3GPP TSG CN Plenary Meeting #21 **NP-03(**
17th - 19th September 2003. Frankfurt, Germany.

Source:	**MCC**
Title:	**CN2#30 Draft meeting report v1.4.0**
Agenda item:	**6.2.1**
Document for:	**Information**

DRAFT Meeting Report, version 1.432.0

TSG CN WG2#30
Sophia Antipolis, France

25 August – 29 August, 2003

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_30_SophiaAntipolis/Docs

1 Opening of the meeting and approval of the agenda

N2-030316 : CN2 chairman, Title: Proposed meeting agenda

Discussion :

Conclusion: approved

2 Allocation of documents to agenda items

N2-030317: CN2 chairman, Title: Allocation of documents to agenda items

Discussion:

Conclusion: noted

3 Reports

N2-030401: MCC, Title: CN2#29 Draft meeting report

Discussion:

Conclusion: approved

N2-030402: MCC, Title: CN#20 Draft meeting report

Discussion: NP-030186 and NP-030187 were mutually exclusive CRs presented to CN plenary for decision. NP-030186 was rejected and NP-030187 approved.

CN4 need to see collective CRs on Enhanced Dialled Services at least one plenary cycle before CN2 present them to Plenary. CAMEL EDS expected completion date is moved to December 2003, to allow review of collective CRs in CN4.

TSG CN agreed with the assumption that CN2 and CN4 will merge in the Q.2 of 2004.

There is a proposal to enhance Change Of Position reporting so that the SCP would provide criteria to MSC. This would reduce signalling load. The work amount is so small that a separate work item is extravagant (SA + CN). Is it OK to mark this work under TEI_6 work item?

TSG_CN agreed that small technical enhancements to CAMEL could be done under WI TEI_6 (like Change Of Position reporting).

For Rel-5, from now on, we will agree only CRs that are essential corrections, agreed by consensus or previously agreed CRs which were incorrectly incorporated in the specification.

NP-030261 (CR 23.079-025r1 on Correction to interaction between ORLCF and forwarding notification, Ericsson) was referred back to CN2 and CN4 for their consideration and TSG_CN allow an exception to the freeze for this CR, and allows it to be presented to CN#21 for approval.

Conclusion: noted

4 Input Liaison Statements

N2-030327: Source: CN4, Type: LS IN , Title: LS on Charging Requirements on MNP for Pre-paid Subscribers

Summary: CN4 thank SA1 for their response liaison statement (S1-030572) on “Clarification on MNP for Pre-paid Subscribers” which details different levels of operator’s needs and their relative importance.

CN4 have reviewed SA1s’ response and the stage 1 CRs attached to it and understand from the response that the most important requirement is

for operators to be able to apply different tariffs to calls / short messages established / sent by their own subscribers while roaming in the operator's PLMN, directed to a subscriber subscribing to

?? a) the operator's PLMN (calling subscriber's Home PLMN)

?? b) a PLMN different from the operator's PLMN (i.e. different from the calling subscriber's HPLMN), but within the same country (i.e. within the calling subscriber's HPLMN country)

?? c) a PLMN within a country different from the calling subscriber's HPLMN country.

CN4 have revised CRs 22.115-012, 22.115-013, 22.066-005, and 22.066-006 to clarify the requirement to be limited to the above mentioned case.

Furthermore CN4 like to comment on the feasibility of additional requirements which also take into account

?? the roaming status of the calling subscriber (own subscriber, national inbound roamer, international inbound roamer)

?? the existence of business agreements between the calling subscriber's VPLMN operator and the called subscriber's HPLMN operator as follows:

CN4 have identified three different levels of complexity / feasibility.

A) The NPDB/SRF holds records for own numbers ported out and for foreign numbers ported in, and the interface between the gsmSCF and the NPDB or SRF is intra PLMN.
B) The NPDB/SRF holds records for own numbers ported out, for foreign numbers ported in, and for foreign national numbers ported to a foreign network, or the interface between gsmSCF and NPDB or SRF is inter PLMN and intra MNP cluster.
C) The NPDB/SRF holds records for world wide all ported numbers, or the interface between gsmSCF and NPDB or SRF is inter MNP cluster.

Note that the term "foreign" is used in the sense of 23.066, i.e. "in a different PLMN" rather than "in a different country".

