.0	Revised to 083
N2-010007	CR	Introduction of CAMEL Phase 4	Vodafone	CAMEL4		1	B	23.018	Rel-5	4.1.0	Postponed
N2-010008	CR	Change of name: Process gsmSSF to Process CS_gsmSSF	Vodafone	CAMEL4			D	23.078	Rel-5	x.4.2	Postponed
N2-010009	CR	Update of References	Vodafone	CAMEL3	257		F	23.078	R99	3.7.0	Agreed
N2-010010	CR	Introduction of CPH operations	Vodafone	CAMEL4			B	23.078	Rel-5	x.4.2	Postponed
N2-010011	CR	CAMEL support for OR	CN4	CAMEL4	016	2	B	23.079	Rel-5	3.6.0	Endorced
N2-010012	CR	Introduction of CPH operations	Vodafone	CAMEL4			B	23.018	Rel-5	4.1.0+	Postponed
N2-010013	DISC	CPH Modelling	Vodafone	CAMEL4					Rel-5		Noted
N2-010014	CR	Hand-over indication for GPRS	Ericsson	CAMEL3	258		F	23.078	99	3.7.0	Revised to 084
N2-010015	CR	Hand-over indication for GPRS	Ericsson	CAMEL3	139		F	29.078	99	3.6.0	Revised to 085
N2-010016	CR	Description of Entity Released GPRS	Ericsson	CAMEL3	259		F	23.078	99	3.7.0	Revised to 086
N2-010017	CR	Description of Entity Released GPRS	Ericsson	CAMEL3	140		F	29.078	99	3.6.0	Revised to 087

N2-010018	CR	Correction to description of 'O-CSI Applicable' parameter	Ericsson	CAMEL3	260		F	23.078	R99	3.7.0	Revised to 095
N2-010019	CR	Correction to description of 'O-CSI Applicable' parameter	Ericsson	CAMEL3	141		F	29.078	R99	3.6.0	Revised to 096
N2-010020	CR	Restriction on SS-CSI to VLR - no marking for CCBS	Ericsson	CAMEL3	261		F	23.078	R99	3.7.0	Revised to 079
N2-010021	CR	Restriction on SS-CSI to VLR - no marking for CCBS	Ericsson	CAMEL3			F	29.002	R99	3.7.0	Revised to 080
N2-010022	CR	Correction of Process CSA_gsmSSF	Alcatel	CAMEL4			F	23.078	Rel-5	X.4.2	Postponed
N2-010023	CR	Correction of Process CAMEL_Subsequent_CS_MSC	Alcatel	CAMEL4			F	23.078	Rel-5	X.4.2	Postponed
N2-010024	CR	Introduction of gsmSCF initiated new calls: SIC process	Alcatel	CAMEL4			2 B	23.078	Rel-5	X.4.2	Postponed
N2-010025	CR	Addition of Initiate New Call handling for Process CSA_gsmSSF	Alcatel	CAMEL4			B	23.078	Rel-5	X.4.2	Postponed
N2-010026	CR	Introduction of the Initiate Call Attempt and Continue With Argument Information Flow	Alcatel	CAMEL4			2 B	23.078	Rel-5	X.4.2	Postponed
N2-010027	CR	Interfaces and modelling for gsmSCF initiated new calls and parties	Alcatel	CAMEL4			2 B	23.078	Rel-5	X.4.2	Postponed
N2-010028	WID	Proposed Work Item Description for Release 4: ODB (Operator Determined Barring) for PS domain	NEC	ODB							Withdrawn
N2-010029	CR	Add new ODB data for the PS Domain in ATSI and NSDC IFs	NEC	ODB	262		B	23.078	Rel-4	3.7.0	Withdrawn
N2-010030	CR	Corrections to CAMEL control of MT-SMS	Ericsson	CAMEL4			F	23.078	Rel-5		Revised to 108
N2-010031	CR	Corrections to CAMEL control of MT-SMS	Ericsson	CAMEL4			F	29.078	Rel-5		Revised to 109
N2-010032	CR	Removing duplicate parameters from SS-CSI	Ericsson	CAMEL3			F	29.002	R99	3.7.0	Revised to 078
