3GPP TSG-CN Meeting #24

2nd – 4th June 2004. Seoul, Korea.

NP-040205

Source: MCC

Title: CN2#33 Draft meeting report

Agenda item: 6.2.1

Document for: Information

DRAFT Meeting Report, version 0.0.1

TSG CN WG2#33
Zagreb, CROATIA

10-14 May, 2004

Chairman: Keijo Palviainen (Nokia)

MCC support: Andrijana Jurisic(ETSI)

Hosts: European 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_33_Zagreb/Docs

1 Opening of the meeting and approval of the agenda

N2-040177: CN2 chairman, Title: Proposed meeting agenda

Discussion:

Conclusion: approved

2 Allocation of documents to agenda items

N2-040178: CN2 chairman, Title: Allocation of documents to agenda items

Discussion: The document was updated during the meeting.

Conclusion: approved

3 Reports

N2-040179: MCC, Title: CN2#33 Draft Meeting Report

Discussion:

Conclusion: approved

N2-040180: MCC, Title: CN#23 Draft Meeting Report

Discussion:

Conclusion: noted

4 Input Liaison Statements

N2-040181: Source: CN4, Type: LS IN , Title: LS reply to CN2 on CAMEL prepay: IP version of the GGSN address

Summary: Up to Rel-4, the GGSN IP address included in the S-CDR is the GGSN IP address that is used for the GTP-C communication between the SGSN and GGSN.

In Rel-5 the following statement in TS 32.215 is used to determine which GGSN IP address is included in the S-CDR: GGSN Address Used is the current serving GGSN IP Address for the Control Plane. If both an IPv4 and an IPv6 address of the GGSN are available, the GSNs shall include the IPv4 address in the CDR."

The GPRS charging TSs do not specify whether the GGSN IP address included in the S-CDR is the one obtained from the DNS/APN resolution procedure or the one received from the GGSN (if any) in the Create PDP Context Response message. However, the TSs mandate that the address included in the S-CDR must remain unchanged during the lifetime of the PDP context.

Discussion: TS 29.060 which describes GTP leads to ambiguity on which IP address shall be used for charging purposes. Ericsson finds that although there is no impact to CN2, improvement to TS 29.060 will be proposed by Ericsson.

SGSN shall include IPv4 address in IDP (the same as the one stored in CDR) if 2 IP v are available. There is no requirement and it is not stated anywhere in the specification that the same address will be used in SCP.

There was a question to CN4 during the CN2/CN4 Joint meeting whether GGSN address can change during the PDP context establishment. If it can be changed, then SGSN does not know the version in the CDR. CN4 replied that it cannot change.

It will be clarified that the SGSN shall report the GGSN address in the same IP address format as in the S-CDR. Reference to charging specification TS 32.215 will be added as well. Rel-6 CR to TS 23.078 will be proposed by Nokia in N2-040205.

Conclusion: noted

<u>N2-040205</u>: Source: Nokia, Type: CR, CR#685r1, Title: IP version of GGSN address for CAMEL

Discussion: The same definition shall be consistent through the document. The CR from previous proposal was used (postponed CR).

Conclusion: revised to N2-040239

<u>N2-040239</u>: Source: Nokia, Type: CR, CR#685r2, Title: IP version of GGSN address for CAMEL

Discussion:

Conclusion: approved

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5 Work item management & miscellaneous

Status of CN2 specifications and drafts

Type	Number	Title	Rel	curent 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	5.7.0	N2	SUMIO, Myagava
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-6	6.1.0	N2	SUMIO, Myagava
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-5	5.7.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-6	6.1.0	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	Rel-5	5.2.0	N2	Angelica Remoquillo

		for IP Multimedia Subsystems (IMS)				

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/Ipr/).

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

All the Features and tasks in the work plan are marked as 100% completed. CN2 responsibility will be replaced by CN4, as CN4 will handle further corrections for CAMEL in all releases.

5.3 Meeting calendar of year 2004

3GPP TSG CN#24 will officially close CN2 on 2-4 June 2004. Forther contributions on CAMEL should be brought to 3GPP CN WG4 meeting (see meeting calendar of CN4 at http://www.3gpp.org/TB/CN/CN4/CN4.htm).

5.4 Terms of reference

6 Maintenance of earlier CAMEL phases

6.1 CAMEL phase 1

6.2 CAMEL phase 2

6.3 CAMEL phase 3 in R99

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

N2-040203: Discussion document, Source: CN2 Chairman, Title: CAMEL4 open issue list

Content: The CN2 meetings have identified a number of open issues on TS 23.078 and TS 29.078. This document lists those open issues.

Non-IMS topics:

1. GGSN address format (IPv4 or IPv6). Needed for charging correlation. An LS sent to SA5-B.

2. D-CSI triggering criteria: According to Ericsson, list of 10 numbers may not be adequate, especially if the DP3 enhanced dialled services are used as a replacement for DP2 triggering.

3. SCUDIF and triggering criteria:

   - Shall we trigger if either basic service criterion matches?

   - Shall both match? Or,

   - Do we assume that operator populates both codes to the list of 5 and MSC compares the code of the preferred service to the list? 23.078 chapter 4.2.1.2.1.

IMS topics:

4. None.

Discussion: In MO case there are some rules already defined. The same rules on MT case shall be applied (Nokia).
SA1 approved Rel-7 CR that SCP can change the basic service. Version TS 22.078 Rel-7 is already published and a new requirement is identified. This new requirement will be added to separate open issues list that apply to from Rel-7 onwards.

Conclusion: revised to N2-040206

N2-040206: Discussion document, Source: CN2 Chairman, Title: CAMEL4 open issue list

Discussion:

Conclusion: revised to N2-040666 which is edited and approved by CN2. The open issues list will be attached to the liaison statement to CN4.

N2-040222: LS OUT to CN4 (CC: TSG CN), Title: CAMEL open issues

Discussion: In this LS, CN2 asks CN4 group to maintain the list for an appropriate period of time, and solve the issues identified in N2-040666 based on company contributions.

Conclusion: revised to N2-049999 which was approved.

