

3GPP TSG-CN Meeting #23**NP-040088**

10th - 12th March 2004, Phoenix, USA

Source: MCC
Title: CN2#32 Draft Meeting Report
Agenda item: 6.2.1
Document for: INFORMATION

DRAFT Meeting Report, version 0.0.2**TSG CN WG2#32****Atlanta, USA****16-20 February, 2004**

Chairman: Keijo Palviainen (Nokia)

MCC support: Andrijana Jurisic(ETSI)

Hosts: American Friends of 3GPP

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_32_Atlanta/Docs

1 Opening of the meeting and approval of the agenda

N2-040001: CN2 chairman, Title: Proposed meeting agenda

Discussion:

Conclusion: approved

2 Allocation of documents to agenda items

N2-040002: CN2 chairman, Title: Allocation of documents to agenda items

Discussion: The document is updated during the meeting.

Conclusion: approved

3 Reports

N2-040003: MCC, Title: Draft Meeting Report from CN2#31

Discussion :

Conclusion: approved

N2-040004: MCC, Title: Draft Meeting Report from CN#22

Discussion: TSG#22 requested that the part of the CR which is “for information” is included in the cover page of the CR, rather than in the body of the CR. CN2 concluded that CRs will be checked case by case. CN2 is not aware of Rel-6 freezing date, therefore we can still approve functional modifications for Rel-6.

Conclusion: noted

4 Input Liaison Statements

N2-040005: Source: CN4, Type: LS IN , Title: Reply on “Trace Management”

Discussion: One specific question that needs clarification is that in the list of interfaces there is CAP protocol listed for SGSN (but not for MSC Server). There does not seem to be any triggering events for CAP protocol listed. CN4 would like to ask clarification from SA5 about the need to trace CAP protocol and also to inform that if CAP protocol needs to be traced then CN2, as a responsible group for CAP protocol, would need to be involved in the discussions.

Conclusion: noted

N2-040010: Source: SA5, Type: LS IN , Title: Reply LS on Trace Management

Discussion: SA5 SWGA agreed that CAP protocol needs to be added to the “list of interfaces” parameter in the MSC Server, but SA5 SWGA do not think that any triggering event needs to be defined for CAP protocol. Furthermore, SA5 SWGA agreed that no changes are needed in CAP protocol due to trace functionality (I.e. no propagation of trace parameters over the CAP interface is needed).

There was no action on CN2. CN2 will verify during the joint meeting with CN4 that CN2 is not involved in this work. It was concluded later that there is no requirement on trace management to involve CAP.

Conclusion: noted

N2-040006: Source: SA1, Type: LS IN , Title: Reply to LS on Clarification on Presence Service Matters (S1-031072;N4-031062)

Discussion: SA1 accepts that technical specification work outside the scope of SA1 may include dependence on other functionalities e.g. CAMEL Phase 4. While SA1 does require interoperability in general, there is no specific requirement for the independence of Presence Service with regard to other 3GPP functionalities within Rel-6.

There is no requirement from SA1 to implement Presence Service without CAMEL. SSN for gsmSCF is used, therefore no change needed in CAMEL specs.

Conclusion: *noted during the discussion in joint meeting with CN4.*

N2-040007: Source: SA2, Type: LS IN , Title: LS Response on Presence Service Matters

Discussion: CN4 asks whether or not a new Sub-System Number (SSN) should be allocated to the PNA or whether it can share the same SSN as the gsmSCF.

The Presence Network Agent is defined as a logical entity which can be co-located with another logical entity in the same physical node and share the same MAP interface.

To discuss with CN4 during joint meeting: Presence by CAMEL or by MAP?

MAP notification is used with SSN=gsmSCF code point.

Conclusion: *noted*

N2-040009: Source: SA2, Type: LS IN , Title: LS on IP Flow Based Bearer Level Charging

Discussion: SA 2 invite CN 2 to check whether the information flows in the attached CR provide sufficient functionality for moving any relevant non-prepay related CAMEL information to the GGSN.

All the IEs added in the CDRs are related to pre-pay CAMEL information. It was asked why non-prepay related information needs to be conveyed and what is non-prepay related CAMEL information?

It was asked whether there is any information flow taking place in the later stage of PDP context where from other relevant information could be transferred to GGSN? If there is any information to be reported to GGSN, they should be in GTP messages.

It seems that CreatePDPContextRequest is send before S-CDR CAMEL information is available (e.g. free format charging data). At "C2" triggering (section 9.2.2.9.1), there is no CAMEL information available. If we should convey information, then it should be in release messages.

Question for clarification forwarded to SA2 is also why CAP v3 data needs to be conveyed to GGSN?

Conclusion: *noted, reply to SA2 is in N2-040098*

N2-040098: Source: CN2, Type: LS OUT to SA2, Title: LS on IP Flow Based Bearer Level Charging

CN2 has checked the information flows in the associated CR (S2-040488) and has concluded that some of the relevant non-prepay related CAMEL information will be not be provided to the GGSN by this mechanism.

In particular, the Create PDP Context Request is sent before all of the required charging data is present. In the procedure CAMEL_GPRS_PDP_Context_Establishment_Acknowledgement (3GPP TS 23.078) triggering takes place after this request is sent. (see C2 in section 9.2.2.1.1 of 3GPP TS 23.060).

In addition, some S-CDR CAMEL information fields become available during CAP dialogue (e.g. free format charging data, default GPRS handling etc).

CN2 has therefore identified an alternative solution based on the transfer of all relevant information via the GTP Delete PDP Context Request message from SGSN to GGSN. CN2 does not know if this is feasible from the GTP point of view.

CN2 also asks SA2 why information relating to the CAP v3 dialogue at the SGSN needs to be transported to the GGSN. If charging is taking place at the GGSN it will not be taking place at the SGSN. CN2 asks SA2 to clarify what the value of transporting this information to the SGSN is.

Discussion: It was commented that operators would generate CDRs in the GGSN and they want to convey more information from SGSN to GGSN in order to have all the information in GGSN.

CN2 should inform SA2 that all the information is available after CAMEL_GPRS_PDP_Context_Disconnection Procedure. The specific reference to this procedure will be added.

Conclusion: *revised to N2-040110*

N2-040110 is approved and and is sent to SA2 during the meeting. The LS was handled during the SA2 meeting and noted.

N2-040087: Source: GSMA IREG, Type: LS IN , Title: LS to 3GPP CN2 on requirement for video telephony

Discussion: GSMA IREG believes that the inclusion of the LLC (UILIP) in the IDP is a possible solution for a successful video telephony termination procedure when video telephony is deduced in the gsmSCF. IREG kindly asks CN2 to review the video telephony interworking issue and provide a solution from the earliest CAMEL phase possible.

LLC always comes from the calling mobile in video call. Alcatel proposed that GMSC copies LLC to USI in IDP. The problem exists with the data call. The basic service is sent in "SRI acknowledgement" which has optional parameter Basic Service Code. Multi-numbering scheme means that BaSC is available.

Working assumption: CN2 agreed to define the LLC parameter in the CAP_initialDP from Rel-5 and onwards (i.e. CAMEL phase 4). It was noted that problem exists only when single numbering scheme is used and the incoming call is either an international call, or domestic call from an analogue line. In the multi-numbering scheme the HLR returns the basic service code to the GMSC and the basic service code is then reported to the gsmSCF.

Conclusion: noted, reply LS is sent to GSMA IREG in N2-040104

N2-040104: LS OUT, To: GSMA IREG, Title: Reply to LS on requirement for video telephony

In the Reply LS, it is indicated that CN2 decided to change Rel-5 specification. It is described how the problem could be solved in pre-release 5 networks.

Conclusion: revised to N2-040161 which was approved

5 Work item management & miscellaneous

Status of CN2 specifications and drafts

Type	Number	Title	Rel	current vers	WG	rapporteur
TS	03.78	CAMEL Phase 1; Stage 2	R1996	5.8.0	N2	LANTELME, Isabelle
TS	03.78	CAMEL Phase 2; Stage 2	R1997	6.11.0	N2	LANTELME, Isabelle
TS	03.78	CAMEL Phase 2; Stage 2	R1998	7.8.0	N2	LANTELME, Isabelle
TS	09.78	CAMEL Application Part phase 1 (stage 3)	R1996	5.7.0	N2	NOLDUS, Rogier
TS	09.78	CAMEL Application Part phase 2 (stage 3)	R1997	6.5.0	N2	NOLDUS, Rogier
TS	09.78	CAMEL Application Part phase 2 (stage 3)	R1998	7.1.0	N2	NOLDUS, Rogier
TR	21.978	Feasibility Technical Report – CAMEL Control of VoIP Services	R1999	3.0.0	N2	SMITH, David
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	R1999	3.18.0	N2	HOMANN, Christian
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	Rel-4	4.10.0	N2	HOMANN, Christian
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	R1999	3.15.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	Rel-4	4.8.0	N2	NOLDUS, Rogier
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-5	5.6.0	N2	SUMIO, Myagava
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-6	6.0.0	N2	SUMIO, Myagava

TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-5	5.6.1	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-6	6.0.0	N2	NOLDUS, Rogier
TS	23.278	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2; IM CN Interworking	Rel-5	5.5.0	N2	Angelica Remoquillo
TS	29.278	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4; CAMEL Application Part (CAP) specification for IP Multimedia Subsystems (IMS)	Rel-5	5.2.0	N2	Angelica Remoquillo

5.1 IPR call reminder

The attention of the members of this Technical Specification Group is drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.

The members take note that they are hereby invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
- to notify the Director-General, or the Chairman of their respective Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms (e.g. see the ETSI IPR forms <http://webapp.etsi.org/lpr/>).

An IPR declaration was announced by the chairman. IPRs do not need to be declared at the WG meeting but should go to the respective organization.

5.2 Work Item (WI) status review

N2-040008: Source: MCC, Type: Work plan, Title: Latest version of the Work plan

Discussion: The work item SCCAMEL (SCUDIF-CAMEL) will be added to the work plan and marked as completed.

Conclusion: noted

5.3 Meeting calendar of year 2004

5.4 Terms of reference

6 Maintenance of earlier CAMEL phases

6.1 CAMEL phase 1

6.2 CAMEL phase 2

N2-040076: TS 03.78, R98, CR#A174, Source: NTT DoCoMo, NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Summary: The gsmSCF determines the bearer service from the Bearer Capability (BC) in the initialDP which is mapped from USI in IAM. But when the USI is not transferred transparently through the international carrier, the gsmSCF cannot determine the bearer service from the BC.

Discussion: To overcome this problem, this CR specifies the LLC parameter in the initialDP.

What is meant by ISDN bearer service in this document? LLC could be marked as “-“ (not mandatory) as existing CAMEL services would not work. In the cover page, test specifications are not affected. It should be indicated that this correction is required for any non-speech call and that should be explained in the reason for change.

The problem appears for incoming data call if we don't apply multinumering data scheeme (NTT DoCoMo uses single numbering). If incoming call is enything else than TS11 then user interaction should not be applied.

If we change R98, R97 has to be changed as well. Some companies would accept this change for R99 onwards. Alcatel, Ericsson and Nokia would like to have this from Rel-5 onwards. If we standardize this in Rel-5, operators can cooperate with vendors to introduce this in earlier releases.

It was cocncluded to introduce this change from Rel-5 onwards.

Conclusion: rejected

N2-040081: TS 09.78, R98, CR#A079, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion:

Conclusion:rejected

N2-040077: TS 23.078, R99, CR#690, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: As the change is accepted from Rel-5 onwards, this change to R99 is rejected.

Conclusion:rejected

N2-040082: TS 29.078, R99, CR#353, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: As the change is accepted from Rel-5 onwards, this change to R99 is rejected.

Conclusion:rejected

N2-040078: TS 23.078, Rel-4, CR#691, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: As the change is accepted from Rel-5 onwards, this change to Rel-4 is rejected.

Conclusion:rejected

N2-040083: TS 29.078, Rel-4, CR#354, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion:

Conclusion: rejected

N2-040079: TS 23.078, Rel-5, CR#692, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: The subcategory of the CR is essential correction as CRs to earlier releases are rejected. Term ISDN-bearer service is not a proper term. The cover page shall indicate that this applies to every data call, not only to video call.