Level A) allows to distinguishing between

?? Calls directed to the calling party's HPLMN

?? Calls not directed to the calling party's HPLMN but directed to a PLMN in the calling party's HPLMN country

?? Calls directed to a PLMN outside the calling party's HPLMN country

Level B) is more complex than Level A) and allows to distinguishing between

?? Calls directed to the calling party's HPLMN

?? Calls not directed to the calling party's HPLMN but directed to a PLMN in the calling party's HPLMN country whereof the operator has business agreements with the calling party's VPLMN operator

?? Calls not directed to the calling party's HPLMN but directed to a PLMN in the calling party's HPLMN country whereof the operator does not have business agreements with the calling party's VPLMN operator

?? Calls directed to a PLMN outside the calling party's HPLMN country

Level C) is more complex than Level B) and allows to distinguishing between

?? Calls directed to the calling party's HPLMN

?? Calls not directed to the calling party's HPLMN but directed to a PLMN in the calling party's HPLMN country whereof the operator has business agreements with the calling party's VPLMN operator

?? Calls not directed to the calling party's HPLMN but directed to a PLMN in the calling party's HPLMN country whereof the operator does not have business agreements with the calling party's VPLMN operator

?? Calls directed to a PLMN outside the calling party's HPLMN country whereof the operator has business agreements with the calling party's VPLMN operator

?? Calls directed to a PLMN outside the calling party's HPLMN country whereof the operator does not have business agreements with the calling party's VPLMN operator

Different levels as phrased above are independent from the roaming status of the calling subscriber. CN4's recommendation is to concentrate on Level A) which covers the most important requirement from SA1 outlined in S1-030572 and in the attached revised stage 1 CRs, and postpone requirements with Level B) and Level C) complexity to later releases. Since 23.066 specifies an IN-based solution and an SRF-based solution for MNP, CN4 have decided to extend both solutions in order to cover the new requirement. The extension to the IN-based solution is covered in CR 23.066-023 (N4-030710) which was approved at CN4 and which is attached to this LS.

For the SRF-based solution two competing proposals have been discussed at CN4. Unfortunately no agreement could have been reached on which of these proposals to follow, and so CN4 could not complete their work in time for CN#20.

- CN4 ask SA and SA1 to consider approval of the revised CRs.

- CN4 ask SA1 to note the different levels of complexity / feasibility for the additional requirements.

- CN4 ask SA to decide on the applicability of the new requirement for Rel-5.

Discussion: Ericsson finds that there may be an impact to CN2. There is no response from SA1 to that LS. It wouldn't be reasonable to ask CN2 to consider Complexity level B and C in stage 2and 3.

It should be discussed whether we should use SRI or ATI.

In Level A, third bullet (Calls directed to a PLMN outside the calling party's HPLMN country), we do not need any mechanism to gain this, since this is possible already.

Conclusion: noted in CN2 and discussed in Joint meeting with CN4 (N4-030721)

N2-030328: Source: CN, Type: LS IN , Title: LS on MNP

Discussion: The document was presented in N4-030752 during CN2-CN4 Joint meeting.

CN plenary thanks CN4 for their work on MNP charging. CN plenary notes that within the timescales available it has been hard to finalise the MNP charging requirements and also the technical CRs for both the IN-based and SRF-based MNP solutions. CN noted that SA1 is planning to introduce MNP charg ing requirements as a release 5 feature. CN plenary supports the view that the complete package for support of MNP charging requirements in both IN and SRF based cases should be available in Release 5. CN therefore asks CN4 to continue to work on any necessary Release 5 CRs and aim to have all CRs presented to CN#21.
Conclusion: noted

N2-030355: Source: SA5, Type: LS IN , Title: LS on possible re-organisation of 3GPP charging specification work

Discussion: At SA#20 the SA5 Chair reported that the lack of human resources in SA5 SWG-B (Charging) was a cause of concern as it was leading to Editors/Rapporteurs in that group being overloaded and was causing a lack of progress on some TSs. As a result it was proposed by an SA delegate that moving the SA5 Charging work to CN WGs might help improve the situation. SA5 and other WGs (particularly CN WGs) were asked to consider if any such work split is possible and practical.

The current responsibilities for charging specifications are:

- the high level requirements are defined in SA1;

- the detailed requirements are defined in SA5 SWG-B

- the architecture, data definition and protocols are defined in SA5 SWG-B.