N2-040204: Source: Ericsson, Title: Additional CAMEL4 open issue list

Discussion:

Conclusion: noted

N2-040207: TS 23.078, Rel-6, Type: CR, CR#723, Title: Correction to CS_gsmSSF for call release

Discussion: The CR solves the open issue#1 in N2-040204. The CR corrects the wording in figure 4.5.7.5, sheet 2, regarding the explanation of "Call to be released". It shall be explained that the check box in question relates to the part of the call that is controlled by the current CS_gsmSSF process instance. The work item is TEI_6.

Conclusion: approved

N2-040208: TS 29.078, Rel-6, Type: CR, CR#375, Title: Correction to First Digit Timer for Prompt&Collect

Discussion: The CR solves the open issue#3 in N2-040204. The CR corrects the description of firstDigitTimeOut, to avoid interworking problems such as unnecessary timer expiry or unnecessary long waiting time. The work item is TEI_6.

Conclusion: e-mail approval, deadline for rejection is 21st May 2004, 12:00 CET. Since no objections received until the deadline, the CR is approved and sent to CN#24 for approval.

N2-040209: TS 23.078, Rel-6, Type: CR, CR#724, Title: Stopping charging timers after Cancel[All]

Discussion: This CR solves the open issue 4 in N2-040204. A task box is added in process CS_gsmSSF, sheet 15, to stop all timers.

Conclusion: approved

N2-040183: TS 23.078, Rel-5, Type: CR, CR#713, Title: Correction to Tssf timer

Discussion: The usage of Tssf in process CS_gsmSSF is incomplete. The CR sets Tssf timer in sheet 11, 38, 42, 50 and 52 of process CS_gsmSSF.

The latest SDL has a question from which SDL state the user is coming. It shall be checked whether Int_Import_Leg is received in monitoring or Waiting for instsructions.

Second modification on sheet 38 is not covered in the CR cover page. Handling of Int_Disconnect_Forward_Connection_With_Argument shall be the seame as Int_Disconnect_Forward Connection.

All input signals shall be on the main level of the SDL diagram. Page 38 will be split in two pages.

As the consequences if not approved is not serious and frequent missoperation to be corrected in Rel-5, the CR was agreed by consensus.

Conclusion: revised to N2-040210

N2-040210: TS 23.078, Rel-5, Type: CR, CR#713r1, Title: Correction to Tssf timer

Discussion: On the sheet 42, state "Idle" is not mentioned. In the check box "Original state? " it could be specified in the text box "state before inputLegAck or state before MoveLegAck"

Conclusion: revised to N2-040233 which is approved as CR713r2.

N2-040211: TS 23.078, Rel-6, Type: CR, CR#721, Title: Correction to Tssf timer

Discussion: This is a mirror CR of CR713r2. Category is "A", WI is CAMEL4.

Conclusion: revised to N2-040234 which is approved as CR721r1.

N2-040184: TS 29.078, Rel-5, Type: CR, CR#368, Title: Correction to Tssf timer

Discussion: The CRs removes the post-conditions related to the reloading & restarting Tssf.
What was removed by this CR it is covered by SDL. Section 11.18.2.2 contains still reference to Tssf (section deals with Event report BCSM). SMS and GPRS may have similar inconsistency.

The CR is agreed by consensus, WI is CAMEL4.

Conclusion: approved

N2-040212: TS 29.078, Rel-6, Type: CR, CR#371, Title: Correction to Tssf timer

Discussion: This is Rel-6 mirror CR of the CR#368.

Conclusion: approved

N2-040185: TS 29.078, Rel-5, Type: CR, CR#365, Title: Correction to ERB pre-condition for gsmSSF FSM state

Discussion: The CR changes the pre-condition for the EventReportBCSM procedure. This CR was agreed by consensus. WI is CAMEL4.

Conclusion: approved

N2-040213: TS 29.078, Rel-6, Type: CR, CR#372, Title: Correction to ERB pre-condition for gsmSSF FSM state

Discussion: This is a mirror CR of CR#365. WI is CAMEL4.

Conclusion: approved

N2-040186: TS 23.078, Rel-5, Type: CR, CR#715, Title: Correction to USSD interworking

Discussion:

Conclusion: withdrawn

N2-040195: TS 23.078, Rel-5, Type: CR, CR#714, Title: Correction to Move Leg pre-condition

Discussion: The CR corrects CSA_gsmSSF, sheet 18 and CSA_gsmSSF, sheet 19 The CR alignes stage 1 and stage 3. At target Call Segment at least one leg shall reach alerting state.

- If certain leg becomes alerting phase, we set Move_Leg_Allowed=true. Stage 1 allows MoveLeg in Active state only.
- TS 22.078 section 8.1.4 says "at least one call leg in the group has reached the active phase". The change on sheet 18 will be canceled

Stage 3 shall be aligned as well (precondition for CS1 is to reach alerting phase).

Conclusion: revised to N2-040214

N2-040214: TS 23.078, Rel-5, Type: CR, CR#714r1, Title: Correction to Move Leg pre-condition

Discussion:

Conclusion: approved

N2-040235: TS 23.078, Rel-6, Type: CR, CR#725, Title: Correction to Move Leg pre-condition

Discussion: This is a mirror CR of CR 714r1.

Conclusion: approved

N2-040215: TS 29.078, Rel-5, Type: CR, CR#373, Title: Correction to Move Leg pre-condition

Discussion: This CR is result of stage 2 CR. The wording in the 3rd bullet of the gsmSSF preconditions will be changed to: "At least one leg in the target Call Segment has reached the active phase" CSE initiated call case will be added in the third bullet of the third gsmSSF precondition.
CS1 shall be replaced by CSID1 in the cover page.
Conclusion: revised to N2-040229

N2-040229: TS 29.078, Rel-5, Type: CR, CR#373r1, Title: Correction to Move Leg pre-condition

Discussion: The gsmSSF precondition "The call is established by the gsmSCF" shall be reworded to "The call was created by the gsmSCF."
Conclusion: revised to N2-040240 which was approved as CR#373r2.