Consequences if not approved should specify that some international and domestic calls from analog line will fail in case of single numbering.

It was questioned whether we need need a second LLC for SCUDIF in Rel-5 and how SCUDIF is correlated with Q.767? LLC can to be copied to BCIE of IDP? Ericson would preffers to have separate pareameter. It was concluded to have separate parameters.

Conclusion: revised to N2-040102

N2-040102: TS 23.078, Rel-5, CR#692r1, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: If the Low Layer Compatibility relates to less preferred service, what indicates the later service? In the ISUP message there is "Access Transport". Mobile sends only one LLC and it is conveyed in "Access Transport". ISUP coding is decisive how we want to change CAP protocol.

In SCUDIF call MSC would need to check for which service LLC relates. Ericsson, Nokia and Alcatel are in favor of 2 separate parameters: LLC and LLC2. In ASN.1 both are optional. In SDL we can define that LLC refers to preferred service and LLC2 to less preferred service.

It is concluded to have 2 LLC parameters. The wording in the CR has to be changed. High Layer Compatibility issue is a separate matter.

Conclusion: revised to N2-040162

N2-040162: TS 23.078, Rel-5, CR#692r2, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: The sentence describing the High Layer Compatibility 2 is missing to specify that it is related to "preferred" service. "Compability" needs to be spelled correctly.

It was proposed to specify that High Layer Compatibility 2 indicates the high layer compatibility of the less preferred service for a SCUDIF call. The other part of the description is deleted.

Information element "High Layer Compatibility" indicates high layer compatibility of the preferred service for a SCUDIF call.

IT was proposed by Ericsson to group information elements that are related each to other in the same part of the table. The meeting agreed to reorganize the table with information elements for the IDP.

Reason for change and summary of change shall reflect the content of the CR. Consequences if not approved shall be improved. Title shall also describe the problem CR is trying to resolve. Title will be improved in the revised version.

Conclusion: revised to N2-040167

N2-040167: TS 23.078, Rel-5, CR#692r3, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: The description of the Ext Basic Service Code shall be corrected.

Conclusion: revised to N2-040172

N2-040172 was approved without presentation as CR#692r4.

N2-040080: TS 23.078, Rel-6, CR#693, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: This is Rel-6 mirror CR of the CR#692r4.

Conclusion: revised to N2-040173

N2-040173 was approved without the presentataion as CR#693r1.

N2-040084: TS 29.078, Rel-5, CR#355, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: It was concluded to have separate LLC parameter for SCUDIF in Rel-5. It should be specified how it interworks with SCUDIF .

MAXIMUM-FOR-LOW-LAYER-COMPATIBILITY max size shall be extended. The length shall be checked and it should be checked whether the length of 18 octets which is indicated includes first octet.

Low Layer Compatibility parameter needs just short description. ASN.1 shall have bound statement in the IDP arg extention.

Conclusion: revised to N2-040103

N2-040103: TS 29.078, Rel-5, CR#355r1, Source: NTT DoCoMo , NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: For MO case the reference shall be 3GPP TS 23.008 and for non-MO case the reference shall be ITU specification. In case the calling mobile is in the same switch, it was concluded that it is enough to have only one reference to TS 23.008.

There are two parameters: LLC and dLLC2 and name shall be aligned with stage 1. There will be only one reference to TS 23.008. Syntax part shall be modified. Annex A (normative annex) shall be changed as we have now two parameters.

Conclusion: revised to N2-040163

N2-040163: TS 29.078, Rel-5, CR#355r2, Source: NTT DoCoMo, NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion: The wording of highlayerCompatibility2, lowlayerCompatibility and lowlayerCompatibility2 is improved to indicate that it relates to SCUDIF call.

Conclusion: revised to N2-040168 which is approved without presentation as CR#355r3.

N2-040085: TS 29.078, Rel-5, CR#356, Source: NTT DoCoMo, NEC, Title: LLC passes on the gsmSSF - gsmSCF interface

Discussion:

Conclusion: revised to N2-040169 which is approved without presentation as CR#356r1.

6.3 CAMEL phase 3 in R99

N2-040016: TS 23.078, R99, CR#653, Source: Alcatel, Title: Triggering without having armed the TDP

Discussion: The procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful shall also check if the associated TDP is armed or not. This change is strongly proposed from R99 onwards.

Ericsson and Alcatel find that this is useful correction for R99. Subcategory is changed to “agreed by consensus”.

Conclusion: approved

N2-040017: TS 23.078, Rel-4, CR#654, Source: Alcatel, Title: Triggering without having armed the TDP

Discussion: This is the Rel-4 mirror CR of the CR#653.

Conclusion: approved

N2-040018: TS 23.078, Rel-5, CR#655, Source: Alcatel, Title: Triggering without having armed the TDP

Discussion: This is the Rel-5 mirror CR of the CR#653.

Conclusion: approved

N2-040019: TS 23.078, Rel-6, CR#656, Source: Alcatel, Title: Triggering without having armed the TDP

Discussion: This is the Rel-6 mirror CR of the CR#653.

Conclusion: approved

6.4 CAMEL phase 3 in Rel-4

7 CAMEL phase 4 in Release 5

7.1 Review of CAMEL phase 4 Stage 1

7.2 Miscellaneous CAMEL phase 4 issues

N2-040086: Discussion document, Source: CN2 Chairman, Title: CAMEL4 open issue list

Discussion: Open issue#2 is deleted. Open issue#5 will be deleted after the meeting if related CRs on SCUDIF interworking with CAMEL are approved. Open issues#6, 7 and 8 will also be deleted depending of the result on related CRs in this meeting.

Conclusion: *revised to N2-040105 which was noted*

N2-040025: TS 23.078, Rel-5, CR#661, Source: Ericsson, Title: Correction to dialed services triggering for NP and NC calls

Discussion: In gsmSCF to gsmSSF information flows for Continue with Argument, the part of the description which says that this IE can only be included if this IE is sent to the VMSC of the CAMEL subscriber, is deleted.

In N-CSI it is mentioned only that this CSI shall be stored in MSC. N-CSI may be stored in GMSC. The current text in the CR prohibits usage of the N-CSI in GMSC. It was decided to change the wording for N-CSI to cover also GMSC.

According to Alcatel, new NOTE does not bring any added value as it was already specified. The note will be removed.

Conclusion: *revised to N2-040106*

N2-040106: TS 23.078, Rel-5, CR#661r1, Source: Ericsson, Title: Correction to dialed services triggering for NP and NC calls

Discussion: MCC to mark the category as “essential correction”.

Conclusion: *approved*

N2-040107 (CR#693) is the Rel-6 mirror CR, which is *approved without presentation*.

N2-040027: TS 23.078, Rel-6, CR#663, Source: Ericsson, Title: Correction to No Answer handling (CAMEL_OCH_MSC2)

Discussion:

Conclusion: *approved*

N2-040108 (CR#695) is the mirror CR and is *approved without presentation*.

N2-040034: TS 23.078, Rel-5, CR#670, Source: Ericsson, Title: Correction to handling of DFC in CS_gsmSSF

Discussion: The subcategory is “essential correction”. SDL source file will be provided offline.

Conclusion: *approved*

N2-040109 (CR#696) is the mirror CR and is *approved without presentation*.

N2-040038: TS 23.078, Rel-5, CR#674, Source: Ericsson, Title: Correction to both way through parameter for ETC and CTR

Discussion: The CR corrects the description of Service Interaction Indicators Two (SII2) parameter in Connect To Resource and in Establish Temporary Connection. The SII2 parameter does not control the bothway through connection between the Call Segment and the *gsmSRF*, but the bothway through connection between the Call Segment and the *Calling Party*.

Before the answer, the mobile cannot give any DTMF. If the user interaction is done to a CS which does not have an incoming leg, the parameter Service Interaction Indicators Two would be irrelevant. Presence of calling party is decisive.

This IE indicates whether or not a bothway through connection is required between the call segment and the calling party. All the parties from the CS are connected each to other, and SRF is addition to it.

Sentence about the presence of the calling party shall be added. If there is not calling party in the CS, this IE is irrelevant.

Conclusion: *revised to N2-040111 which was approved without presentation as CR#674r1.*

N2-040112 is a mirror CR for Rel-6 (CR#687) and is *approved without presentation*.

N2-040060: TS 29.078, Rel-5, CR#351, Source: Ericsson, Title: Correction to Correction to both way through parameter

Discussion:

Conclusion: revised to N2-040113 (CR#351r1) which was *approved without presentation*. **N2-040114** (CR#360) is the Rel-6 mirror CR which was *approved without presentation*.

N2-040040: TS 23.078, Rel-5, CR#676, Source: Ericsson, Title: Correction to forwarded leg handling with Suppress O-CSI

Discussion: The subcategory is marked as “essential correction”. It was commented that it would be useful to have the red circle to indicate changes in the SDL.

Conclusion: revised to N2-040115 (CR#676r1) which was *approved without presentation*. **N2-040116** (CR#698) is a mirror CR for Rel-6 and is *approved without presentation*.

N2-040041: TS 23.078, Rel-5, CR#677, Source: Ericsson, Title: Correction to ORLCF handling for CAMEL calls in VMSC

Discussion: In check box “Requested CAMEL phases supported by GMSC?”, the reference to note 3 shall be added. The CR is subcategory “essential correction”. The main purpose of the CR shall be to use the result of the check for appropriate action. Alcatel commented that from the CR it is not obvious what is the intention of the check.

Ericsson is proposed separate check box where we should refer to actual parameter names.

Conclusion: revised to N2-040117 which is *approved*. **N2-040118** (CR#699) is the mirror CR for Rel-6 which was *approved without presentation*.

N2-040043: TS 23.078, Rel-5, CR#679, Source: Ericsson, Title: Correction to Tssf timer at Apply Charging

Discussion:

Conclusion: revised to N2-040095 before the meeting

N2-040095: TS 23.078, Rel-5, CR#679r1, Source: Ericsson, Title: Correction to Tssf timer at Apply Charging

Discussion: The CR corrects the figure 4.96-15 and the text in the task box following the Apply Charging operation. Subcategory is “essential correction”. Consequences if not approved shall be improved, i.e. it shall be described what happens when Tssf timer setting is incorrect.

In Handle_AC procedure the Tssf timer is set and also in monitoring state. All the inputs for Apply Charging shall be checked if we have any case that Tssf is not set. It was proposed to remove setting of Tssf from Handle_AC.

Conclusion: revised to N2-040119

N2-040119: TS 23.078, Rel-5, CR#679r2, Source: Ericsson, Title: Correction to Tssf timer at Apply Charging

Discussion: Tssf is now not set in Monitoring state.

Conclusion: approved

N2-040175: TS 23.078, Rel-6, CR#711, Source: Ericsson, Title: Correction to Tssf timer at Apply Charging

Discussion: Meeting forgot to make this Rel-6 mirror CR.

Conclusion: approved off-line after meeting.

N2-040047: TS 29.078, Rel-5, CR#347, Source: Ericsson, Title: Correction to temporary connection establishment

Discussion:

Conclusion: approved. N2-040120 (CR#361) is mirror CR for Rel-6 and is approved without presentation.

N2-040028: TS 23.078, Rel-5, CR#664, Source: Ericsson, Title: Correction to Establish Temporary Connection

Discussion:

Conclusion: *withdrawn*

N2-040029: TS 23.078, Rel-5, CR#665, Source: Ericsson, Title: Handling CAP DFC before alerting state

Discussion: .

Conclusion: *withdrawn*

N2-040088: TS 29.078, Rel-5, CR#357, Source: not identified, Title: CollectedDigits parameter of PromptAndCollectUserInformation

Discussion: There was no delegate to present the document, therefore the document is postponed to next meeting. New document number shall be requested for the next meeting by the source company.

Conclusion: *postponed to next meeting*

N2-040089: TS 29.078, Rel-5, CR#358, Source: not identified, Title: PlayAnnouncement and PromptAndCollectUserInformation

Discussion: There was no delegate to present the document, therefore the document is postponed to next meeting. New document number shall be requested for the next meeting by the source company.

Conclusion: *postponed to next meeting*

N2-040090: TS 29.078, Rel-5, CR#359, Source: not identified, Title: Enhancing Camel CAP 3 To Implement services based on UIScript

Discussion: There was no delegate to present the document, therefore the document is postponed to next meeting. New document number shall be requested for the next meeting by the source company.