SA5 have discussed proposals to re-organise the work of developing the charging specifications. Two competing proposals are on the table. SA5 would be interested to receive your reactions to both these proposals (an early response would be helpful):

(A) would require the groups, to which this liaison statement is addressed, to take on additional work to develop charging specifications which are currently the responsibility of SA5 SWG-B.

(B) is to attract more resources for charging work by concentrating the responsibility for all 3GPP charging work into SA5 SWG-B. This would include, for example, the Charging Service Capability Feature (SCF), which is currently handled by CN5 as part of their work on OSA in TS 29.198-12.

So far, SA5 have agreed that the best way to avoid delaying the completion of the Rel-6 charging specifications is to maintain the current structure until the Rel-6 charging specifications are complete.
The original resource problems arose from lack of continuity of representation and the withdrawal of key delegates by some companies. Most of these problems have now been resolved.

SA5 have noted that their next meeting overlaps with the meetings of CN1, CN2, CN3 and CN4, and offer a joint discussion with members of those groups on the proposals outlined above.

SA5 ask CN1, CN2, CN3, CN4, CN5, SA1 and SA2 to react to the proposals outlined above, and to respond so that SA5 can report back to SA#21 (22-25 September 2003).

Conclusion: noted

N2-030414: Source: SA2, Type: LS IN , Title: Reply LS on possible re-organisation of 3GPP charging specification work

Discussion: This LS is a reply to LS in N2-030355. The option A in this LS is related to post- Release 6 work, and in the time frame of post Release 6, the CN2 will not exist anymore.

Conclusion: noted

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	3.16.0	N2	HOMANN, Christian
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	Rel-4	4.9.0	N2	HOMANN, Christian
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	R1999	3.176.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	Rel-4	4.9.0	N2	NOLDUS, Rogier
DraftTS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-5	5.4.0	N2	SUMIO, Myagava
DraftTS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-5	5.4.0	N2	NOLDUS, Rogier
TS	23.278	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2; IM CN Interworking	Rel-5	5.3.0	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	5.3.0	N2	Angelica Remoquillo

5.1 IPR call reminder

The chairman made the following call for IPRs, and asked ETSI members to check the latest version of ETSI's policy available on the web server:

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/).

5.2 Work Item (WI) status review

N2-030404 : MCC, Type: Work plan, Title: Latest version of the Work plan

Discussion:

Conclusion: noted

N2-030411: Source: CN Chairman and Vice-Chairman, CN WGs Chairmen , Type: CN's view on possible re-organisation of 3GPP charging specification work

Summary: SA5 is not so connected with overall 3GPP work on protocols.

If SA5 SWB moves to CN, the following sequence is envisioned:

- SWGB moves under CN as an ad-hoc
- SWGB agrees with SA1 to move stage 1 responsibility to SA1
- SWGB together with SA2 agrees on how to split the responsibility on stage 2
- SWGB gets integrated into CN3 or CN4 if the workload can be accommodated. Otherwise it might become a new WG.

As for the OSA Charging SCF, it is proposed that it stays in CN5. This is already in line with the overall proposal since:

- OSA stage 2 is under the responsibility of SA2
- OSA Charging SCF stage is in a CN WG.

The final decision, if the charging work should stay within SA5 or moved towards WGs, must be done by SA plenary.

Discussion:

1. Do we want to give in some work before May 2003? Meeting agrees that we should not take any additional work since CN2 will terminate in May 2003.
2. Do we want to give out some work before CN2 terminates? Ericsson finds that we have to bare in mind what shall be put in the CDRs. This is a kind of work we should task SA5 . CAMEL has some impact on the CDRs. This meeting we have some inputs to send to SA5 to be discussed.

   It was concluded that CN2 does not want to give out any CAMEL work.

3. Do we want to discuss the topic with SA5 during this week? Bearing in mind the workload CN2 had in this meeting, CN2 could not afford to stop CN2 meeting to join CN5 to discuss this topic, but delegates are invited to join CN5 according to individual judgement.