N2-040241: TS 29.078, Rel-6, Type: CR, CR#374, Title: Correction to Move Leg pre-condition

Discussion: This is a Rel-6 mirror CR of CR 373r2.
Conclusion: approved

N2-040196: TS 23.078, Rel-5, Type: CR, CR#717, Title: Correction to D-CSI suppression in Continue With Argument

Discussion: The CR corrects the description of the "Suppress D-CSI" in the ContinuWithArgument Information Flow. The CR was agreed by consensus. WI is CAMEL4.
Conclusion: approved

N2-040216: TS 23.078, Rel-6, Type: CR, CR#722, Title: Correction to D-CSI suppression in Continue With Argument

Discussion: This is a Rel-6 mirror CR of the CR#717.
Conclusion: approved

N2-040197: TS 23.078, Rel-5, Type: CR, CR#718, Title: Correction to InitialDP IF for NP leg

Discussion: The CR corrects the description of MSC Address in IDP. Current description implies that an NP leg that is created in the GMSC will not lead to D-CSI triggering or N-CSI triggering. D-CSI may also be sent to GMSC. Hence, an NP leg created in the GMSC may result in D-CSI triggering. Furthermore, the NP leg created in the GMSC may also result in N-CSI triggering.

NP triggering in the GMSC should be covered. For NP call, all cases should be listed. Egzact wording is left to Ericsson.
Consequences if not approved shall be improved. Consequences if the CR is not approved are:
1. Wrong MSC address is sent to gsmSCF. As a result there will be prepay charging problems in a NP call case.
2. Potential incompatibility. The gsmSCF may reject Initial DP from a GMSC if the triggering is done for a NP leg.
3. Missing CAP dialogue. The MSC/SSP may not trigger in a NP call in the GMSC. This may lead to poor service or prepay charging problems.
Conclusion: revised to N2-040217

N2-040217: TS 23.078, Rel-5, Type: CR, CR#718r1, Title: Correction to InitialDP IF for NP leg

Discussion: For NC call, Call Reference Number is associated with the MSC. Editorial correction to the description of GMSC needed.

Conclusion: revised to N2-040226

N2-040226: TS 23.078, Rel-5, Type: CR, CR#718r2, Title: Correction to InitialDP IF for NP leg

Discussion: For the Call Reference Number it shall be specified "For the setting of the Call Reference Number for NP calls, see the corresponding call case above (MO, MT, VT or MF)."
Conclusion: revised to N2-040230

N2-040230: TS 23.078, Rel-5, Type: CR, CR#718r3, Title: Correction to InitialDP IF for NP leg

Discussion:
Conclusion: approved

N2-040236: TS 23.078, Rel-6, Type: CR, CR#726, Title: Correction to InitialDP IF for NP leg

Discussion: This is a mirror CR of CR#718r3.
Conclusion: approved

N2-040201: TS 23.078, Rel-5, Type: CR, CR#719, Title: Correction to Entity Released for individual call party

Discussion: According the CR, in sheet 36 of CS_gsmSSF CS_gsmSSF shall send "Abort" to CSA_gsmSSF instead of "Application End".
As in CAMEL3 Alcatel finds that instead of added "Abort", there should be "application end" for backward compatibility.
Conclusion: revised to N2-040218

N2-040218: TS 23.078, Rel-5, Type: CR, CR#719r1, Title: Correction to Entity Released for individual call party

Discussion:
Conclusion: approved

N2-040242: TS 23.078, Rel-6, Type: CR, CR#728, Title: Correction to Entity Released for individual call party

Discussion: This is Rel-6 mirror CR of CR#719r1.
Conclusion: approved

7.3 CAMEL phase 4, Interactions with Optimal Routeing

N2-040182: TS 23.079, Rel-5, Type: CR, Source: Nortel Networks, Title: Enhancement to Route_Permitted procedure to handle Short/ Long FTNs

Discussion: Rel-6 specification is not yet created. The WI shall be TEI_5.

Conclusion: endorsed in CN2, sent for e-mail approval in CN4.

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

N2-040199: TS 29.078, Rel-5, CR#369, Source: Alcatel, Title: Mapping between ICA and IAM

Discussion: According to the stage 1 and stage 2, CPH operations are allowed only for speech call. To set up a new call leg or a new call , the gsmSCF sends an ICA then CPH operations will be used in order to continue the call. Mappping between ICA and IAM are described.

It has to be noted that only mandatory parameters indicating the call is a speech call are described.
The note 4 shall be improved so that the parameter is not mandatory in ISUP.
The reference to Q.931 shall be replaced by reference [25].

Conclusion: revised to N2-040220

N2-040220: TS 29.078, Rel-5, CR#369r1, Source: Alcatel, Title: Mapping between ICA and IAM

Discussion: The CR is agreed by consensus. WI is CAMEL4.

Conclusion: approved

N2-040200: TS 29.078, Rel-6, CR#370, Source: Alcatel, Title: Mapping between ICA and IAM

Discussion: This is Rel-6 mirror CR to CR#369r1. WI is CAMEL4.

Conclusion: revised to N2-040221

N2-040221: TS 29.078, Rel-6, CR#370r1, Source: Alcatel, Title: Mapping between ICA and IAM

Discussion:

Conclusion: approved

N2-040202: TS 23.078, Rel-5, CR#720, Source: Ericsson, Title: Correction to User Interaction before Answer

Discussion:

Conclusion: revised to N2-040223

N2-040223: TS 23.078, Rel-5, CR#720r1, Source: Ericsson, Title: Correction to User Interaction before Answer

Discussion:

Conclusion: approved

N2-040237: TS 23.078, Rel-5, CR#720, Source: Ericsson, Title: Correction to User Interaction before Answer

Discussion:

Conclusion: approved

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 Dialled Services (removal of functionality)

7.11   CAMEL phase 4/ Provision of location information of called subscriber

7.12   CAMEL phase 4/ Notification 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

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 MSClassMark to SCP

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

No contributions.

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

N2-040194: Discussion document, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: Active location retrieval was seen as useful enhancement in previous meeting. Some MT call services require the active location of the subscriber. There is a flag in the HLR and that may be a new value for the flag (current location). The meeting was not sure if there is a requirement for this in stage 1. Once the gateway sends SRI, we already can send PSI, but there is nothing in stage 1 about that.