Conclusion: *postponed to next meeting*

7.3 CAMEL phase 4, Interactions with Optimal Routeing

N2-040051: Discussion document, Source:Nortel Networks, Title: Discussion of OR Route Permitted Checks

Discussion: Optimal routing of late call forwarding is not affected by this.

Conclusion: *noted*

N2-040052: TS 23.079, Rel-5, CR#028, Source: Nortel Networks, Title: Enhancements to Route Permitted Procedure

Discussion: (N4-040200)

-In the Route_Permitted_ECF procedure, the last check box shall be removed.

-Reference address for ORLCF is not always original called address.

-The part of the CR which is provided for information shall be moved to an attachment.

-Comments will be sent to the originator of the CR and new version will be provided for the next meeting.

Conclusion: *withdrawn*

N2-040053: TS 23.018, Rel-5, CR#138, Source: Nortel Networks, Title: Changes to Route Permitted Procedure

Discussion: (N4-040201)

Conclusion: *withdrawn*

N2-040075: TS 23.018, Rel-6, CR#139, Source: Nortel Networks, Title: Changes to Route Permitted Procedure

Discussion: (N4-040203)

Conclusion: *withdrawn*

7.4 CAMEL phase 4, Call Party Handling and SCP initiated calls

N2-040050: TS 23.018, Rel-5, CR#136, Source: Ericsson, Title: Default Basic Service for gsmSCF-initiated calls

Discussion: (N4-040186) If HLR can't derive compatibility information from MAP SRI, then HLR applies a default value for Basic Service. With the introduction of gsmSCF-initiated calls, two default Basic Service values are needed: one value for MAP SRI from GMSC and another value for MAP SRI from gsmSCF.

One way forward is based on Ericsson proposal to have a default value in the HLR and the other way is to mandate SCP to populate certain fields to indicate that CPH applies only to speech.

The CR should be reworded to clarify the distinction whether ICA comes from GMSC or from gsmSCF.

Alcatel proposed to specify T11 to be default for SCP initiated calls. CPH is restricted to TS11. This proposal was accepted.

The subcategory is "agreed by consensus. CN2 left the approval of the revised CR to CN4.

Conclusion: *revised to N2-040121 (N4-040269) which is noted by CN2*

N2-040011: TS 23.078, Rel-5, CR#648, Source: Alcatel, Title: Missing DisconnectLeg Result

Discussion: In procedures relative to the establishment phase of the call, the sending of Int-DisconnectLeg Ack is not foreseen on receipt Int-DisconnectLeg (leg1). In addition after sending the Int-DisconnectLeg message, the CS-gsmSSF process is waiting for a Int-DisconnectLeg ack. This CR specifies that Int-DisconnectLeg Ack is sent on receipt of Int-DisconnectLeg in any state.

Consequences if not approved shall describe in details why this may cause interoperability errors. Subcategory is "essential correction"

Conclusion: *revised to N2-040122 which is approved.*

N2-040012: TS 23.078, Rel-6, CR#649, Source: Alcatel, Title: Missing DisconnectLeg Result

Discussion: This is a Rel-6 mirror CR of CR#648.

Conclusion: *revised to N2-040123 (CR#649r1) which was approved.*

N2-040030: TS 23.078, Rel-5, CR#666, Source: Ericsson, Title: Handling of DFCWA in ETC and CTR procedures

Discussion:

Conclusion: *revised to N2-040092 before the meeting*

N2-040092: TS 23.078, Rel-5, CR#666r1, Source: Ericsson, Title: Handling of DFCWA in ETC and CTR procedures

Discussion:

Conclusion: *approved. N2-040124 (CR#700) is mirror CR for Rel-6 and was approved without presentation.*

N2-040031: TS 23.078, Rel-5, CR#667, Source: Ericsson, Title: Correction to CUG handling for NP calls

Discussion: Category is "essential correction". It was mentioned that for MO call CUG check is needed. The parts which are not CAMEL stage two will be moved to the separate file which will be attached to this CR.

Conclusion: *revised to N2-040125 which was approved. N2-040126 (CR#701) is Rel-6 mirror CR which was approved.*

N2-040032: TS 23.078, Rel-5, CR#668, Source: Ericsson, Title: Correction to CAMEL_ICA_MSC (hanging connector)

Discussion: "go to 2" will be replaced by "go to 3". The introduction of label no. 2 will be canceled. Cover page has to be updated accordingly.

Conclusion: *revised to N2-040127 which was approved. N2-040128 (CR#702) is the mirror CR for Rel-6 which was approved.*

N2-040033: TS 23.078, Rel-5, CR#669, Source: Ericsson, Title: Allowing Export_leg at DP Alerting and DP Answer

Discussion: Subcategory is "essential correction". After the leg is exported and the export is successful, we should go to mid-call states (Alcatel). It is agreed to correct this.

In the procedure CAMEL_Export_Leg_MSC, “no answer” cause may be returned as well.

Conclusion: *revised to N2-040136*

N2-040136: TS 23.078, Rel-5, CR#669r1, Source: Ericsson, Title: Allowing Export_leg at DP Alerting and DP Answer

Conclusion: Sheet 4.87-2 of the procedure CAMEL_ICA_MSC_ALERTING contains changes compared to previous version. Reason for change and consequences if not approved are changed.

Conclusion: *approved*

N2-040176: TS 23.078, Rel-6, CR#712, Source: Ericsson, Title: Allowing Export_leg at DP Alerting and DP Answer

Conclusion: CN2 forgot to make Rel-6 mirror during the meeting.

Conclusion: *approved off-line after the meeting*

N2-040035: TS 23.078, Rel-5, CR#671, Source: Ericsson, Title: Correction to Request Report BCSM Event handling in CSA_gsmSSF

Discussion:

Conclusion: *revised to N2-040093 before the meeting*

N2-040093: TS 23.078, Rel-5, CR#671r1, Source: Ericsson, Title: Correction to Request Report BCSM Event handling in CSA_gsmSSF

Discussion: The CR is introducing a check “legID present?” and depending of the result, determines the default leg ID, in process CSA_gsmSSF. Subcategory is “essential correction”. Reason for change have to be improved.

Conclusion: *revised to N2-040137 which was approved. N2-040138 (CR#703) is mirror CR for Rel-6 and is approved.*

N2-040037: TS 23.078, Rel-5, CR#673, Source: Ericsson, Title: Correction to Split Leg handling in CSA_gsmSSF

Discussion:

Conclusion: *revised to N2-040094 before the meeting*

N2-040094: TS 23.078, Rel-5, CR#673r1, Source: Ericsson, Title: Correction to Split Leg handling in CSA_gsmSSF

Discussion: Summary of change should briefly describe what may happen if the CR is approved. The subcategory is “essential correction”.

Conclusion: *revised to N2-040139*

N2-040139 *was approved. N2-040140 (CR#704) is the Rel-6 mirror CR which was approved without presentation.*

N2-040039: TS 23.078, Rel-5, CR#675, Source: Ericsson, Title: Correction to CS ID in Play Announcement and Prompt & Collect

Discussion: Subcategory of the CR is “essential correction”. Call Segment ID is marked as “S” in the Prompt & Collect information flow. The CR specifies that Call Segment ID in Play Announcement and Call Segment ID in Prompt & Collect shall not be sent to an assisting gsmSSF.

How initiating SSF is able to route the message if it doesn’t have a call segment? Call segment ID must be present, then the SSF shall rely the operation to SRF for that particular call segment. Current text says that Call segment ID can not be sent (page 3, Prompt and Collect User Information).

Prompt And Collect User Information for gsmSCF to Assisting SSF information flows is described in section 5.6.5.6 of 23.078. Call Segment ID information element is not used.

The change of the description of the Call Segment ID is canceled, and it is left as “S” as already proposed in the CR. “Consequences if not approved” is changed to reflect the real problem if the CR is not approved.

Conclusion: *revised to N2-040141 which is approved. N2-040142 (CR#705) is mirror CR for Rel-6 which was approved without presentation.*

N2-040073: TS 22.078, Rel-5, CR, Source: Nokia, Title: MoveLeg precondition alignment

Discussion: In section 8.1.4 “target call segment” shall be replaced by “target group”. “Call state model” is not used in stage 1. The title is changed to “Correction to preconditions for connecting a held party to the group”.

Consequences if not approved shall be improved in order to explain that CAMEL services may fail if the CR is not approved.

Conclusion: revised to N2-040132 which was endorsed without presentation, MCC to forward it to SAI as source CN2

N2-040074: TS 22.078, Rel-6, CR, Source: Nokia, Title: MoveLeg precondition alignment

Discussion: The title is changed to “Correction to preconditions for connecting a held party to the group”. ‘the same changes as for Rel-5 CR apply

Conclusion: revised to N2-040133 which is endorsed without presentation, MCC to forward it to SAI as source CN2

N2-040044: TS 23.078, Rel-5, CR#680, Source: Ericsson, Title: Correction to SplitLeg preconditions

Discussion: Consequences if not approved shall be improved. The CR is marked as essential correction. The reference to the figure in Summary of change shall be corrected.

Conclusion: revised to N2-040143 which was approved. N2-040144 (CR#706) is the mirror CR for Rel-6 which is approved without presentation.

N2-040048: TS 29.078, Rel-5, CR#348, Source: Ericsson, Title: Correction to SplitLeg and MoveLeg preconditions

Discussion: When SplitLeg is used to split a leg off from CSID1 into a new Call Segment, then the BCSM for the leg to be split shall be in the active phase (DP names were replaced by “active phase”)

IF split leg is used to move leg to the CS1, then it can be also used in alerting phase (covered by alerting phase precondition). The CR proposes more refined precondition for move of the leg into CS and move leg out of CS.

Subcategory is “essential correction”. Consequences if not approved will be improved. In the cover page to indicate that a SplitLeg is also possible in the monitoring state.

Conclusion: revised to N2-040145

N2-040145 is approved without presentation. **N2-040146** (CR#362) is the mirror CR for Rel-6 and was approved without presentation.

N2-040045: TS 23.078, Rel-5, CR#681, Source: Ericsson, Title: Correction to Disconnect Leg preconditions

Discussion: Cover sheet is improved in the revised version of the document.

Conclusion: revised to N2-040096 before the meeting

N2-040096: TS 23.078, Rel-5, CR#681r1, Source: Ericsson, Title: Correction to Disconnect Leg preconditions

Discussion: Should DisconnectLeg be allowed in user interaction state? Alcatel does not see the problem if Disconnect Leg is allowed, this might simplify the service logic. Ericsson mentioned that SDL can not handle DisconnectLeg during user interaction.

The principle is accepted that Disconnect leg is not performed during the user interaction. Consequences if not approved shall give more explanation about the user interaction.

Conclusion: revised to N2-040147

N2-040147 was approved. N2-040148 (CR#707) is mirror CR for Rel-6 and is approved without presentation.

N2-040049: TS 29.078, Rel-5, CR#349, Source: Ericsson, Title: Correction to Disconnect Leg preconditions

Discussion: The part of the CR that is provided for information will be placed to separate file which will be attached. Subcategory is “essential correction”. Consequences if not approved shall be improved from editorial point of view.

“Source call segment” is not in use. It shall be replaced by “call segment”. In case of Disconnect, we shall identify the CS of the leg to be disconnected.

Conclusion: revised to N2-040149

N2-040149 was approved. N2-040150 (CR#363) is the mirror CR for Rel-6 which was approved without presentation.

N2-040036: TS 23.078, Rel-5, CR#672, Source: Ericsson, Title: Correction to Cancel handling in CSA_gsmSSF

Discussion:

Conclusion: withdrawn

- 7.5 CAMEL phase 4/DTMF Mid-call procedure for MO and MT calls
- 7.6 CAMEL phase 4/Provisioning of IP based multimedia services
- 7.7 CAMEL phase 4 control over MT SMS
- 7.8 CAMELphase 4/ Inclusion of flexible tone injection
- 7.9 CAMEL phase 4/ Charging Notification to CSE (removal of functionality)
- 7.10 CAMEL phase 4/ Enhancements of Dialed Services (removal of functionality)
- 7.11 CAMEL phase 4/ Provision of location information of called subscriber

N2-040042: TS 23.078, Rel-5, CR#678, Source: Ericsson, Title: Correction to Information Location at DP O_Term_Seized

Discussion: The CR includes a description in the Event Report BCSM information flow, for the reporting of Location Information at DP O_Term_Seized.