Conclusion: noted

N2-030442/N4-030736: Source: CN2 Chairman, Type: Tdoc list, Title: CN2/CN4 Joint meeting Tdoc list

Discussion:

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

6.3 CAMEL3 in R99

6.4 CAMEL3 in Rel-4

N2-030320: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#566, Title: Inclusion of check "pty continues" in procedure Handle_ACR

Discussion:

Conclusion: withdrawn

N2-030321: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#595, Title: Adding the definition "pty continues"

Discussion:

Conclusion: withdrawn

N2-030322: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#597, Title: Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state"

Discussion:

Conclusion: withdrawn

N2-030323: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#598, Title: Adding the definition "pty continues"

Discussion:

Conclusion: withdrawn

N2-030329: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#600, Title: Correction in handling of Start-Delta and Stop-Delta operations

Discussion:

Conclusion: revised to N2-030358

N2-030358: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#600r1, Title: Correction in handling of Start-Delta and Stop-Delta operations

Discussion: The subcategory shall be "agreed by consensus". Why the Release 4 is selected, but not also Rel-99?

If the technically this CR is accepted, it could be done for R99 as an essential correction. What happens to SDL if the CR is not approved? In one case we are stopping the timer which is not running. According to Ericsson this would not hurt the implementation and it is not seen as an essential correction. It would be acceptable to correct it in Release 5.

SDL diagrams should be marked to show where the changes have been done. SDL source file should be available.

Vodafone would like to see enhanced "consequences if not approved" if the CR will be accepted for R99.

Rogier: At the beginning of the procedure Handle_ACR we should always stop delta timer.

T-Mobile would like to see that corrected from the release 99, since there is a problem with charging.

Conclusion: revised to N2-030417

N2-030416: TS 23.078, R99, Hughes Software Systems, Type: CR, CR#621, Title: Correction in handling of Start-Delta and Stop-Delta operations

Discussion: This document will be in the separate package as the N2-030417 and N2-030425.

Conclusion: approved

N2-030417: TS 23.078, Rel-4, Hughes Software Systems, Type: CR, CR#600r2, Title: Correction in handling of Start-Delta and Stop-Delta operations

Discussion: This document will be in the separate package as the N2-030416 and N2-030425.

Conclusion: approved

N2-030425: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#622, Title: Correction in handling of Start-Delta and Stop-Delta operations

Discussion: This document will be in the separate package together with N2-030416 and N2-030417.

Conclusion: approved

7 CAMEL4

7.1 CAMEL4, Stage 1

7.2 CAMEL4, Miscellaneous

N2-030372: CN2 Chairman, Type: Discussion document, Title: DISC: CAMEL open issue list

Discussion: This document lists CAMEL open issues on TS 23.078 and TS 29.078. Document numbers mentioned in this document are not correct, they refer to documents from CN#29.

- N2-030370 is solving issue of timer handling in IMS in general.
- Open issue 3) and 9) may be resolved in this meeting, and open issues list updated accordingly.

Following items will be added to open issues list:

1. No IANA package ID has been reserved for flexible tone purposes.
2. For which legID the resumption counter is incremented in DP2, DP3 and DP12? Shall Connect have the same legID at this DP? Is DisconnectLeg(leg2) a problematic case?
3. User Interaction at Alerting and Mid-Call shall be added. What happens when B answers (same or different CS)?

4. Flexible tone limit of 2s between bursts may be too short. The limit is defined in 29.078. Time interval between bursts was 120s in stage 1.

5. SRI SCP-HLR interface may require a specific SCCP Translation Type (TT) if Routing Number is received due to MNP. Quite a national issue.

6. The Calling party location at alerting DP: Is this required? There are some inconsistencies at the moment.

7. SCUDIF interworking with CAMEL.

    ?? CPH applies to speech only. Until certain point in call, SCUDIF call is not known to be speech for sure.

    ?? If there is CAMEL user interaction, will SCUDIF call fallback to speech?

Conclusion: revised to N2-030422

N2-030422: CN2 Chairman, Type: Discussion document, Title: DISC: CAMEL open issue list

Discussion:

Conclusion: noted

N2-030373: CN2 Chairman, Type: Discussion document, Title: Recorded CAMEL4 decisions

Discussion: The document lists principal decisions made by CN2. There was a query whether a tone to a call segment shall be regarded as one leg, i.e. whether it shall reduce the max number of legs in the CS. Vodafone was performing the query and when we receive the result, the the decision 34 (bullet E) will be updated.