For optimal routing case, we don't know if GMSC supports the prepaging feature. So the new parameter can be used or old parameter could be reused (Alcatel). GMSC shall set "prepaging supported" in SRI, otherwise HLR shall not send PSI (current location). Proposed enhancement is for HLR functionality. This has an impact on TS 23.078.

It was agreed to write CR to stage 1 in N2-040219. Existing functionality should be defined first in stage1, and then this enhancement.

Conclusion: noted

N2-040219: TS 22.078, Rel-6, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: Currently, TS 22.078 does not contain a reference to the existing functionality of obtaining Location Information and Subscriber State from the VLR, during Mobile Terminating call handling. The present CR proposes that that capability be mentioned in TS 22.078, including the possibility to obtain the Current Location during Mobile Terminating call handling.

CN plenary should approve stage 2 and stage 3 CRs conditionally and condition is approval of SA1 requirement.

The reference to subscriber state is mentioned in the CR (information obtained during mobile terminating call handling). If the Location information is missing, at least subscriber state can be interrogated at the same time and is giving the indication about the location information.

It was agreed to remove Subscriber state from the CR.We want to indicate that the Location information that is obtained can be either "Stored location information" or the Current location information which is the result of the paging of the subscriber. Alcatel proposed to delete the explanation of Location information in brackets and to refer to TS 23.018. The HLR may return information based on the current service area. This applies for both ATI and mobile terminating call.

Conclusion: revised to N2-040238

N2-040238: TS 22.078, Rel-6, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: It shall be indicated on cover page that CN2 has seen the previous version of the document and no technical problems has been found.

Conclusion: noted and will be sent to SA1 as Ericsson contribution.

N2-040187: TS 23.008, Rel-6, Type: CR, Cr#131, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: he CR specifies in section 2.14.1.3 (Location information/Subscriber state interrogation) that the HLR may request the active location of the subscriber. Action location shall be replaced by Current location. The WI code shall be TEI_6.

Joint meeting with CN4: CN plenary shall approve the CR conditionally and the condition is SA approval of service requirement. Current location is defined in 22.071.Affected specifications: 22.078 shall be added.

Conclusion: revised to N4-040720 during the joint meeting with CN4. N4-040720 was approved by CN4. (CN2 document number was not allocated for revised version).

N2-040188: TS 23.018, Rel-6, Type: CR, Cr#142, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: N4-040540

Conclusion: withdrawn

N2-040189: TS 23.078, Rel-6, Type: CR, CR#659r1, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Content: The CR pecifies in section 4.3.7.1 (Location information/Subscriber state Interrogation) that HLR may request active location information, in section 4.6.1.8 that the Location Information in CAP IDP for MT call may contain the IE "Current Location Retrieved" and in section 4.6.9.1 that the Location Information in MAP SRI-Res may contain the IE "Current Location Retrieved".

Discussion: If subscriber changes the location during the ongoing call, is the VLR updated? If yes, there is no need to page the subscriber.

Nokia: would Age of location contain enough information? The mobile wont respond to paging during the ongoing call. The age of location would be after previous handover.

Current location retrieved means that the successful paging has taken the place. That is not the case for ongoing call. If the VLR does not page the subscriber, it would not include the current information retrieved (Ericsson).

We must ensure that all the vendors interpret the same way the age of location and current location retrieval. When there is an ongoing call, the age of location remains 0. Even the current location retrieved tag is absent (as there is no paging), age of location is 0.

It was proposed to change a parameter name, but the concern is that we introduce the misalignment with 29.002. TS 23.018 includes current location retrieved.

Conclusion:

-   Prepaging flag shall be set in SRI and Active location will be changed to Current location.
-   Current location retrieved is not conveyed in th e MAP and CAP.
-   WI is TEI_6
-   Alcatel: Description of PSI shall be improved in stage 2 document. Section 4.3 is description of CAMEL subscriber data in HLR, so the link between PSI and SRI functionality can be included. Information flow shall be included.

Conclusion: revised to N2-040243

N2-040243: TS 23.078, Rel-6, Type: CR, CR#659r2, Source: Ericsson, Title: Current Location Retrieval for MT call handling

Discussion: Several wording changes are proposed and will be considered in revised version.

When a GMSC interrogates the HLR for routeing information, the HLR may use the Provide Subscriber Information procedure to obtain the required information, from the VLR.

- "One or both subscriber states" and obtain will be replaced by "requested".
- Is it paging of the subscriber under the control of VLR or HLR? The HLR will request current location, and VLR has a choice: if there is ongoing call, there will be no paging, but if there isn't an ongoing call, the subscriber will be paged.
- New paragraph shall explain that the HLR may request the VLR to provide current location.
- Current location obtained is the result of the paging of the subscriber. IE table specifies what the HLR is able to ask for. Location information and current location information shall come into the IE table.
- ATI request and SRI from the GMSC are triggers for the HLR to send ProvideSubscriberInfo.
- In the first paragraph, we could add the trigger "When the HLR receives ATI from gsmSCF"
- 2 new paragraphs are added in section 4.3.7.1.
- The HLR may also use Provide Subscriber Information IF to request one or both of subscriber state and subscriber location (which may be Current Location) from the VLR, when the HLR receives Send Routeing Info from the GMSC.

Conclusion: revised to N2-040247 which is approved as CR#659r3

N2-040190: TS 29.002, Rel-6, Type: CR, CR#659r1, Source: Ericsson, Title: Active Location Retrieval for MT call handling

Discussion: Reason for change should not refer to discussion document, but should give the actual reason change. Active location shall be replaced by Current location. Wording changes required.

Conclusion: revised to N2-040244/N4-040721 which was endorsed by CN2 (N4-040721 was revised to N4-04753 in CN4 and was agreed by CN4))

N2-040198: Discussion document, Source: Ericsson, Title: Enhancement to ConnectToResource

Discussion: SRF is under the control of SCF. There is no need to make SRF autonomous according to Alcatel.