The subcategory is “agreed by consensus”.

Conclusion: approved

N2-040151 (CR#708) is the mirror CR for Rel-6 and is approved without presentation.

- 7.12 CAMEL phase 4/ Notifiaction of GPRS Mobility Management to CSE

7.13 CAMEL phase 4/ Inclusion ODB data in the CSE-HLR interface

7.14 CAMEL phase 4/ Location Information during an ongoing call

N2-040013: TS 23.078, Rel-5, CR#650, Source: Alcatel, Title: DP O/T_Change_of_Position triggering

Discussion: The CR will be merged with N2-040026 into N2-040134.

Conclusion: *rejected*

N2-040026: TS 23.078, Rel-5, CR#662, Source: Ericsson, Title: Correction to DP description tables

Discussion: This is a competitive proposal to N2-040013 which is taken as the base for the further work and the source is changed to Alcatel and Ericsson. Meeting agreed that DP O_Change_Of_Position is applicable only for the Mobile Originating Call in the VMSC.

Subcategory is “essential correction”. The document will be merged with Alcatel’s proposal in N2-040013 and will be presented in N2-040134. Consequences if not approved will be taken from N2-040013.

Conclusion: *revised to N2-040134 which is approved.*

N2-040014: TS 23.078, Rel-6, CR#651, Source: Alcatel, Title: DP O/T_Change_of_Position triggering

Discussion: This CR is the result of N2-040026 and N2-040013.

Conclusion: *revised to N2-040135 which is approved* (The title is: Correction to DP description tables)

N2-040155: TS 23.078, Rel-5, CR#709, Title: Starting of Timer Tccd after ACR on DP 'Change of Position'

Content: Start the timer Tccd also if Apply Charging Report is issued because of the Change of Position DP. Include also the LegID parameter for Procedure Handle_ACR.

Conclusion: *approved*

N2-040170 (CR#710) is the mirror CR for Rel-6 and is *approved without the presentation.*

7.15 CAMEL phase 4 / GPRS AnyTimeInterrogation

No contributions.

7.16 CAMEL phase 4 partial implementation

No contributions.

7.17 CAMEL phase 4 / Reporting of IMEI and MSCClassMark to SCP

N2-040046: TS 29.078, Rel-5, CR#346, Source: Ericsson, Title: Correction to GPRS protocol definition

Discussion: Application context is not increased and the change should be backwards compatible. The operations imported from R99 are using the R99 argument. That could be mentioned in the cover sheet.

“Idpackage3” shall be replaced by “idpackage”. Alcatel proposes to use identifiers that are used in Rel-5, to have consistent naming.

Conclusion: *revised to N2-040152 which was approved*

N2-040174: TS 29.078, Rel-6, CR#364, Source: Ericsson, Title: Correction to GPRS protocol definition

Discussion: This is the mirror CR to CR #364, but not exactly identical, as some of the modules are already updated to Rel-5. Category still remains "A".

Conclusion: *approved*

7.18 CAMEL phase 4 / Service Change and UDI Fallback (SCUDIF)

N2-040070: TS 22.078, Rel-5, CR, Source: Nokia, Title: SCUDIF corrections for CAMEL interworking

Discussion: (N3-040038) It is proposed that CSE/SCP may create legs but each call shall have only one outgoing leg in total, if the multimedia is preferred or selected service.

CN2/CN3 Joint meeting shall conclude on following questions:

1. To which specifications to specify the interaction between CAMEL and SCUDIF?

If CN2 and CN3 decide to specify the interaction between CAMEL and SCUDIF in TS 23.172, then all the decisions have to be done jointly between CN2 and CN3. Other possibility is to specify interaction in stage 1, TS 22.078 and that proposal is in document N2-040070.

Ericsson is of the opinion that CPH interactions should be specified in SCUDIF stage 2, TS 23.172 and possibly also in CAMEL stage 1 specification. CN2 chairman stated that it is difficult to maintain the specification on two places. It is already specified in CAMEL stage 1 that CPH applies only to speech call and this only has to be clarified. CPH has no impact on protocol, therefore the stage 2 change would not be necessary according to the CN2 chairman.

CN3 delegates would like to specify in SCUDIF stage 2 a short clarification that CPH is allowed only after answer, when it is certain that it is a speech call and that the speech call will not change later on.

Requirement on interaction between CAMEL for SCUDIF is in the SA1 scope. According to CN2 chairman, interactions between 2 features are described in Basic call handling, and for CPH interactions with SCUDIF it is proposed just to reference CAMEL stage 1 since we don't know what will be the requirement.

In SCUDIF there is preferred and less preferred basic service. Most of the CPH will be done before answer. It should be documented in CAMEL stage 1 when CPH is allowed in SCUDIF. Currently the CAMEL requirement for SCUDIF is not clearly defined and it has to be clarified in TS 22.078.

CN2 shall come up to the conclusion on proper wording to specify when CPH is allowed in SCUDIF and send a proposal to SA1 in form of the LS. The proposed wording reads as follows: "If the call is not video call and may become not video call, then CPH can be applied."

The tone is ordered at different point at the time, then the time when tone is played. If the basic service change happens after tone is ordered, the CR tries to explain what happens the service changes to multimedia service. At the time of tone connection the VPLMN/IPLMN shall not connect the tone if the multimedia is currently being used. GsmSSF has enough information to decide whether the tone shall be played. It can always know what is the basic service.

- 2) How user interaction works? When the user interaction is possible?

The rules for user interaction: CPH rule changed and rules for user interaction are different now. According to Ericsson, at DP2 and DP12, if there is a possibility that the call become an video call, the user interaction shall not be applied.

Conclusion: *revised to N2-040100/N3-04088*

N2-040100: TS 22.078, Rel-5, CR, Source: Nokia, Title: SCUDIF corrections for CAMEL interworking

Discussion: Changes are drafted online. Section 21 is modified.

Conclusion: *revised to N2-040164 which is endorsed and will be sent to SA1 as source CN2*

N2-040165: TS 22.078, Rel-6, CR, Source: Nokia, Title: SCUDIF corrections for CAMEL interworking

Discussion: This is the Rel-6 mirror CR.

Conclusion: *endorsed and will be sent to SA1 as source CN2*

N2-040071: TS 23.172, Rel-5, CR#022, Source: Nokia, Title: SCUDIF corrections for CAMEL interworking

Discussion: (N3-040037) New section 4.3.7.3 "Interaction with Call Party Handling" is introduced. There should be only a statement that the call should be checked if it is a speech call and reference to stage 1 shall be then introduced.

It was concluded that only reference to stage 1 will be added to SCUDIF stage 2 specification.

Conclusion: revised to N2-040101 which is noted in CN2(it is further handled in CN3 as N3-040087)

N2-040072: TS 23.172, Rel-5, CR#023, Source: Nokia, Title: SCUDIF corrections for user interaction

Discussion: (N3-040039) No In-band information shall be played if the calling terminal in Multimedia mode. If SCUDIF occurs to speech prior to CALL CONFIRMED then in-band information is possible. Otherwise, only if the speech is preferred service, in-band information is possible.

Terminating call case shall be added (bullet no. 3).

Conclusion: CN2 noted, revised to N3-040086 during the CN2-CN3 joint meeting and will be handled further only in CN3

7.19 CAMEL phase 4/ MNP interworking with prepay

No contributions.

8 CAMEL phase 4 in Release 6

8.1 General and miscellaneous Rel-6 issues

N2-040058: Discussion document, Title: IMEI query by gsmSCF, Source: Ericsson

Discussion: (N4-040161) The document provides the comparison between the use of MAP ATI and the use of MAP Check IMEI, for the purpose of IMEI verification by the SCP. Lucent prefers to use the option MAP Check IMEI.

Location update is rejected for black listed mobiles while roaming outside HPLMN. This would be for cases when MSC has IMEI check off. Vodafone does not see this feature as useful.

Conclusion: noted

N2-040059: Discussion document, Title: Additional elements in CAP Connect for NP follow-on calls, Source: Ericsson

Discussion: The present document proposes that the optional information elements "suppress D-CSI", "suppress N-CSI" and "Suppress Outgoing Call Barring" be added to Connect for **Rel-6**. These parameters need to be marked "O" for NP and NC calls only.

With those information elements present in Connect, the gsmSCF has the ability to control whether or not a follow-on NP/NC call may be subject to a D-CSI service, an N-CSI service or Call Barring.

The intention is to include T-CSI into Connect information flow (this was unintentionally omitted from the "Proposal" section.)

What is the purpose of "Suppress T-CSI" when we don't have T-BCSM. In the initial call attempt we can have "Suppress T-CSI". When a call is initiated to mobile and ICA contains MSISDN, then HLR would be interrogated. If first call fails, and follow on call is created, Ericsson proposes to have this parameter in follow on call.

The principle is acceptable. It was concluded that separate subset is not needed.

Conclusion: revised to N2-040097 which is noted. CRs will be provided for the next.

N2-040056: TS 23.078, Rel-6, CR#683, Title: Inclusion of Location Information in subscriber-initiated USSD

Discussion: The present CR proposes to include location information in the USSD information flow from MSC to HLR. The location information shall be included only in the information flow that is used to establish the USSD communication. Subsequent information flows do not require this information.

Stage 1 says that the USSD can be initiated by the subscriber. Vodafone commented that, according to stage 1, the location information is not required in the USSD information flow from MSC to HLR.

It was proposed that Ericsson provides a company contribution to SA1 (to CAMEL stage1 or USSD specification) to specify the requirement.

Conclusion: postponed, service requirement from SA1 is expected

N2-040057: TS 29.002, Rel-6, CR#716, Title: Inclusion of Location Information in subscriber-initiated USSD

Discussion:

Conclusion: postponed, the service requirement is expected from SA1

N2-040020: TS 23.078, Rel-5, CR#657, Source: Alcatel, Title: No receipt of Int_DP_Analysed_Information in state Monitoring

Discussion: First page of the SDL shall be marked as deleted offline by MCC.

Conclusion: approved

N2-040022: TS 23.078, Rel-6, CR#659, Source:Ericsson, Title: Allowing for ALR in MT call handling

Discussion: Informative part in the CR shall be moved to attachment. The latest version of the spec should be 6.0.0. TS 23.008 possibly needs a change.

Alcatel is in principle against this CR. IF the active location is required, then this information must be paged. With pre-paging feature, paging is done at PRN, or at least at reception of IAM (MSRN). This feature causes to many pagings. The major concern is delaying the whole call setup.

Is the pre-paging option is per subscriber? VMSC pages subscriber and if he is not responding to this request, VLR would not allocate roaming number and early call forwarding is performed. It is dependend on VLR capability wheether VLR has to support pre-paging.

CAMEL does not mandate that location information has to be requested. If the service needs it, then it is requested. HLR has the PSI flag off if the subscriber information is not requested. It is per subscriber based.

Nokia indicated a support for this CR.

Working assumption: It was concluded that the principle of the CR is accepted. Alcatel finds that TS 29.002 has to be changed as well related to pre-paging. If pre-paging timer is used for this purpose, then pre-paging support shall be indicated to HLR. If proposal here and pre-paging are coupled, that means that stage 2 shall be changed as well. It is not clear if TS 29.078 shall need additional change in that case.

Conclusion: revised to next meeting

N2-040061: TS 23.078, Rel-6, CR#684, Source:Nokia, Title: Correction on EntityReleasedGPRS when no relationship to a PDP context

Discussion: This CR modifies SDL so that presence of EDP and reporting of ACR is checked. If there is no relationship then no EntityReleasedGPRS is sent.

If there is no relationship to pdp context, SCP shall still receive Entity Release, i.e. EntityReleasedGPRS would be sent without this CR even if SCP did not arm any EDP for it. Do we want to get the indication about the disappearance of pdp context to SCP? It was stated that it would cause unnecessary signalling. Alcatel would not prefer to change the concept of the relationship. Alcatel later on indicated that relationship is defined per PDP context but EntityReleasedGPRS description gives different understanding of the operation use than in the CR.