N2-010033	CR	Adding EXPORT definition for LSAIdentity	Ericsson	CAMEL3			F	29.002	R99	3.7.0	Endorced

N2-010034	CR	Correction to LocationInformationGPRS	Ericsson	CAMEL3	142		F	29.078	R99	3.6.0	Revised to 088
N2-010035	CR	No Volume charging on GPRS Session (clarifying text)	Ericsson	CAMEL3	263		F	23.078	R99	3.7.0	Revised to 089
N2-010036	CR	No Volume charging on GPRS Session (clarifying text)	Ericsson	CAMEL3	143		F	29.078	R99	3.6.0	Revised to 090
N2-010037	CR	Introduction of Mid-call DP	Ericsson	CAMEL4			B	23.078	Rel-5	3.7.0	Revised to 104
N2-010038	CR	Introduction of Mid-call DP	Ericsson	CAMEL4			B	29.078	Rel-5	3.6.0	Revised to 105
N2-010039	CR	Introduction of CAP over IP for Core Network release R4	Ericsson	SS7IP	144		B	29.078	Rel-4	3.6.0	Revised to 073
N2-010040	DISC	The need for SDL source files	Vodafone								Noted
N2-010041	CR	Introduction of flexible tones in ApplyCharing Information Flow	Lucent Technologies	CAMEL4				23.078	Rel-5		Revised to 101
N2-010042	CR	Introduction of flexible tones in ApplyCharing Information Flow	Lucent Technologies	CAMEL4				29.078	Rel-5		Revised to 102
N2-010043	DISC	Discussion document on the introduction of flexible tones in ApplyCharging Information Flow	Lucent Technologies	CAMEL4				N/A			Noted
N2-010044	CR	Correction to MSNetwork Capability parameter length	Lucent Technologies	CAMEL3	148			29.078	R99		Revised to 091
N2-010045	DISC	Support of Legacy services in IMS	Lucent Technologies	CAMEL4				N/A			Withdrawn
N2-010046	LSIN	Response to Liaison Statement on IPT Basic Call Handling	CN1								Noted
N2-010047	LSIN	Camel Phase 1 Support in Phase 2 further assumptions	SA1								Noted
N2-010048	LSIN	Support for prepaid in MMS	T2								Noted
N2-010049	CR	FTN in forwarding notification to SCP	Ericsson	CAMEL4			B	23.078	Rel-5	3.7.0	Revised to 106
N2-010050	CR	FTN in forwarding notification to SCP	Ericsson	CAMEL4			B	29.078	Rel-5	3.6.0	Revised to 107

N2-010051	CR	Correction to MO-SMS	Ericsson	CAMEL3	265		F	23.078	R99	3.70	Withdrawn
N2-010052	CR	Correction to MO-SMS	Ericsson	CAMEL3	145		F	29.078	R99	3.6.0	Revised to 094
N2-010053	CR	Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.	Alcatel	CAMEL3	264		F	23.078	R99	3.7.0	Revised to 097
N2-010054	CR	Using SGSN for Hand-over indication to Detach and Disconnect	Siemens	CAMEL3	266		F	23.078	R99	3.7.0	Withdrawn
N2-010055	CR	Using SGSN for Hand-over indication to Detach and Disconnect	Siemens	CAMEL3	146		F	29.078	R99	3.6.0	Withdrawn
N2-010056	Work Plan	3GPP Workplan status before CN2#16	MCC								Noted
N2-010057	DISC	Support of CAMEL phase N	Alcatel	CAMEL3				22.078	R99		Noted
N2-010058	CR	23.008 Collective phase4 CR	Alcatel	CAMEL4				23.008	R99		Revised to 075
N2-010059	REPORT	Draft Report TSG CN WG2#15, Paris	MCC								Agreed
N2-010060	REPORT	Draft Report TSG CN#10, Bangkok	MCC								Noted