Autonomous SRF is like ring tone specific server which will play the specific tone to calling party until the call is answered. There are other means to achieve this. Connect to Recourse, Establish Temporary Connection and third mechanisms are given with specific parameters.

While the call is alerting the GMSC or VMSC disconnects original alerting tone and connects the ISUP trunk towards calling party. Once the call is answered, separate call leg is disconnected and call is connected. One way is ISUP interface, and other way is CAMEL (Establish Temporary Connection or ConnectToResource or ICA)

Ericsson explained that operators are using this mechanism already, and there is a requirement to standardize this. It gives the guideline to vendors how to implement it. There are many multivendor networks, and that is the reason for need to standardize this.

Alcatel finds that this change introduces the change of the architecture. Vodafone concerns could be covered if the picture showing network configurations examples and interfaces would be shown in the document.

Alcatel is concerned with third functionality (Rel-6 SRF) to play tones autonomously and there could be SA issue because up to now, SRF was under the control of SCP. This proposal would introduce a small, but new functionality and how this announcement server behave should be kept outside CAMEL specification.

Specification of the announcement server is not part of CAMEL specification, but could be shown in TS 29.078 SRF scenarios as an example.

Conclusion: revised to N2-040224 which is noted

<u>**N2-040191**</u>: TS 23.078, Rel-6, Type: CR, CR#716, Source: Ericsson, Title: Enhancement to ConnectToResource

Discussion:Establish Temporary Connection will be used based on the discussion in N2-040224. Title to be changed to Enhancement to User Interaction. Chairman's preference is to refer to EstablishTemporaryConnection.

Discussion paper shall be attached as an attachment in the Zip file. In the Reason for change the section explaining the reason for change from the discussion document will be copied.

The restriction of the national use of the parameters (CgPN) shall be in stage 2. Instead of the Home Network, we should use Home Country (document refers to International gateway exchange).

When ETC is routed to home country., the SCP doesn't know the rules of Visited network if the temporary leg is routed between countries. The restriction applies to restriction between SCP and MSC. If they are in the same country , this is national scenario, and if they are not in the same country this is then international scenario.

Alcatel: SCP, MSC and announcement device shall be in the same operator. Ericsson: MSC and SCP are owned by the same operator (MT case). If SCP sends Connect with Calling Party Number, MSC puts it to ISUP address. The announcement should be connected to calling party and MSC is not involved, it only passes Calling Party Number in ISUP message.

Alcatel: MSC must support CAMEL and if this is specified that MSC just copy and past message to ISUP that might me a solution.

Nokia: For all the parameters currently it is specified what to do if certain parameters is received. In this case we just say if we receive the parameter, we just pass it in ISUP message.

Status column indicates optionally of Original Called Party ID and Original Calling Party ID. This IE may be used as an identifier of the Called Party and the main purpose is that it may be forwarded to the gsmSRF. The example of the use of the parameter shall be mentioned.

Nokia supports the proposal as it is. It specifies that it is requirement for the MSC to forward the parameter

Conclusion: revised to N2-040231 (Title changed to Enhancement to User Interaction, WI code is changed to TEI_6)

<u>**N2-040231**</u>: TS 23.078, Rel-6, Type: CR, CR#716r1, Source: Ericsson, Title: Enhancement to user interaction

Discussion: Enhancement in ETC is introduced. In the scope section enhancement of ETC is mentioned and information flow is updated. Mapping of parameters CAP to ISUP should not be duplicated.

Should we mandate forwarding of this parameter to ISUP? It shall be done as defined in 29.078.
If a vendor supports CAMEL phase 4, is that operator mandated to map parameters from CAP to dedicated ISUP parameters and shall the same mandate be introduced for these 2 parameters CallingPartyNumber and OriginalCalledPartyID? Currently the mandate is in 3 places: information flow table, procedure description, and information mapping table to ISUP. It is proposed to keep only mapping table and not to duplicate information.

Is this feature mandatory or optional? We should distinguish Rel-5 and Rel-6. Regarding earlier releases, operators/vendors can implement it in CAMEL phase 2 environment. If it is defined as a subset, it will be more complicated to implement it for earlier releases.

Conclusion:

1. It was concluded to make this functionality optional. IF the MSC does not support this new functionality it shall just silently discard a new parameter.
2. It was concluded that no new subset bit is added for this feature.

Offered CAMEL phase 4 functionalities are defined in 29.002 and Ericsson has a concern on additional specification work needed if we introduce a new subset. Ericsson has no preference on whether to define a new subset or not.

Conclusion: revised to N2-040245

N2-040245: TS 23.078, Rel-6, Type: CR, CR#716r2, Source: Ericsson, Title: Enhancement to user interaction
Discussion: Support of Original Called Party ID and Calling Party Number is an implementation option in gsm SSF. This will be reflected in the IE description. It shall be clarified that these two information elements, shall be included in the ISUP IAM for the "Temporary Connection", if present

MCS shall be replaced by gsm SSF. Some further wording changes will be considered.

Conclusion: revised to N2-040248 which is approved as CR#716r3

N2-040192: TS 29.078, Rel-6, Type: CR, CR#366, Source: Ericsson, Title: Enhancement to Connect To Resource

Discussion: Table number shall be revised. Rel-6 uses the same CAP protocol version as Rel-5. Rel-5 MSC would just ignore these parameters. Second sentence of each parameter description shall be removed as it is already in stage 2. The introduced table is in Annex 7 and the name of the table shall be A.7.

Title changed to Enhancement to User Interaction, WI code is changed to TEI_6

Conclusion: revised to N2-040232

N2-040232: TS 29.078, Rel-6, Type: CR, CR#366, Source: Ericsson, Title: Enhancement to User Interaction

Discussion: New elements are added to ETC instead to ConnectToRecource. Note 1 is renumbered to Note 2.

Conclusion: approved

N2-040193: TS 29.078, Rel-6, Type: CR, CR#367, Source: Ericsson, Title: Adding missing ROS Object Identifier

Discussion: The CR corrects the definition of gsmSSF ROS-OBJECT-CLASS and adds the definition of gprsSSF ROS-OBJECT-CLASS. WI code should be TEI_6. Both contracts should be mentioned under capGprsSsfToScf. SMS ROS is also missing. The same extend as for GprsSsf can be done.