Nokia interpreted that if there is no relationship to pdp context, the check is done if there is ACR pending and if there is any DP armed.

This CR is a partial solution and give the impression that EntityReleasedGPRS is useless operation. Int_Error cases could be modeled to show why Entity_released_GPRS is useful.

Section 6.2.2 in TS 23.078 gives the impression that the relationship is per pdp context. SDL shall be aligned with section 6.2.6.2 which is the textual description of the SDL. The formal specification of the relationship will not be changed.

The CR will be postponed and revised to next meeting.

Conclusion: postponed

N2-040062: TS 23.078, Rel-6, CR#685, Source:Nokia, Title: IP version of GGSN address for CAMEL

Discussion: Since the SGSN reports the address of the GGSN to SCP which is relevant for charging (charging id is unique for GGSN address and currently is always Ipv4 address). It is proposed only in the case when SGSN and GGSN support IPv6 only, IPv6 shall be reported. In all other cases IPv4 shall be reported.

Charging ID and GGSN address are in CDRs. GGSN address received in PDP context activation is written in the CDR. GGSN address is derived from Access Point Name. There is a mechanism to write GGSN address to CDR. Whatever GGSN address is in the CDR, it shall be mirror image to the address that is put in IDP. Charging specification has a mechanism to determine which IP version GGSN address is used. We should only report the GGSN address that is in the CDR. Ericsson finds that we should not define new rules to specify which GGSN address shall be in CDR. Ericsson finds that the rule is already specified.

In CAMEL we have to specify what is sent in PDP context establishment and what is sent in PDP context disconnection.

Working assumption:

SGSN derives GGSN address. GGSN address to be reported in IDP shall be identical to GGSN in the CDR. We should determine which GGSN address is written in the CDR and associated with Charging ID.

CN2 will send the LS to SA5 SWGB to ask to define the rule which IP version shall be used for GGSN address that is sent. CN2 will not copy rules, but will ensure that the GGSN address that will be sent to SCP is the one that is in the CDR.

Conclusion: postponed to next meeting. The LS to SA5 will be in N2-040158.

N2-040158: LS on CAMEL prepay: IP version of the GGSN address, To: SA5 SWG B

Content: CN2 would like to define the IP version of the GGSN address that needs to be sent from the SGSN to the gsmSCF using the CAP protocol. The format of the GGSN address will differ according to the IP version. GGSN address shall be the same for CAMEL as stored in the CDRs produced in the SGSN for a PDP context (S-CDR). There may be a need to correlate gsmSCF CDRs to the SGSN CDRs. For such correlation purposes the Charging Id is needed, and therefore Charging Id is sent to the gsmSCF along with the GGSN address. The Charging Id is unique on the GGSN address basis. The CAP protocol encoding allows either IPv4 or IPv6 address to be sent but only one address. It is not clear to CN2 what is the expected IP version in the SGSN CDRs in various cases per PDP context.

- A. SGSN and/or GGSN support IPv4 only. Then the address is obviously the IPv4 address of the GGSN, isn't it?
- B. SGSN and GGSN support dual IP stack. Is the IP version of the GGSN address then mandated to be certain IP version?
- C. SGSN or GGSN supports IPv6 only (future case). Does IPv6 address of the GGSN lead to problems

CN2 asks kindly SA5 SWG B group to answer to the questions above (cases A-C). If the IP version in the SGSN CDRs is not defined then CN2 encourages SA5 SWG B to clarify the charging specifications. Based on your response CN2 will clarify & align the CAMEL specifications.

Ericsson proposed to provide change of wording offline.

Conclusion: revised to N2-040171 which is approved

N2-040063: TS 23.078, Rel-6, CR#686, Source:Nokia, Title: GPRS ODB reporting to CAMEL SCP

Discussion: Before the CR it was not specified what happens in various cases when a PDP context is disconnected due to Operator Determined Barring (ODB).

The gprsSSF is modelled to have an ODB input. If there is a monitoring or controlling relationship then ACR-GPRS is sent, FCI record is closed, EntityReleasedGPRS is sent and all EDPs for the PDPid are disarmed.

It is stage 2 issue where ODB is checked. If pdp context has to be established and if the event that prevents pdp context establishment happens, that shall be signalled to SCP. There can be many reasons that prevent the pdp context to be established.

Conclusions:

- If Tssf must be started, this will be checked offline.
- Signals on the right top of the sheet shall be revised in order to include "signals to/from". Signals to/from left are signals to/from SGSN and signals to the right are to the GPRS_Dialogue_handler.

Conclusion: revised to N2-040159 which is approved

N2-040023: TS 23.078, Rel-6, CR#660, Source: Ericsson, Title: Inclusion of Calling Party Number in CTR

Discussion:

Conclusion: revised to N2-040091 before the meeting

N2-040091: TS 23.078, Rel-6, CR#660r1, Source: Ericsson, Title: Inclusion of Calling Party Number in CTR

Discussion: The CR adds a Calling Party Number to CAP Connect To Resource as an indication of the subscriber for whom the User Interaction is established. Why SRF needs the calling party number?

Information to SRF is under the control of SCP. The Calling Party Number is copied to ISUP if SRF is behind ISUP.

According to Nokia this would be a new concept. Nokia and Alcatel are not in favour of this CR. TeliaSonera commented that this proposal moves a logic to SRF.

Conclusion: postponed to next meeting

N2-040024: TS 29.078, Rel-6, CR#345, Source: Ericsson, Title: Inclusion of Calling Party Number in CTR

Discussion: This is the mirror CR of the CR#660r1.

Conclusion: postponed to next meeting

N2-040069: TS 23.078, Rel-6, CR#689, Source: Nokia, Title: NoReply timer clarification for follow-on calls

Discussion: In reason for change the term "new value of TNry timer" was not clear. IDP is armed and "No answer timer duration" is provided. "No answer timer" duration is the same timer than TNry timer.

TNry timer is the SCP provided timer and the "No answer timer" is the default. SCP provided timer is used only once. If e.g. follow on call is to be provided, then the new timer is provided.

Reason for change shall be clarified.

Conclusion: revised to N2-040160 which is approved without presentation

8.2 Enhanced Dialed Services

N2-040015: TS 23.078, Rel-6, CR#652, Source: Alcatel, Title: EDS and DisconnectLeg interworking

Discussion: In the current specification the handling of EDS on receipt of DisconnectLeg (Leg1) after receiving of DisconnectLeg(Leg2) is the same one as on receipt of DisconnectLeg(Leg2) only.

But as the 2 legs are disconnected, the call shall be terminated and could not be continued as it is described for the time being.

This proposal is the same as Nokia's proposal in N2-040064 but sends also Int_Disconnect_Leg_Ack. In this document signal Int_Disconnect_Leg is sent. The purpose of this signal is that MSC will report the operation result to the SCP.

Conclusion: approved

N2-040064: TS 23.078, Rel-6, CR#687, Source: Nokia, Title: Handling of DisconnectLeg(leg1) after DisconnectLeg(leg2)

Discussion: Withdrawn as N2-040015 was accepted as similar proposal.

Conclusion: *withdrawn*

8.3 Service Change and UDI Fallback (SCUDIF)

N2-040065: TS 23.018, Rel-6, , Source: Nokia, Title: CAMEL4 SCUDIF notification during active call for prepay

Discussion: N4-0400204

Conclusion:*withdrawn*

N2-040066: TS 23.078, Rel-6, CR#688, Source: Nokia, Title: CAMEL4 SCUDIF notification during active call for prepay

Discussion: (N4-0400205) This is a CR to support notification during ongoing call for prepay when the bearer changes.

Ext-Basic Service Code indicates new Basic service code after a successful bearere service modification.

Alcatel asked if we could always report on that leg on which the service change has been done (which of the parties initiated service change).

According to Nokia, the requirement is charging and from charging point of view, the direction of the initiation is not important. It is only important that the service change has been done successfully. SCUDIF change is reported on a particular leg.

CPH is only allowed for TS11 calls. SCUDIF call has two basic service calls and one of them is TS11. It is not clear if the preferred service is TS11. It shall be taken into account that CPH can be allowed for the call that cannot be changed to multimedia call.

Should we allow CPH for the call that has specified two basic services? That is an open question.

- From which moment on gsmSCF should be allowed to arm the event? The change of position reporting is applicable from answer only. The SCUDIF change event may be armed at DP Collected Info. If a SCUDIF change event occurs before answer, then gsmSSF shall not report it. An applicable basic service is reported at answer.
- It is not decided yet if we do the reporting on the leg on which the modification has been reached, or on particular leg. Is SCUDIF in relation with CPH? We should first agree on the applicability of CPH to SCUDIF change notification and then decide on the implicit disarming.

T-Busy may be the result of call forwarding, in that case, we may not want to disarm the DP.

We should specify how SCP comes to the conclusion that the call will never become an multimedia call. We could formulate preconditions in TS 23.078 when it is allowed to have CPH.

On which leg we report the SCUDIF change, it is related on applicability of CPH to multimedia call. User interaction is allowed only in a call for which SCP knows it is TS11 call.

This document relates to CN3 document for the joint meeting where the rules for user interaction are defined. User interaction in combination with SCUDIF was discussed in joint meeting with CN3.

In the new DP_O_Bearer_Change parameter description, "Bearer service" shall be replaced by "Basic service" (within Bearere capability, basic service changes and this is notified to SCP).

Conclusions:

- DP name shall be "O_Service_Change" and "T_Service_Change". This affects also the BCSM figures.
- For O-BCSM, the arming and reporting of DP O_Service_Change shall always be on leg1; for T-BCSM, the arming of DP T_Service_Change shall always be on leg2. This shall be reflected, amongst others, in the default leg definitions in TS 29.078.
- When DP O_/T_Service_Change occurs and the DP is armed, then the DP will be reported, irrespective of the party that initiated the service change.

- When the service change occurs and a charging report is pending on the other leg than the leg for which the O_/T_Service_Change DP is armed, then no ACR shall be sent to gsmSCF. When Handle_ACR is called from CS_gsmSSF, the appropriate leg is passed on to the procedure.
- At O-BCSM call set up failure (Busy, No_Answer, RSF), we shall not have implicit disarming of O_Service_Change"; reason is that call set up failure pertains to leg, so should not result in leg 1 disarming. This is already reflected in the implicit disarming tables.
- The procedure "Process CAMEL_T_SCUDIF_MSC" is currently not called; it should be called from CAMEL_MT_LEG2_GMSC; a new sheet needs to be added.
- For the Call Forwarding Basic Call procedures, there shall not be bearer modifications, that shall be done only in the Terminating Call procedures.
- For the Terminating Call procedure (in VMSC), it shall be clarified that radio parameters modification shall not be done if there is no radio connection.
- In figure 4.97-44x: Process CS_gsmSSF (sheet 44x), Tccd shall be started after Handle_ACR;
- In figure 4.97-44x: Process CS_gsmSSF (sheet 44x), Handle_ACR shall receive input parameter.
- In figure 4.97-44x: Process CS_gsmSSF (sheet 44x), Int_Continue shall be returned to MSC.
- The offered CAMEL Phase 4 functionalities should be amended, in section 1.1.2.
- If SCUDIF change is reported, it is sufficient to report only the basic service code.

Conclusion: revised to N2-040129/N4-040266 (CN4 noted)

N2-040129: TS 23.078, Rel-6, CR#688r1, Source: Nokia, Title: CAMEL4 SCUDIF notification during active call for prepay

Discussion: The document contains changes agreed. In procedure Handle_ACR, the change is not related to SCUDIF, it is only highlighted that the leg is an input parameter.

Conclusion: revised to N2-040154 which is approved

N2-040067: TS 29.002, Rel-6, CR#726, Source: Nokia, Title: CAMEL4 SCUDIF notification during active call for prepay

Discussion: (N4-0400206) SA1 has approved a service requirement to notify SCP about bearer modification during active call phase. With this change the prepay service can determine the correct tariff for the call.

- the name of the new BIT should be "serviceChangeDP"
- Ericsson asked whether the length of the OfferedCamel4Functionalities is BIT STRING? Yes, it shall not be changed. This is left to CN4.