N2-010061	REPORT	Draft Report TSG SA#10, Bangkok	MCC								Noted
N2-010062	CR	Usage of MSISDN for CAMEL - USSD Information Flows	Ericsson	CAMEL3	267		F	23.078	R99	3.7.0	Revised to 081
N2-010063	CR	Correction of error implementing CR 23.078-118r2	Rapporteur	CAMEL3	268		F	23.078	R99	3.7.0	Revised to 082
N2-010064	CR	Correction of reference	Siemens	CAMEL3	269		F	23.078	R99	3.7.0	Revised to 070
N2-010065	CR	Clarification of APN change in PDP Context Established	Siemens	CAMEL3	270		F	23.078	R99	3.7.0	Revised to 092
N2-010066	CR	Correction on GPRS related information flows	Siemens	CAMEL3	271		F	23.078	R99	3.7.0	Revised to 093
N2-010067	CR	Correction on GPRS related operation	Siemens	CAMEL3	147		F	29.078	R99	3.6.0	Revised to 100

N2-010068	TS	Draft 23.078 (R00) Vx.4.2	Rapporteur	CAMEL4							Agreed
N2-010069	DISC	Reference handling in CAMEL3 and CAMEL4	Siemens	CAMEL3/4							Noted
N2-010070	CR	Correction of reference	Siemens	CAMEL3	269	1	F	23.078	R99	3.7.0	Revised to 098
N2-010071	CR	Correction of reference for CAMEL phase 4	Siemens	CAMEL4				23.078	Rel-5	x.4.2	Revised to 099
N2-010072	INFO	Tdoc list before CN2#16 starts	MCC								Noted
N2-010073	CR	Introduction of 'CAP over IP in accordance with SIGTRAN'	Ericsson	SS7 IP	144	1	B	29.078	Rel-4	3.6.0	Rejected
N2-010074	DISC	CPH Modelling evaluation	Alcatel	CAMEL4				23.078	Rel-5	X.4.2	Noted
N2-010075	CR	23.008 Collective phase4 CR	Alcatel	CAMEL4				23.008	R99		Noted
N2-010076	LS OUT	LS "Support of earlier CAMEL phases"	Alcatel	CAMEL3							Revised to 111
N2-010077	Work Plan	Progress of CAMEL work, changes to Work plan status	Chairman								Agreed
N2-010078	CR	Removing duplicate parameters from SS-CSI	Ericsson	CAMEL3			F	29.002	R99	3.7.0	Endorced
N2-010079	CR	Restriction on SS-CSI to VLR - no marking for CCBS	Ericsson	CAMEL3	261	1	F	23.078	99	3.7.0	Agreed
N2-010080	CR	Restriction on SS-CSI to VLR - no marking for CCBS	Ericsson	CAMEL3			F	29.002	99	3.7.0	Endorced
N2-010081	CR	Usage of MSISDN for CAMEL - USSD Information Flows	Ericsson	CAMEL3	267	1	F	23.078	R99	3.7.0	Agreed
N2-010082	CR	Correction of error implementing CR 23.078-118r2	Rapporteur	CAMEL3	268	1	F	23.078	R99	3.7.0	Agreed
N2-010083	CR	Inconsistency between InitialDPGPRS procedure and generic GPRS procedure	Nokia	CAMEL3	138	1	F	29.078	R99	3.6.0	Agreed
N2-	CR	Hand-over indication for GPRS	Ericsson	CAME	258	1	F	23.07	R99	3.7.0	Agreed

010084				L3				8			
N2-010085	CR	Hand-over indication for GPRS	Ericsson	CAMEL3	139	1	F	29.078	R99	3.6.0	Revised to 112
N2-010086	CR	Description of Entity Released GPRS	Ericsson	CAMEL3	259	1	F	23.078	R99	3.7.0	Agreed
N2-010087	CR	Description of Entity Released GPRS	Ericsson	CAMEL3	140	1	F	29.078	R99	3.6.0	Agreed
N2-010088	CR	Correction to LocationInformationGPRS	Ericsson	CAMEL3	142	1	F	29.078	R99	3.6.0	Agreed