Conclusion: noted

N2-030423: TS 23.078, Rel-5, Vodafone, Type:, Title: Incorrect charging with MNP

Discussion: At CN2 #29 a discussion on CPH considered whether or not the stated number of legs that a gsmSSF claims to support includes legs used to connect to a gsmSRF to play a tone, and also whether or not a leg needs to be created to play a tone to multiple legs in CSID1. (It was noted that playing a tone to only one leg in any call segment does not require an extra leg to be created).

At the meeting Nick Russell of Vodafone agreed to send specific questions to all gsmSSF manufacturers via the CN2 e-mail list addressing this issue and to collect the answers and report them back to CN2 #30 in summary form, in order to protect the identities of the respondents.

The specific questions are reproduced below, with the collated responses:

1) Does the stated MAXIMUM number of legs supported in your gsmSSF include leg(s) used to establish a temporary connection to a gsmSRF/assisting gsmSSF/IP?

2) Does the playing of a tone to all legs of a multi-leg Call Segment (*) consume a leg in that Call Segment for the duration of the tone?

(* Only Call Segment 1 can include multiple legs)

Vodafone proposed that the “leg is consumed for ETC and PlayTone”. The proposal was accepted by the meeting. The CAMEL decisions list will be updated.

Ericsson is asking whether the result of this query shall be reflected somewhere in the specifications. The maximum number of legs shall be documented in the stage 1 to avoid interworking problems. CN2 is expecting contributions on this topic in the next meeting or in SA1.

Conclusion: noted

N2-030333: TS 23.079, Rel-5, Ericsson, Type: CR, Title: Correction to interaction between ORLCF and forwarding notification

Conclusion: revised to N2-030424 (N4-030978)

N2-030424: TS 23.079, Rel-5, Ericsson, Type: CR, Title: Correction to interaction between ORLCF and forwarding notification

Discussion:

Conclusion: endorsed by CN2, approved by CN4 during Joint meeting in N4-030978

N2-030398: TS 23.078, Rel-5, Siemens AG, Type: CR, CR#584, Title: Direction change of incoming message Answer~~Correction to interaction between ORLCF and forwarding notification~~

Discussion: The document was postponed in the previous meeting.

Conclusion: approved

N2-030324: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#599, Title: Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state"

Discussion: The document was postponed in the previous meeting.

Conclusion: revised to N2-030357

N2-030357: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#599r1, Title: Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state"

Discussion: Consequences if not approved shall be improved. If we take this as R99 mirror CR, the category would be A, so the same problem from R99 would be resolved.

Conclusion: rejected

N2-030351: TS 23.078, Rel-5, Ericsson, Type: CR, CR#608, Title: Correction to procedure Handle_O_Answer

Discussion: Subcategory shall be essential correction.

Conclusion: approved

N2-030356: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#610, Title: Correction of “pty continues” and “LegActive” check boxes in SDL’s

Discussion: ”Consequences if not approved” shall be improved (Inter-working problems if SCP and MSC have different understanding what is reported when non-last leg is released due to call period timer). The title shall be shorter (Title Replacing the check box “pty continues” by “LegActive” in procedure Handle_ACR and mentioning the LegActive value at Handle_ACR task box in the SDL “handling of Tcp expiry in Monitioring state” was changed offline to Correction of “pty continues” in the document, Tdoc list and DB in order to keep the same title for the same CR number)

Conclusion: revised to N2-030426

N2-030426: TS 23.078, Rel-5, Hughes Software Systems, Type: CR, CR#610r1, Title: Correction of “pty continues” and “LegActive” check boxes in SDL’s

Discussion:

Conclusion: approved without presentation

N2-030361: TS 23.078, Rel-5, Nortel Networks, Type: CR, CR#612, Title: Receiving Int_CWA after reporting Abandon

Discussion:

Conclusion: revised to N2-030403

N2-030403: TS 23.078, Rel-5, Nortel Networks, Type: CR, CR#612r1, Title: Receiving Int_CWA after reporting Abandon

Discussion: Source SDLs are not included. Subcategory is essential correction.

Comments should be marked with the dotted line. This can be changed offline by the rapporteur as well as the output from the “Release” on page 8 (one output would be better).