Conclusion: revised to N2-040130/N4-040267 which was endorsed by CN2 and approved by CN4

N2-040068: TS 29.078, Rel-6, CR#352, Source: Nokia, Title: CAMEL4 SCUDIF notification during active call for prepay

Discussion: (N4-0400207)

- DP name shall be aligned with stage 2
- Tag numbering shall be checked by TS 29.078 rapporteur
- Bullets in section 11.18.1.1 need to be aligned (by rapporteur)
- In section 11.18.1.1, do not repeat the default leg settings, but refer to the leg Id tables; in section 11.27.1.1, do not repeat the default leg settings, also refer to the leg Id tables.

Conclusion: revised to N2-040131 which is approved

8.4 Change of position

N2-040055: TS 23.078, Rel-6, CR#682, Source: Siemens, Title: Enhancement of Event Specific Information for DP 'Change of Position'

Summary of change: For the Release 6 feature "Change of position procedure armed with criteria" the SSP has to implement a logic how to determine the following criteria:

- Inter system Handover UTRAN to GSM and vice versa
- Inter PLMN Handover
- Entering or Leaving a Cell, Service Area, or Location Area Enhancement of the ASN.1 datatype EventSpecific Info.

Because the ERB(Change of Position) contains only the parameter 'location Information' the SCP has to implement the same logic again. To avoid additional data storage and logic at the SCP the indication what kind of triggering was performed has to be indicated towards the SCP. The following items shall be indicated:

- Intersystem Handover GSM UMTS
- Intersystem handover UMTS GSM
- InterPLMN Handover
- Inter MSC Handover
- Entering a Cell
- Leaving a Cell
- Entering a Service area
- Leaving a Service area
- Entering Location area
- Leaving Location area

Discussion: This CR adds MetDPCriteria. It is possible to have multiple detection point criteria. Change of position can match with multiple criteria. SSF has to check always the whole list of criteria to ensure for all events whether they are met or not. SSF has to report all criteria, independently whether it is checking them or not.

If SCP requests only change of Cell ID, it can consist of inter-system HO as well. It was concluded that the SCP should apply the mask and report only what was requested.

The current SDL does not check all the criteria (Check_criteria_change_of_position), therefore this CR has impact on SDL. According to Alcatel, the SDL check shall be checked as simple as possible.

There are 8 criteria that may be given by the SCP, so it should be identified whether one of them occurred. If occurred, then further checks are done (like whether a move to the cell or out of the cell happened).

If we are interested in certain LA, target and source LA could be given. Nokia finds that in LocationInformation the target LA is indicated, therefore 1 bit would be enough per criteria.

Location information contains cell id and it could contain the cell id provided by SCP (that means subscriber moved in to cell id).

All the IEs are optional and mutually exclusive (if LA id is reported, cell id can't be reported), but in bit map all of them can be reported. There is a possibility to remove mutual exclusivity.

If the Location information includes Change of position, it should be mandatory.

In 3G network with UTRAN, cell id cannot be reported. In 2G access, cell id reporting is possible and with 3G access, service area is reported.

SCP may request location without criteria. It should be "S", and conditions shall be specified (1. reporting criteria is specified, 2. gsm SCF has indicated requested information)

Either the SDL has to be changed and wording in textual part shall be refined.

Conclusion: revised to N2-040099

N2-040099: TS 23.078, Rel-6, CR#682r1, Source: Siemens, Title: Enhancement of Event Specific Information for DP 'Change of Position'

Discussion: The CR contains the whole TS 23.078 with all the changes. Met DP criteria needs refinement. The direction of met criterion is not reflected in the SDL. Revised version of the CR shall not contain the whole specification.

Conclusion: revised to N2-040156 which was approved without presentation as CR#682r2

N2-040054: TS 29.078, Rel-6, CR#350, Source: Siemens, Title: Enhancement of Event Specific Information for DP 'Change of Position'

Discussion: Alcatel proposed to increase the bit string size of "leavingLocationArea" from 16 to 32 for further cases.

Reason for change shall be improved. If we agree on this feature it shall be marked as "M" (mandatory). If this concept is part of R6, when SCP receives the IDP and it receives the reporting of the criteria,

The service logic uses the functionality in the home network.

It should be "S", and conditions shall be specified (1. reporting criteria is specified, 2. gsm SCF has indicated requested information)

Conclusion: revised to N2-040153

N2-040153: TS 29.078, Rel-6, CR#350r1, Source: Siemens, Title: Enhancement of Event Specific Information for DP 'Change of Position'

Discussion: Changes to changes shall be deleted.

Conclusion: revised to N2-040157 which was approved as CR#350r2

9 Review of dates and hosts for future meetings

Review of the N2 meeting schedule for 2004

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPCN2#33	WG	10 th -14 th May	Zagreb	Croatia

The meeting in Croatia is the last meeting of CN2. After May, all CAMEL issues will be handled in CN4.

10 Closing of the meeting (13:30 Friday)

Deadlines for the meeting in May:

- the deadline to submit request for document numbers is 30th of April 2004 , 12:00 CET
- the deadline to send actual documents is: 30th of April 2004, 23:59 CET

Rel-6 mirror CRs shall be sent to CN2 exploder no later than end of 25th February.

Action points:

- to find a rapporteur for TS 23.278 and TS 29.278
- to define when to upgrade TS 23.278 and TS 29.278 to Rel-6
- BB CAMEL-SCUDIF to be added to WP and mark it 100% completed

Annex A Attendees list

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Annex B Output Documents

Approved Change Requests for CAMEL Phase 3

TDoc #	WI	Rel	Title	Spec	CR	Ca	Re	Versio	Conclusion
N2-040016	CAMEL3	R99	DP Triggering without having armed the TDP	23.078	653	F		3.18.0	approved
N2-040017	CAMEL3	Rel-4	DP Triggering without having armed the TDP	23.078	654	A		4.10.0	approved
N2-040018	CAMEL3	Rel-5	DP Triggering without having armed the TDP	23.078	655	A		5.6.0	approved
N2-040019	CAMEL3	Rel-6	DP Triggering without having armed the TDP	23.078	656	A		6.0.0	approved
N2-040159	CAMEL3	Rel-6	GPRS ODB reporting to CAMEL SCP	23.078	686	F	1	6.0.0	approved

Approved Output Liaison Statements

TDoc #	Type	Title	Source	Conclusion
N2-040110	LS OUT	Reply to LS on IP Flow Based Bearer Level Charging (To: SA2)	Vodafone	approved
N2-040161	LS OUT	LS to GSM IREG	NTT DoCoMo , NEC	approved
N2-040171	LS OUT	LS to SA5 on the GGSN address to be stored in CDRs	CN2	approved

Approved and endorsed Change Requests for CAMEL Phase 4

TDoc #	Title	Spec	CR	Rev	Cat	Rel	Versi	WI	Conclusion
N2-040027	Correction to No Answer handling (CAMEL_OCH_MSC2)	23.078	663		F	Rel-5	5.6.0	CAMEL4	approved
N2-040034	Correction to handling of DFC in CS_gsmSSF	23.078	670		F	Rel-5	5.6.0	CAMEL4	approved
N2-040042	Correction to Information Location at DP O_Term_Seized	23.078	678		F	Rel-5	5.6.0	CAMEL4	approved
N2-040047	Correction to temporary connection establishment	29.078	347		F	Rel-5	5.6.0	CAMEL4	approved

N2-040092	Handling of DFCWA in ETC and CTR procedures	23.078	666	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040106	Correction to dialed services triggering for NP and NC calls	23.078	661	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040107	Correction to dialed services triggering for NP and NC calls	23.078	694		A	Rel-6	6.0.0	CAMEL4	approved
N2-040108	Correction to No Answer handling (CAMEL_OCH_MSC2)	23.078	695		A	Rel-6	6.0.0	CAMEL4	approved
N2-040109	Correction to handling of DFC in CS_gsmSSF	23.078	696		A	Rel-6	6.0.0	CAMEL4	approved
N2-040111	Correction to both way through parameter for ETC and CTR	23.078	674	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040112	Correction to both way through parameter for ETC and CTR	23.078	697		A	Rel-6	6.0.0	CAMEL4	approved
N2-040113	Correction to description of Service Interaction Indicators Two parameter	29.078	351	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040114	Correction to description of Service Interaction Indicators Two parameter	29.078	360		A	Rel-6	6.0.0	CAMEL4	approved
N2-040115	Correction to forwarded leg handling with Suppress O-CSI	23.078	676	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040116	Correction to forwarded leg handling with Suppress O-CSI	23.078	698		A	Rel-6	6.0.0	CAMEL4	approved
N2-040117	Correction to ORLCF handling for CAMEL calls in VMSC	23.078	677	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040118	Correction to ORLCF handling for CAMEL calls in VMSC	23.078	699		A	Rel-6	6.0.0	CAMEL4	approved
N2-040119	Correction to Tssf timer at Apply Charging	23.078	679	2	F	Rel-5	5.6.0	CAMEL4	approved
N2-040120	Correction to temporary connection establishment	29.078	361		A	Rel-6	6.0.0	CAMEL4	approved
N2-040122	Missing DisconnectLeg Result	23.078	648	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040123	Missing DisconnectLeg Result	23.078	649	1	A	Rel-6	6.0.0	CAMEL4	approved
N2-040124	Handling of DFCWA in ETC and CTR procedures	23.078	700		A	Rel-6	6.0.0	CAMEL4	approved
N2-040125	Correction to CUG handling for NP calls	23.078	667	1	F	Rel-5	5.6.0	CAMEL4	approved

N2-040126	Correction to CUG handling for NP calls	23.078	701		F	Rel-6	6.0.0	CAMEL4	approved
N2-040127	Correction to CAMEL_ICA_MSC (hanging connector)	23.078	668	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040128	Correction to CAMEL_ICA_MSC (hanging connector)	23.078	702		A	Rel-6	6.0.0	CAMEL4	approved
N2-040134	Correction to DP description tables	23.078	662	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040135	Correction to DP description tables	23.078	651	1	A	Rel-6	6.0.0	CAMEL4	approved
N2-040136	Allowing Export_leg at DP Alerting and DP Answer	23.078	669	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040137	Correction to Request Report BCSM Event handling in CSA_gsmSSF	23.078	671	2	F	Rel-5	5.6.0	CAMEL4	approved
N2-040138	Correction to Request Report BCSM Event handling in CSA_gsmSSF	23.078	703		A	Rel-6	6.0.0	CAMEL4	approved
N2-040139	Correction to Split Leg handling in CSA_gsmSSF	23.078	673	2	F	Rel-5	5.6.0	CAMEL4	approved
N2-040140	Correction to Split Leg handling in CSA_gsmSSF	23.078	704		A	Rel-6	6.0.0	CAMEL4	approved
N2-040141	Correction to CS ID Prompt & Collect	23.078	675	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040142	Correction to CS ID Prompt & Collect	23.078	705		A	Rel-6	6.0.0	CAMEL4	approved
N2-040143	Correction to SplitLeg preconditions	23.078	680	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040144	Correction to SplitLeg preconditions	23.078	706		A	Rel-6	6.0.0	CAMEL4	approved
N2-040145	Correction to SplitLeg and MoveLeg preconditions	29.078	348	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040146	Correction to SplitLeg and MoveLeg preconditions	29.078	362		A	Rel-6	6.0.0	CAMEL4	approved
N2-040147	Correction to Disconnect Leg preconditions	23.078	681	2	F	Rel-5	5.6.0	CAMEL4	approved
N2-040148	Correction to Disconnect Leg preconditions	23.078	707		A	Rel-6	6.0.0	CAMEL4	approved
N2-040149	Correction to Disconnect Leg preconditions	29.078	349	1	F	Rel-5	5.6.0	CAMEL4	approved