N2-010089	CR	No Volume charging on GPRS Session (clarifying text)	Ericsson	CAMEL3	263	1	F	23.078	R99	3.7.0	Agreed
N2-010090	CR	No Volume charging on GPRS Session (clarifying text)	Ericsson	CAMEL3	143	1	F	29.078	R99	3.6.0	Revised to 113
N2-010091	CR	Correction to MSNetwork Capability parameter length	Lucent Technologies	CAMEL3	148	1		29.078	R99	3.6.0	Agreed
N2-010092	CR	Clarification of APN change in PDP Context Established	Siemens	CAMEL3	270	1	F	23.078	R99	3.7.0	Agreed
N2-010093	CR	Correction on GPRS related information flows	Siemens	CAMEL3	271	1	F	23.078	R99	3.7.0	Agreed
N2-010094	CR	Correction to MO-SMS	Ericsson	CAMEL3	145	1	F	29.078	R99	3.6.0	Agreed
N2-010095	CR	Correction to description of 'O-CSI Applicable' parameter	Ericsson	CAMEL3	260	1	F	23.078	R99	3.7.0	Agreed
N2-010096	CR	Correction to description of 'O-CSI Applicable' parameter	Ericsson	CAMEL3	141	1	F	29.078	R99	3.6.0	Agreed
N2-010097	CR	Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.	Alcatel	CAMEL3	264	1	F	23.078	R99	3.7.0	Revised to 114
N2-010098	CR	Correction of reference	Siemens	CAMEL3	269	2	F	23.078	R99	3.7.0	Postponed
N2-010099	CR	Correction of reference for CAMEL phase 4	Siemens	CAMEL4				23.078	Rel-5	x.4.2	Postponed
N2-	CR	Correction on GPRS related	Siemens	CAME	147	1	F	29.07	R99	3.6.0	Agreed

010100		operation		L3				8			
N2-010101	CR	Introduction of flexible tones in ApplyCharing Information Flow	Lucent Technologies	CAMEL4				23.078	Rel-5		Revised to 115
N2-010102	CR	Introduction of flexible tones in ApplyCharing Information Flow	Lucent Technologies	CAMEL4				29.078	Rel-5		Postponed
N2-010103	DISC	Open issues on CAMEL control of GPRS	Ericsson	CAMEL3					R99		Noted
N2-010104	CR	Introduction of Mid-call DP	Ericsson	CAMEL4			B	23.078	Rel-5	3.7.0	Postponed
N2-010105	CR	Introduction of Mid-call DP	Ericsson	CAMEL4			B	29.078	Rel-5	3.6.0	Postponed
N2-010106	CR	FTN in forwarding notification to SCP	Ericsson	CAMEL4			B	23.078	Rel-5	3.7.0	Agreed
N2-010107	CR	FTN in forwarding notification to SCP	Ericsson	CAMEL4			B	29.078	Rel-5	3.6.0	Agreed
N2-010108	CR	Corrections to CAMEL control of MT-SMS	Ericsson	CAMEL4			F	23.078	Rel-5		Postponed
N2-010109	CR	Corrections to CAMEL control of MT-SMS	Ericsson	CAMEL4			F	29.078	Rel-5		Postponed
N2-010110	INFO	Corrections to CAMEL4 support of OR	Vodafone	CAMEL3							Postponed
N2-010111	LS OUT	LS "Support of earlier CAMEL phases"	Alcatel	CAMEL3							Agreed
N2-010112	CR	Hand-over indication for GPRS	Ericsson	CAMEL3	139		2 F	29.078	R99	3.6.0	Agreed
N2-010113	CR	No Volume charging on GPRS Session (clarifying text)	Ericsson	CAMEL3	143		2 F	29.078	R99	3.6.0	Agreed
N2-010114	CR	Correction of "Call Forwarding Notification" feature in CAMEL Phase 3.	Alcatel	CAMEL3	264		2 F	23.078	R99	3.7.0	Agreed
N2-010115	CR	Introduction of flexible tones in ApplyCharing Information Flow	Lucent Technologies	CAMEL4				23.078	Rel-5		Agreed