Conclusion: approved

N2-030362: TS 23.078, Rel-5, Nortel Networks, Type: CR, CR#613, Title: Handling AC Pending if ETC/ CTR fails

Discussion: When AC is pending and ETC/ CTR fails the ‘Handle_ACR’ process is called. This will align the ETC/ CTR failure handling with other failure scenarios such as unsuccessful call establishment scenarios.

Is it appropriate to send first ACR and then the report of the failure of the ConnectToResource?

What SCP does if the SCP receives an error, or what would SCP do if it receives ACR? If it gets first error report, it closes the dialogue or does the appropriate action. SCP should be able to handle both cases.

User interaction with SRF id is new in Rel-5, so Rel-5 would be the release where we should fix this.

Ericsson: If the CTR fails , designers would like to know which error should be reported. (since it is specified for ETC)

Conclusion: revised to next meeting

N2-030363: TS 23.078, Rel-5, Nortel Networks, Type: Discussion document, Title: MNP/ CAMEL pre-paid MNP-SRF solution

Summary: In order to correctly charge CAMEL pre-paid calls and Short Messages it has been agreed to standardise MNP Information Requests. Two solutions have been agreed for standardisation: IN Query solution (already approved) and MNP-SRF solution (still being defined).

Basic Requirements for SRF solution:

The following identifies the stage 2 elements of the MNP_SRF solution that are required as a minimum:

1. The MNP Information Request is a standalone query that can be used to collect MNP information for call related and non-call related (i.e. SMS) subscriber activities.

2. The MNP Information Request is purely to obtain MNP information to assist with prepaid charging (MNP Information for routeing purposes is obtained by separate procedures).

3. The information a NPDB currently maintains is not specified and can therefore range from a minimum of information about subscribers (e.g. only details of subscribers who have ported out of the network) to a NPDB holding MNP information for all subscribers in the portability domain. For correct charging of CAMEL pre-paid calls enough information must be returned by the NPDB in the MNP Information Request response so that the SCF can, as a minimum, determine 'own numbers ported out' and 'foreign numbers ported in'.

Stage 3 Protocol issues: Two proposals have been discussed – a mechanism that uses SRI and a mechanism that uses ATI. The following comparison of these two mechanisms is presented:

1. ATI can be used at any time when requested and was created specifically for interrogating subscriber's data. SRI is usually used for call set-up (e.g. Terminating call, optimal routing, gsmSCF initiated calls) and so using it also to interrogating MNP data on an Any Time basis seems not to fit with the function that SRI was designed for. Hence, ATI is a more logical and mo re natural solution for interrogating the MNP data for prepaid charging.

2. Whether ATI or SRI is selected, a special TT and scenario will need to be specified in TS 23.066. There are similar degrees of specification impact with either solution (i.e. in both cases 23.066, 23.078 and 29.002 are impacted).

3. If SRI is selected as the mechanism, the SCP (Service Control Point) will be affected. Even though CAMEL gsmSCF may initiate calls by using SRI from the standard, it is not a mandatory requirement for the SCP to have that ability. Hence, some SCP's may not have and indeed, do not need to have SRI implemented. By selecting SRI as the MNP mechanism, SCP's will need to have SRI as a mandatory component. ATI is already required on SCP so the degree of incremental development required is minimised. On the other hand, the SRI is already implemented in the SRF, but ATI is not.

Discussion: N4-030783

To continue the work in CN2/CN4 there should be a decision whether ATI or SRI is used. Nokia supports SRI option. Nortel Networks, Ericsson and Lucent prefer use of ATI. Siemens and Nokia propose to use SRI.T-Mobil slightly prefer also use of SRI. Vodafone proposes to use ATSI.

CN2 will take a look at N2-030390.

Conclusion: noted

N2-030364: TS 23.066, Rel-5, Nortel Networks, Type: CR, CR#026, Title: Incorrect CAMEL pre-paid charging in MNP networks

Discussion: This CR proposes addition of a MNP_Info_Request interface and procedure for MNP-SRF based PLMNs (to provide the functionality needed to enable a SCP to obtain MNP Information in order to correctly tariff CAMEL pre-paid calls and SMS in networks employing Mobile Number Portability).

This was late document in CN2. It was discussed during CN2-CN4 Joint meeting in N4-030784.