N2-040150	Correction to Disconnect Leg preconditions	29.078	363		A	Rel-6	6.0.0	CAMEL4	approved
N2-040151	Correction to Information Location at DP O_Term_Seized	23.078	708		A	Rel-6	6.0.0	CAMEL4	approved
N2-040152	Correction to GPRS protocol definition	29.078	346	1	F	Rel-5	5.6.0	CAMEL4	approved
N2-040155	Starting of Timer Tccd after ACR on DP 'Change of Position'	23.078	709		F	Rel-5	5.6.0	CAMEL4	approved
N2-040156	Enhancement of Event Specific Information for DP 'Change of Position'	23.078	682	2	B	Rel-6	6.0.0	CAMEL4	approved
N2-040157	Enhancement of Event Specific Information for DP 'Change of Position'	29.078	350	2	B	Rel-6	6.0.0	CAMEL4	approved
N2-040160	NoReply timer clarification for follow-on calls	23.078	689	1	F	Rel-6	6.0.0	CAMEL4	approved
N2-040170	Starting of Timer Tccd after ACR on DP 'Change of Position'	23.078	710		A	Rel-6	6.0.0	CAMEL4	approved
N2-040174	Correction to GPRS protocol definition	29.078	364		A	Rel-6	6.0.0	CAMEL4	approved
N2-040175	Correction to Tssf timer at Apply Charging	23.078	711		A	Rel-6	6.0.0	CAMEL4	approved
N2-040176	Allowing Export_leg at DP Alerting and DP Answer	23.078	712		A	Rel-6	6.0.0	CAMEL4	approved

Approved and endorsed Change Requests for EDCAMEL

TDoc #	Title	Typ	Spec	CR	C	R	Rel	Versi	WI	Conclusio
N2-040015	EDS and DisconnectLeg interworking	CR	23.078	652	F		Rel-6	6.0.0	EDCAMEL	approved
N2-040020	No receipt of Int_DP_Analysed_Informati on in state Monitoring	CR	23.078	657	D		Rel-6	6.0.0	EDCAMEL	approved

Approved CRs for Rel-5 WI TEI

TDoc #	Title	Typ	Spec	CR	C	R	Rel	Versi	WI	Conclusion
N2-040168	LLC passes on the gsmSSF - gsmSCF interface	CR	29.078	355	F	3	Rel-5	5.6.1	CAMEL4	approved
N2-040169	LLC passes on the gsmSSF - gsmSCF interface	CR	29.078	356	A	1	Rel-6	6.0.0	CAMEL4	approved

N2-040172	LLC passes on the gsmSSF - gsmSCF interface	CR	23.078	692	F	4	Rel-5	5.6.0	CAMEL4	approved
N2-040173	LLC passes on the gsmSSF - gsmSCF interface	CR	23.078	693	A	1	Rel-6	6.0.0	CAMEL4	approved

Approved CRs for Rel-6 WI SCCAMEL

TDoc #	Title	Typ	Spec	CR	C	R	Rel	Versi	WI	Conclusion
N2-040131	CAMEL4 SCUDIF notification during active call for prepay	CR	29.078	352	B	1	Rel-6	6.0.0	SCCAMEL	approved
N2-040154	CAMEL4 SCUDIF notification during active call for prepay	CR	23.078	688	B	2	Rel-6	6.0.0	SCCAMEL	approved

Annex C List of Documents

TDoc #	Type	Title	Source	WI	Spec	CR #	Rev	Cat	Rel	Versio	Conclusio
N2-040001	Agenda	Agenda	CN2 chairman								approved
N2-040002	Agenda	Allocation of documents to agenda items	CN2 chairman								noted
N2-040003	Report	CN2#30 Draft meeting report	MCC								approved
N2-040004	Report	CN#21 Draft meeting report	MCC								noted
N2-040005	LS IN	LS Reply on "Trace Management"	CN4								noted
N2-040006	LS IN	Reply to LS on Clarification on Presence Service Matters (S1-	SA1								noted
N2-040007	LS IN	LS Response on Presence Service Matters	SA2								noted
N2-040008	WP	Latest version of the work plan	MCC								noted
N2-040009	LS IN	LS on IP Flow Based Bearer Level Charging	SA2								noted
N2-040010	LS IN	Reply LS on Trace Management	SA5								noted
N2-040011	CR	Missing DisconnectLeg Result	Alcatel	CAMEL4	23.078	648		F	Rel-5	5.6.0	revised to N2-040122

N2-040012	CR	Missing DisconnectLeg Result	Alcatel	CAMEL4	23.078	649		A	Rel-6	6.0.0	revised to N2-040123
N2-040013	CR	DP O/T_Change_of_Position triggering	Alcatel	CAMEL4	23.078	650		F	Rel-5	5.6.0	rejected
N2-040014	CR	DP O/T_Change_of_Position triggering	Alcatel	CAMEL4	23.078	651		A	Rel-6	6.0.0	revised to N2-040135
N2-040015	CR	EDS and DisconnectLeg interworking	Alcatel	EDCAMEL	23.078	652		F	Rel-6	6.0.0	approved
N2-040016	CR	DP Triggering without having armed the TDP	Alcatel	CAMEL3	23.078	653		F	R99	3.18.0	approved
N2-040017	CR	DP Triggering without having armed the TDP	Alcatel	CAMEL3	23.078	654		A	Rel-4	4.10.0	approved
N2-040018	CR	DP Triggering without having armed the TDP	Alcatel	CAMEL3	23.078	655		A	Rel-5	5.6.0	approved
N2-040019	CR	DP Triggering without having armed the TDP	Alcatel	CAMEL3	23.078	656		A	Rel-6	6.0.0	approved
N2-040020	CR	No receipt of Int_DP_Analysed_Information in state Monitoring	Alcatel	EDCAMEL	23.078	657		D	Rel-6	6.0.0	approved
N2-040021	CR	Allowing zero-length number strings for D-CSI	Ericsson	CAMEL4	23.078	658		B	Rel-6	6.0.0	withdrawn
N2-040022	CR	Allowing for ALR in MT call handling	Ericsson	CAMEL4	23.078	659		B	Rel-6	6.0.0	revised to next meeting
N2-040023	CR	Inclusion of Calling Party Number in CTR	Ericsson	CAMEL4	23.078	660		B	Rel-6	6.0.0	revised to N2-040091
N2-040024	CR	Inclusion of Calling Party Number in CTR	Ericsson	CAMEL4	29.078	345		B	Rel-6	6.0.0	postponed to next meeting
N2-040025	CR	Correction to dialed services triggering for NP and NC calls	Ericsson	CAMEL4	23.078	661		F	Rel-5	5.6.0	revised to N2-040106
N2-040026	CR	Correction to DP description tables	Ericsson	CAMEL4	23.078	662		F	Rel-5	5.6.0	revised to N2-040134
N2-040027	CR	Correction to No Answer handling (CAMEL_OCH_MSC2)	Ericsson	CAMEL4	23.078	663		F	Rel-5	5.6.0	approved
N2-040028	CR	Correction to Establish Temporary Connection	Ericsson	CAMEL4	23.078	664		F	Rel-5	5.6.0	withdrawn
N2-040029	CR	Handling CAP DFC before alerting state	Ericsson	CAMEL4	23.078	665		F	Rel-5	5.6.0	withdrawn
N2-040030	CR	Handling of DFCWA in ETC and CTR procedures	Ericsson	CAMEL4	23.078	666		F	Rel-5	5.6.0	revised to N2-040092

N2-040031	CR	Correction to CUG handling for NP calls	Ericsson	CAMEL4	23.078	667		F	Rel-5	5.6.0	revised to N2-040125
N2-040032	CR	Correction to CAMEL_ICA_MSC (hanging connector)	Ericsson	CAMEL4	23.078	668		F	Rel-5	5.6.0	revised to N2-040127
N2-040033	CR	Allowing Export_leg at DP Alerting and DP Answer	Ericsson	CAMEL4	23.078	669		F	Rel-5	5.6.0	revised to N2-040136
N2-040034	CR	Correction to handling of DFC in CS_gsmSSF	Ericsson	CAMEL4	23.078	670		F	Rel-5	5.6.0	approved
N2-040035	CR	Correction to Request Report BCSM Event handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	671		F	Rel-5	5.6.0	revised to N2-040093
N2-040036	CR	Correction to Cancel handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	672		F	Rel-5	5.6.0	withdrawn
N2-040037	CR	Correction to Split Leg handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	673		F	Rel-5	5.6.0	revised to N2-040094
N2-040038	CR	Correction to both way through parameter for ETC and CTR	Ericsson	CAMEL4	23.078	674		F	Rel-5	5.6.0	revised to N2-040111
N2-040039	CR	Correction to CS ID in Play Announcement and Prompt & Collect	Ericsson	CAMEL4	23.078	675		F	Rel-5	5.6.0	revised to N2-040141
N2-040040	CR	Correction to forwarded leg handling with Suppress O-CSI	Ericsson	CAMEL4	23.078	676		F	Rel-5	5.6.0	revised to N2-040115
N2-040041	CR	Correction to ORLCF handling for CAMEL calls in VMSC	Ericsson	CAMEL4	23.078	677		F	Rel-5	5.6.0	revised to N2-040117
N2-040042	CR	Correction to Information Location at DP O_Term_Seized	Ericsson	CAMEL4	23.078	678		F	Rel-5	5.6.0	approved
N2-040043	CR	Correction to Tssf timer at Apply Charging	Ericsson	CAMEL4	23.078	679		F	Rel-5	5.6.0	revised to N2-040095
N2-040044	CR	Correction to SplitLeg preconditions	Ericsson	CAMEL4	23.078	680		F	Rel-5	5.6.0	revised to N2-040143
N2-040045	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	23.078	681		F	Rel-5	5.6.0	revised to N2-040096
N2-040046	CR	Correction to GPRS protocol definition	Ericsson	CAMEL4	29.078	346		F	Rel-5	5.6.0	revised to N2-040152
N2-040047	CR	Correction to temporary connection establishment	Ericsson	CAMEL4	29.078	347		F	Rel-5	5.6.0	approved
N2-040048	CR	Correction to SplitLeg and MoveLeg preconditions	Ericsson	CAMEL4	29.078	348		F	Rel-5	5.6.0	revised to N2-040145
N2-040049	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	29.078	349		F	Rel-5	5.6.0	revised to N2-040149

N2-040050	CR	Default Basic Service for gsmSCF-initiated calls	Ericsson	CAMEL4	23.018			F	Rel-5	5.8.0	revised to N2-040121
N2-040051	DISC	Discussion of OR Route Permitted Checks	Nortel Networks								noted
N2-040052	CR	Enhancements to Route Permitted Procedure	Nortel Networks	CAMEL4	23.079			F	Rel-5	5.4.0	withdrawn
N2-040053	CR	Changes to Route Permitted Procedure	Nortel Networks	CAMEL4	23.018			F	Rel-5	5.8.0	withdrawn
N2-040054	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	29.078	350		B	Rel-6	6.0.0	revised to N2-040153
N2-040055	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	23.078	682		B	Rel-6	6.0.0	revised to N2-040099
N2-040056	CR	Inclusion of Location Information in subscriber-initiated USSD	Ericsson	CAMEL4	23.078	683		B	Rel-6	6.0.0	postponed
N2-040057	CR	Inclusion of Location Information in subscriber-initiated USSD	Ericsson	CAMEL4	29.002	716		B	Rel-6	6.4.0	postponed
N2-040058	DISC	IMEI query by gsmSCF	Ericsson	CAMEL4							noted
N2-040059	DISC	Additional elements in CAP Connect for NP follow-on calls	Ericsson	CAMEL4							revised to N2-040097
N2-040060	CR	Correction to Correction to both way through parameter	Ericsson	CAMEL4	29.078	351		F	Rel-5	5.6.0	revised to N2-040113
N2-040061	CR	Correction on EntityReleasedGPRS when no relationship to a PDP	Nokia	CAMEL3	23.078	684		F	Rel6	6.0.0	postponed
N2-040062	CR	IP version of GGSN address for CAMEL	Nokia	CAMEL3	23.078	685		F	Rel6	6.0.0	postponed to next meeting
N2-040063	CR	GPRS ODB reporting to CAMEL SCP	Nokia	CAMEL3	23.078	686		F	Rel6	6.0.0	revised to N2-040159
N2-040064	CR	Handling of DisconnectLeg(leg1) after DisconnectLeg(leg2)	Nokia	EDCAMEL	23.078	687		F	Rel6	6.0.0	withdrawn
N2-040065	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	23.018			B	Rel6	6.1.0	withdrawn
N2-040066	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	23.078	688		B	Rel6	6.0.0	revised to N2-040129
N2-040067	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	29.002			B	Rel6	6.4.0	revised to N2-040130
N2-040068	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	29.078	352		B	Rel-6	6.0.0	revised to N2-040131