Conclusion: revised to N2-040225 which is approved as CR#367r1

8.2 Enhanced Dialled Services

No contributions.

8.3 Service Change and UDI Fallback (SCUDIF)

N2-040246: TS 23.172, Rel-6, Type: CR, Source: Ericsson, Title: Interaction of CAMEL with Service Change

Discussion: The CR adds the description of the interaction between the Service Change procedure and CAMEL. Information Elements shall not be repeated in SCIDOF specification. "Activated" shall be replaced by "armed".

Conclusion: noted

8.4 Change of position

No contributions.

9 Merging with CN4

CN2#33 meeting in Zagreb, Croatia is the last meeting of CN2 group. After June plenary, all CAMEL issues will be handled in CN4.

- Terms of reference of CN4 will be updated to include CAMEL items and will be sent to CN#24 for approval. CN2 terms of reference will be removed from the CN2 web page.

- List of CN4 specifications including rapportership will be updated to include CAMEL specifications.

- Rapporteurs of CAMEL specifications Mr. Sumio Miyagawa and Mr. Christian Homman will not continue rapporteurs work after closing of CN2. Raporteurs to be appointed by CN4.

- CN2 directories will be left at existing place due to a number of links to previous meeting and access to CAMEL documents and reports. CN2 web page will be update accordingly after the plenary in June 2004 when 3GPP TSG CN#24 officially close 3GPP TSG CN2.

- Work Plan will be updated to replace CN2 by CN4 as a responsible group for all CAMEL features and building blocks.

- Rel-7 requirements shall be added in the Work plan by CN4 or SA1.

- CAMEL open issues are sent to CN4 (CC:CN) in a form of liaison statement. CN4 is asked to maintain the list for a certain period of time.

- CN2 e-mail list will cease after TSG CN#24. It is up to CN4 to decide whether to create a separate list for CAMEL or to discuss CAMEL issues in existing CAMEL list.

- CN2 closing: It is proposed that TSG CN#24 officially closes CN2.

10 Closing of the meeting (13:30 Friday)

CN2 chairman closed the last CN2 meeting on 15th May 2004, at 14:30. CN2 chairman thanked to delegates for the good work in standardisation of CAMEL. The chairman thanked also to MCC support Per Johan Jorgenssen and Andrijana Jurisic for good support and cooperation given to CAMEL group.

The guest of the last CN2 meeting was Mr. Ian Park, the first chairman of CN2 group and later CN4 chairman and CN vice chairman. Mr. Ian Park remembered a good time working on CAMEL within CN2 and CN4 and thanked also all the delegates for contributing to CAMEL work through years.

Andrijana Jurisic from Mobile Competence Center (ETSI) thanked CN2 delegates, the chairman and rapporteurs for the cooperation and for a good time working and learning with CN2.

Annex A   Attendees list

Member of 3GPP (ETSI)

Ms. Teija Rantala	TeliaSonera AB	3GPPMEMBER (ETSI)	SE	+358405077074	teija.rantala@teliasonera.com	YES
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Mr. Keijo Palviainen	NOKIA Corporation	3GPPMEMBER (ETSI)	FI		keijo.palviainen@nokia.com	
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Member of 3GPP (TTC)

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Organisation partner representative (ETSI)

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Annex B   Output Documents

Approved Change Requests for CAMEL Phase 3

None.

Approved Output Liaison Statements

TDoc #	Type	Title	Source	To
N2-049999	LS OUT	CAMEL open issues	CN2	CN4 (CC: CN)

Approved and endorsed Change Requests for CAMEL Phase 4

TDoc #	Title	Spec	CR #	Rev	Cat	Rel	Version	WI	Conclusion
N2-040184	Correction to Tssf timer	29.078	368		F	Rel-5	5.7.0	CAMEL4	approved
N2-040185	Correction to ERB pre-condition for gsmSSF FSM state	29.078	365		F	Rel-5	5.7.0	CAMEL4	approved
N2-040196	Correction to D-CSI suppression in Continue With Argument	23.078	717		F	Rel-5	5.7.0	CAMEL4	approved
N2-040212	Correction to Tssf timer	29.078	371		A	Rel-6	6.1.0	CAMEL4	approved
N2-040213	Correction to ERB pre-condition for gsmSSF FSM state	29.078	372		A	Rel-6	6.1.0	CAMEL4	approved
N2-040214	Correction to Move Leg pre-condition	23.078	714	1	F	Rel-5	5.7.0	CAMEL4	approved
N2-040216	Correction to D-CSI suppression in Continue With Argument	23.078	722		A	Rel-6		CAMEL4	approved
N2-040218	Correction to Entity Released for individual call party	23.078	719		F	Rel-5	5.7.0	CAMEL4	approved
N2-040220	Mapping between ICA and IAM	29.078	369	1	F		5.7.0	CAMEL4	approved
N2-040221	Mapping between ICA and IAM	29.078	370	1	A	Rel-6	6.1.0	CAMEL4	approved
N2-040223	Correction to User Interaction before Answer	23.078	720	1	F	Rel-5	5.7.0	CAMEL4	approved
N2-040230	Correction to InitialDP IF for NP leg	23.078	718	3	F	Rel-5	5.7.0	CAMEL4	approved
N2-040233	Correction to Tssf timer	23.078	713	2	F	Rel-5	5.7.0	CAMEL4	approved
N2-040234	Correction to Tssf timer	23.078	721	1	A	Rel-6	6.1.0	CAMEL4	approved
N2-040235	Correction to Move Leg pre-condition	23.078	725	1	A	Rel-6	6.1.0	CAMEL4	approved

TDoc #	Title	Spec	CR #	Rev	Cat	Rel	Version	WI	Conclusion
N2-040236	Correction to InitialDP IF for NP leg	23.078	726		F	Rel-6	6.1.0	CAMEL4	approved
N2-040237	Correction to User Interaction before Answer	23.078	727		F	Rel-6	6.1.0	CAMEL4	approved
N2-040240	Correction to Move Leg pre-condition	29.078	373	2	F	Rel-5	5.7.0	CAMEL4	approved
N2-040241	Correction to Move Leg pre-condition	29.078	374	2	A	Rel-6	6.1.0	CAMEL4	approved
N2-040242	Correction to Entity Released for individual call party	23.078	728		A	Rel-5	6.1.0	CAMEL4	approved

Approved and endorsed Change Requests for EDCAMEL

None.