N2-040088	CR	the CollectedDigits parameter of PromptAndCollectUserInfo	unknown		29.078	357				5.6.0	postponed to next meeting
N2-040089	CR	PlayAnnouncement and PromptAndCollectUserInfo information	unknown		29.078	358				5.6.0	postponed to next meeting
N2-040090	CR	Enhancing Camel CAP 3 To Implement services based on UIScript	unknown		29.078	359				5.6.0	postponed to next meeting
N2-040091	CR	Inclusion of Calling Party Number in CTR	Ericsson	CAMEL4	23.078	660	1	B	Rel-6	6.0.0	postponed to next meeting
N2-040092	CR	Handling of DFCWA in ETC and CTR procedures	Ericsson	CAMEL4	23.078	666	1	F	Rel-5	5.6.0	approved
N2-040093	CR	Correction to Request Report BCSM Event handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	671	1	F	Rel-5	5.6.0	revised to N2-040137
N2-040094	CR	Correction to Split Leg handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	673	1	F	Rel-5	5.6.0	revised to N2-040139
N2-040095	CR	Correction to Tssf timer at Apply Charging	Ericsson	CAMEL4	23.078	679	1	F	Rel-5	5.6.0	revised to N2-040119
N2-040096	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	23.078	681	1	F	Rel-5	5.6.0	revised to N2-040147
N2-040097	DISC	Additional elements in CAP Connect for NP follow-on calls	Ericsson	CAMEL4							noted
N2-040098	LS OUT	Reply to LS on IP Flow Based Bearer Level Charging (To: SA2)	Vodafone								revised to N2-040110
N2-040099	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	23.078	682	1	B	Rel-6	6.0.0	revised to N2-040156
N2-040100	CR	SCUDIF corrections for CAMEL interworking	Nokia	SCUDIF	22.078			F	Rel5	5.12.0	revised to N2-040164
N2-040101	CR	SCUDIF corrections for CAMEL interworking	Nokia	SCUDIF	23.172			F	Rel5	5.3.0	noted
N2-040102	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	23.078	692	1	A	R5	5.6.0	revised to N2-040162
N2-040103	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	29.078	355	1	A	R5	5.6.1	revised to N2-040163
N2-040104	LS OUT	LS to GSM IREG	NTT DoCoMo, NEC								revised to N2-040161
N2-040105	DISC	CAMEL open issue list	CN2 chair								noted
N2-040106	CR	Correction to dialed services triggering for NP and NC calls	Ericsson	CAMEL4	23.078	661	1	F	Rel-5	5.6.0	approved

N2-040107	CR	Correction to dialed services triggering for NP and NC calls	Ericsson	CAMEL4	23.078	694		A	Rel-6	6.0.0	approved
N2-040108	CR	Correction to No Answer handling (CAMEL_OCH_MSC2)	Ericsson	CAMEL4	23.078	695		A	Rel-6	6.0.0	approved
N2-040109	CR	Correction to handling of DFC in CS_gsmSSF	Ericsson	CAMEL4	23.078	696		A	Rel-6	6.0.0	approved
N2-040110	LS OUT	Reply to LS on IP Flow Based Bearer Level Charging (To: SA2)	Vodafone								approved
N2-040111	CR	Correction to both way through parameter for ETC and CTR	Ericsson	CAMEL4	23.078	674	1	F	Rel-5	5.6.0	approved
N2-040112	CR	Correction to both way through parameter for ETC and CTR	Ericsson	CAMEL4	23.078	697		A	Rel-6	6.0.0	approved
N2-040113	CR	Correction to Correction to both way through parameter	Ericsson	CAMEL4	29.078	351	1	F	Rel-5	5.6.0	approved
N2-040114	CR	Correction to description of Service Interaction Indicators Two parameter	Ericsson	CAMEL4	29.078	360		A	Rel-6	6.0.0	approved
N2-040115	CR	Correction to forwarded leg handling with Suppress O-CSI	Ericsson	CAMEL4	23.078	676	1	F	Rel-5	5.6.0	approved
N2-040116	CR	Correction to forwarded leg handling with Suppress O-CSI	Ericsson	CAMEL4	23.078	698		A	Rel-6	6.0.0	approved
N2-040117	CR	Correction to ORLCF handling for CAMEL calls in VMSC	Ericsson	CAMEL4	23.078	677	1	F	Rel-5	5.6.0	approved
N2-040118	CR	Correction to ORLCF handling for CAMEL calls in VMSC	Ericsson	CAMEL4	23.078	699		A	Rel-6	6.0.0	approved
N2-040119	CR	Correction to Tssf timer at Apply Charging	Ericsson	CAMEL4	23.078	679	2	F	Rel-5	5.6.0	approved
N2-040120	CR	Correction to temporary connection establishment	Ericsson	CAMEL4	29.078	361		A	Rel-6	6.0.0	approved
N2-040121	CR	Default Basic Service for gsmSCF-initiated calls	Ericsson	CAMEL4	23.018			F	Rel-5	5.8.0	noted
N2-040122	CR	Missing DisconnectLeg Result	Alcatel	CAMEL4	23.078	648	1	F	Rel-5	5.6.0	approved
N2-040123	CR	Missing DisconnectLeg Result	Alcatel	CAMEL4	23.078	649	1	A	Rel-6	6.0.0	approved
N2-040124	CR	Handling of DFCWA in ETC and CTR procedures	Ericsson	CAMEL4	23.078	700		A	Rel-6	6.0.0	approved
N2-040125	CR	Correction to CUG handling for NP calls	Ericsson	CAMEL4	23.078	667	1	F	Rel-5	5.6.0	approved

N2-040126	CR	Correction to CUG handling for NP calls	Ericsson	CAMEL4	23.078	701		F	Rel-6	6.0.0	approved
N2-040127	CR	Correction to CAMEL_ICA_MSC (hanging connector)	Ericsson	CAMEL4	23.078	668	1	F	Rel-5	5.6.0	approved
N2-040128	CR	Correction to CAMEL_ICA_MSC (hanging connector)	Ericsson	CAMEL4	23.078	702		A	Rel-6	6.0.0	approved
N2-040129	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	23.078	688	1	B	Rel-6	6.0.0	revised to N2-040154
N2-040130	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	29.002		1	B	Rel-6	6.4.0	endorsed
N2-040131	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	29.078	352	1	B	Rel-6	6.0.0	approved
N2-040132	CR	Correction to preconditions for connecting a held party to the group	Nokia	CAMEL4	22.078			F	Rel5	5.12.0	endorsed
N2-040133	CR	MoveLeg precondition alignment	Nokia	CAMEL4	22.078			A	Rel-6	6.3.0	endorsed
N2-040134	CR	Correction to DP description tables	Ericsson	CAMEL4	23.078	662	1	F	Rel-5	5.6.0	approved
N2-040135	CR	Correction to DP description tables	Alcatel	CAMEL4	23.078	651	1	A	Rel-6	6.0.0	approved
N2-040136	CR	Allowing Export_leg at DP Alerting and DP Answer	Ericsson	CAMEL4	23.078	669	1	F	Rel-5	5.6.0	approved
N2-040137	CR	Correction to Request Report BCSM Event handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	671	2	F	Rel-5	5.6.0	approved
N2-040138	CR	Correction to Request Report BCSM Event handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	703		A	Rel-6	6.0.0	approved
N2-040139	CR	Correction to Split Leg handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	673	2	F	Rel-5	5.6.0	approved
N2-040140	CR	Correction to Split Leg handling in CSA_gsmSSF	Ericsson	CAMEL4	23.078	704		A	Rel-6	6.0.0	approved
N2-040141	CR	Correction to CS ID Prompt & Collect	Ericsson	CAMEL4	23.078	675	1	F	Rel-5	5.6.0	approved
N2-040142	CR	Correction to CS ID Prompt & Collect	Ericsson	CAMEL4	23.078	705		A	Rel-6	6.0.0	approved
N2-040143	CR	Correction to SplitLeg preconditions	Ericsson	CAMEL4	23.078	680	1	F	Rel-5	5.6.0	approved
N2-040144	CR	Correction to SplitLeg preconditions	Ericsson	CAMEL4	23.078	706		A	Rel-6	6.0.0	approved

N2-040145	CR	Correction to SplitLeg and MoveLeg preconditions	Ericsson	CAMEL4	29.078	348	1	F	Rel-5	5.6.0	approved
N2-040146	CR	Correction to SplitLeg and MoveLeg preconditions	Ericsson	CAMEL4	29.078	362		A	Rel-6	6.0.0	approved
N2-040147	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	23.078	681	2	F	Rel-5	5.6.0	approved
N2-040148	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	23.078	707		A	Rel-6	6.0.0	approved
N2-040149	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	29.078	349	1	F	Rel-5	5.6.0	approved
N2-040150	CR	Correction to Disconnect Leg preconditions	Ericsson	CAMEL4	29.078	363		A	Rel-6	6.0.0	approved
N2-040151	CR	Correction to Information Location at DP O_Term_Seized	Ericsson	CAMEL4	23.078	708		A	Rel-6	6.0.0	approved
N2-040152	CR	Correction to GPRS protocol definition	Ericsson	CAMEL4	29.078	346	1	F	Rel-5	5.6.0	approved
N2-040153	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	29.078	350	1	B	Rel-6	6.0.0	revised to N2-040157
N2-040154	CR	CAMEL4 SCUDIF notification during active call for prepay	Nokia	SCCAMEL	23.078	688	2	B	Rel-6	6.0.0	approved
N2-040155	CR	Starting of Timer Tccd after ACR on DP 'Change of Position'	Alcatel	CAMEL4	23.078	709		F	Rel-5	5.6.0	approved
N2-040156	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	23.078	682	2	B	Rel-6	6.0.0	approved
N2-040157	CR	Enhancement of Event Specific Information for DP 'Change of Position'	Siemens	CAMEL4	29.078	350	2	B	Rel-6	6.0.0	approved
N2-040158	LS OUT	LS to SA5 on the GGSN address to be stored in CDRs	Nokia								revised to N2-040171
N2-040159	CR	GPRS ODB reporting to CAMEL SCP	Nokia	CAMEL3	23.078	686	1	F	Rel-6	6.0.0	approved
N2-040160	CR	NoReply timer clarification for follow-on calls	Nokia	CAMEL4	23.078	689	1	F	Rel-6	6.0.0	approved
N2-040161	LS OUT	LS to GSM IREG	NTT DoCoMo , NEC								approved
N2-040162	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo , NEC	TEI	23.078	692	2	A	Rel-5	5.6.0	revised to N2-040167
N2-040163	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo , NEC	TEI	29.078	355	2	A	Rel-5	5.6.1	revised to N2-040168

N2-040164	CR	SCUDIF corrections for CAMEL interworking	Nokia	SCUDIF	22.078			F	Rel-5	5.12.0	endorsed
N2-040165	CR	SCUDIF corrections for CAMEL interworking	Nokia	SCUDIF	22.078			F	Rel-6	5.12.0	endorsed
N2-040166		skipped number									
N2-040167	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	23.078	692	2	A	Rel-5	5.6.0	revised to N2-040172
N2-040168	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	29.078	355	3	F	Rel-5	5.6.1	approved
N2-040169	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	29.078	356	1	A	Rel-6	6.0.0	approved
N2-040170	CR	Starting of Timer Tccd after ACR on DP 'Change of Position'	Alcatel	CAMEL4	23.078	710		A	Rel-6	6.0.0	approved
N2-040171	LS OUT	LS to SA5 on the GGSN address to be stored in CDRs	CN2								approved
N2-040172	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	23.078	692	4	F	Rel-5	5.6.0	approved
N2-040173	CR	LLC passes on the gsmSSF - gsmSCF interface	NTT DoCoMo, NEC	TEI	23.078	693	1	A	Rel-6	6.0.0	approved
N2-040174	CR	Correction to GPRS protocol definition	Ericsson	CAMEL4	29.078	364		A	Rel-6	6.0.0	approved
N2-040175	CR	Correction to Tssf timer at Apply Charging	Ericsson	CAMEL4	23.078	711		A	Rel-6	6.0.0	approved
N2-040176	CR	Allowing Export_leg at DP Alerting and DP Answer	Ericsson	CAMEL4	23.078	712		A	Rel-6	6.0.0	approved