Approved CRs for Rel-5 WI TEI

TDoc #	WI	Title	Spec	CR #	Cat	Rev	Version	Rel	Conclusion
N2-040247	TEI_6	Current Location Retrieval for MT call handling	23.078	659	B	3	6.1.0	Rel-6	approved
N2-040248	TEI_6	Enhancement to User Interaction	23.078	716	B	3	6.1.0	Rel-6	approved
N2-040225	TEI_6	Adding missing ROS Object Identifier	29.078	367	F	1	6.1.0	Rel-6	approved
N2-040239	TEI_6	IP version of GGSN address for CAMEL	23.078	685	F	2	6.1.0	Rel-6	approved
N2-040232	TEI_6	Enhancement to User Interaction	29.078	366	B	1	6.1.0	Rel-6	approved
N2-040207	TEI_6	Correction to CS_gsmSSF for call release	23.078	723	F		6.1.0	Rel-6	approved
N2-040208	TEI_6	Correction to First Digit Timer for Prompt&Collect	29.078	375	F		6.1.0	Rel-6	approved
N2-040209	TEI_6	Stopping charging timers after Cancel[All]	23.078	724	F		6.1.0	Rel-6	approved

Approved CRs for Rel-6 WI SCCAMEL

None.

Endorsed CRs for MAP specification TS 29.002

TDoc #	Type	Agenda	Title	Spec	CR #	Rev	Cat	Version	Rel	WI	Source	Conclusion
N2-040244	CR	8.1	Current Location Retrieval for MT call handling	29.002	733		B	6.1.0	Rel-6	TEI6	Ericsson	endorsed

Annex C   List of Documents

TDoc #	Type	Agenda	Title	Spec	CR #	Rev	Cat	Ver	Rel	WI	Source	Conclusion
N2-040177	Agenda	1	Agenda								CN2 chairman	approved
N2-040178	Agenda	2	Allocation of documents to agenda items								CN2 chairman	noted
N2-040179	Report	3.1	CN2#32 Draft meeting report								MCC	approved
N2-040180	Report	3.2	CN#23 Draft meeting report								MCC	approved
N2-040181	LS IN	4	LS reply to CN2 on CAMEL prepay: IP version of the GGSN address								SA5	noted
N2-040182	CR	7.3	Enhancement to Route_Permitted procedure to handle Short/ Long FTNs	23.079			F	5.4.0	Rel-5	CAMEL4	Nortel Networks	endorsed, e-mail approval in CN4
N2-040183	CR	7.2	Correction to Tssf timer	23.078	713		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040210
N2-040184	CR	7.2	Correction to Tssf timer	29.078	368		F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040185	CR	7.2	Correction to ERB pre-condition for gsmSSF FSM state	29.078	365		F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040186	CR	7.2	Correctiosn to USSD interworking	23.078	715		F	5.7.0	Rel-5	CAMEL4	Ericsson	withdrawn
N2-	CR	8.1	Active Location Retrieval for MT	23.00	131		B	6.1.	Rel-6	CAMEL	Ericsson	revised to N4-

040187			call handling	8				0		4		040720 and approved in CN4
N2-040188	CR	8.1	Active Location Retrieval for MT call handling	23.018	142		B	6.2.0	Rel-6	CAMEL4	Ericsson	withdrawn
N2-040189	CR	8.1	Active Location Retrieval for MT call handling	23.078	659	1	B	6.1.0	Rel-6	TEI_6	Ericsson	revised to N2-040243
N2-040190	CR	8.1	Active Location Retrieval for MT call handling	29.002	733		B	6.1.0	Rel-6	CAMEL4	Ericsson	revised to N2-040244
N2-040191	CR	8.1	Enhancement to Connect To Resource	23.078	716		B	6.1.0	Rel-6	CAMEL4	Ericsson	revised to N2-040231
N2-040192	CR	8.1	Enhancement to Connect To Resource	29.078	366		B	6.1.0	Rel-6	CAMEL4	Ericsson	revised to N2-040232
N2-040193	CR	8.1	Adding missing ROS Object Identifier	29.078	367		F	6.1.0	Rel-6	CAMEL4	Ericsson	revised to N2-040225
N2-040194	DISC	8.1	Active Location Retrieval for MT call handling							CAMEL4	Ericsson	noted
N2-040195	CR	7.2	Correction to Move Leg pre-condition	23.078	714		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to 214
N2-040196	CR	7.2	Correction to D-CSI suppression in Continue With Argument	23.078	717		F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040197	CR	7.2	Correction to InitialDP IF for NP leg	23.078	718		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040217
N2-040198	DISC	8.1	Enhancement to Connect To Resource						Rel-6	CAMEL4	Ericsson	revised to N2-040224
N2-040199	CR	7.4	Mapping between ICA and IAM	29.078	369		F	5.7.0	Rel-5	CAMEL4	Alcatel	revised to N2-040220
N2-040200	CR	7.4	Mapping between ICA and IAM	29.078	370		A	6.1.0	Rel-6	CAMEL4	Alcatel	revised to N2-040221
N2-040201	CR	7.2	Correction to Entity Released for individual call party	23.078	719		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to 218
N2-040202	CR	7.4	Correction to User Interaction before Answer	23.078	720		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040223
N2-040203	Disc	5.2	Camel open issues list							CAMEL4	CN2 chairman	revised to 206
N2-040204	DISC	7.4	Additional open CAMEL Phase 4 issues						Rel-5	CAMEL4	Ericsson	noted
N2-040205	CR	4	IP version of GGSN address for CAMEL	23.078	685	1	F	6.1.0	Rel-6	TEI_6	Nokia	revised to N2-040239
N2-040206	Disc	5.2	Camel open issues list							CAMEL4	CN2 chairman	revised to N2-040666
N2-	CR	5.3	Correction to CS_gsmSSF for call	23.07	723		F	6.1.	Rel-6	TEI_6	Ericsson	approved

Tdoc	Type		Title		CR	Rev	Cat	Ver	Rel	WI	Company	Status
040207			release	8				0				
N2-040208	CR	5.4	Correction to First Digit Timer for Prompt&Collect	29.078	375		F	6.1.0	Rel-6	TEI_6	Ericsson	approved
N2-040209	CR	5.5	Stopping charging timers after Cancel[All]	23.078	724		F	6.1.0	Rel-6	TEI_6	Ericsson	approved
N2-040210	CR	7.2	Correction to Tssf timer	23.078	713	1	F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040233
N2-040211	CR	7.2	Correction to Tssf timer	23.078	721		A	6.1.0	Rel-6	CAMEL4	Ericsson	revised to N2-040234
N2-040212	CR	7.2	Correction to Tssf timer	29.078	371		A	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040213	CR	7.2	Correction to ERB pre-condition for gsmSSF FSM state	29.078	372		A	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040214	CR	7.2	Correction to Move Leg pre-condition	23.078	714	1	F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040215	CR	7.2	Correction to Move Leg pre-condition	29.078	373		F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040229
N2-040216	CR	7.2	Correction to D-CSI suppression in Continue With Argument	23.078	722		A		Rel-6	CAMEL4	Ericsson	approved
N2-040217	CR	7.2	Correction to InitialDP IF for NP leg	23.078	718	1	F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040226
N2-040218	CR	7.2	Correction to Entity Released for individual call party	23.078	719		F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040219	CR	8.1	Current Location Retrieval for MT call handling	22.078			B	6.4.0	Rel-6	CAMEL4	Ericsson	revised to N2-040238
N2-040220	CR	7.4	Mapping between ICA and IAM	29.078	369	1	F	5.7.0		CAMEL4	Alcatel	approved
N2-040221	CR	7.4	Mapping between ICA and IAM	29.078	370	1	A	6.1.0	Rel-6	CAMEL4	Alcatel	approved
N2-040222	LS OUT	5	LS to CN4 on CAMEL open item list								CN2 Chairman	revised to N2-049999
N2-040223	CR	7.4	Correction to User Interaction before Answer	23.078	720	1	F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040224	DISC	8.1	Discussion, "Enhancement to User Interaction"						Rel-6	CAMEL4	Ericsson	noted
N2-040225	CR	8.1	Adding missing ROS Object Identifier	29.078	367	1	F	6.1.0	Rel-6	TEI_6	Ericsson	approved
N2-040226	CR	7.2	Correction to InitialDP IF for NP leg	23.078	718	2	F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040230
N2-040227	To R	5	CAMEL update to CN2 terms of reference								CN2 Chairma	noted

											n	
N2-040228	CR	8.3	Interaction of CAMEL with Service Change	23.172			F	6.0.0	Rel-6	SCCAMEL	Ericsson	withdrawn
N2-040229	CR	7.2	Correction to Move Leg pre-condition	29.078	373	1	F	5.7.0	Rel-5	CAMEL4	Ericsson	revised to N2-040240
N2-040230	CR	7.2	Correction to InitialDP IF for NP leg	23.078	718	3	F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040231	CR	8.1	Enhancement to User Interaction	23.078	716	1	B	6.1.0	Rel-6	TEI_6	Ericsson	revised to N2-040245
N2-040232	CR	8.1	Enhancement to User Interaction	29.078	366	1	B	6.1.0	Rel-6	TEI_6	Ericsson	approved
N2-040233	CR	7.2	Correction to Tssf timer	23.078	713	2	F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040234	CR	7.2	Correction to Tssf timer	23.078	721	1	A	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040235	CR	7.2	Correction to Move Leg pre-condition	23.078	725	1	A	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040236	CR	7.2	Correction to InitialDP IF for NP leg	23.078	726		F	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040237	CR	7.4	Correction to User Interaction before Answer	23.078	727		F	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040238	CR	8.1	Current Location Retrieval for MT call handling	22.078			B	6.4.0	Rel-6	CAMEL4	Ericsson	noted
N2-040239	CR	4	IP version of GGSN address for CAMEL	23.078	685	2	F	6.1.0	Rel-6	TEI_6	Nokia	approved
N2-040240	CR	7.2	Correction to Move Leg pre-condition	29.078	373	2	F	5.7.0	Rel-5	CAMEL4	Ericsson	approved
N2-040241	CR	7.2	Correction to Move Leg pre-condition	29.078	374	2	A	6.1.0	Rel-6	CAMEL4	Ericsson	approved
N2-040242	CR	7.2	Correction to Entity Released for individual call party	23.078	728		A	6.1.0	Rel-5	CAMEL4	Ericsson	approved
N2-040243	CR	8.1	Active Location Retrieval for MT call handling	23.078	659	2	B	6.1.0	Rel-6	TEI_6	Ericsson	revised to N2-040247
N2-040244	CR	8.1	Active Location Retrieval for MT call handling	29.002	733		B	6.1.0	Rel-6	TEI_6	Ericsson	endorsed
N2-040245	CR	8.1	Enhancement to User Interaction	23.078	716	2	B	6.1.0	Rel-6	TEI_6	Ericsson	revised to N2-040248
N2-040246	CR	8.3	Interaction of CAMEL with Service Change	23.172			F	6.0.0	Rel-6	SCCAMEL	Ericsson	noted
N2-040247	CR	8.1	Current Location Retrieval for MT call handling	23.078	659	3	B	6.1.0	Rel-6	TEI_6	Ericsson	approved
N2-	CR	8.1	Enhancement to User Interaction	23.078	716	3	B	6.1.	Rel-6	TEI_6	Ericsson	approved

040248				8				0				
N2-040666	Di sc	5.2	Camel open issues list								CN2 chairman	approved
N2-049999	LS O UT	5	LS to CN4 on CAMEL open item list								CN2 Chairma n	approved