- Annex D will be incorporated into annex C
- *Siemens:* why is in D 2.1 the calling party added. There is no requirement, therefore it will be removed.
- *Siemens:* Why the indirect routing is needed? It should be sufficient to have direct routing? the SRF database from the own network is interrogated. The part of indirect routing will be removed.
- Ericsson: MNP database can be in a different Network.
- MSISDN in the ATI ACK is not correct should be in the ATI Request.
- It was proposed that stage 2 CRs of both solutions should be combined.
- The CR will be revised and discussed in CN4 only.

Conclusion: noted

N2-030387: TS 29.002, Rel-5, LM Ericsson, Type: CR, CR#615, Title: Incorrect charging with MNP

Discussion: The document was discussed during CN2-CN4 Joint meeting in N4-030895.

Siemens would like to have clarification why the "ownNumberNotPortedOut"is introduced? According to Siemens, it is not necessary to request IMSI and MSISDN. Ericsson needs to check this.

Conclusion: noted in CN2 (revised in CN4)

N2-030388: TS 29.002, Rel-6, ERICSSON L.M. Nortel Networks, Type: CR, CR#616, Title: Incorrect charging with MNP

Discussion: This is a release 6 mirror CR (N4-030896).

Conclusion: noted

N2-030389: TS 23.066, Rel-5, LM Ericsson, Type: CR, CR#025, Title: Incorrect charging with MNP

Discussion: N4-030784

Conclusion: withdrawn

N2-030390: TS 23.078, Rel-5, LM Ericsson, Type: CR, CR#530r1, Title: Incorrect charging with MNP

Discussion: (N4-030898) This CR enhances the MAP operation Any Time Interrogation. A direct MAP interface between MNP SRF and gsmSCF is added to provide MNP information. Correct Title is: "Using ATI for Mobile Number Portability".

- When there is a reference to the Annex, there should be also TS referenced (TS 23.066).
- "MNP Information Request in the MNP-SRF" has been is put under section 11. Ericsson finds this as the most appropriate place, as the section deals with subscriber state and location retrieval and since MNP data query is related to ATI procedure.
- T-Mobil would like to see all new parts in this CR together in the section 12 (i.e. section 11.2.4 should be part of the section of the section 12). At the beginning to clause 12 we should have a sentence about network option regarding ATI. If we have part of change in section 11 and part in section 12, we should have a sentence about the network option in both sections.
- Lucent would rather like to see new section that explains MNP support. Working assumption: All changes will be placed in section 12.
- In IF table, the status "C", the description says "This IE shall be present, if requested by the gsmSCF" The "C" already includes "if available".
- MNP requested info could be useful to put as a part of requested info. Alcatel proposes that ATI request has 2 main level parameters. ATI request shall have 3 parameters: gsmSCF address, Requested info and Subscriber identity. After that it shall be specified what is contained in Requested info (MNP Requested Info).
- We will follow the same structure as we already have. Information Elements table should be documented in the same way as ATI (location) and IEs should not be respecified.
- Stage 2 parameters names (spaces in the name) and section numbers shall be checked.

Conclusion: revised to N2-030456

N2-030456: TS 23.078, Rel-5, LM Ericsson, Type: CR, CR#530r2, Title: Incorrect charging with MNP

Discussion:

Conclusion: approved conditionally (the condition is CN4 approval of corresponding CN4 CRs: 29.002 CR#615 and 23.066 CR#25. There is a chance that Information elements are misaligned and that should be checked and fixed later on). After the meeting it was noticed that 23.066 CR#25 was superceeded by CR#26. Therefore the precondition was updated, and the Ericsson CR is considered as CN2 approved.

N2-030386: LM Ericsson, Type: Discussion document, Title: SRF Based MNP Charging Solution

Discussion: N4-030894

Conclusion: withdrawn

7.3 CAMEL4, Optimal Routeing

7.4 CAMEL4, Call Party Handling and SCP initiated calls

N2-030330: TS 23.078, Rel-5, Ericsson, Type: CR, CR#573r1, Title: Reporting Disconnect (leg n)

Discussion: The document was postponed in CN2#29. Do we need this change because in this BCSM we have only leg2 and there is no other leg than leg2.

- MO DISC1 procedures: changes may not be necessary.

- In DISC2 procedures of MO call we do not need comment box that the "n" is greater than 1.

- Alcatel prefers not to change procedure names. If we send EventReport BCSM with leg# 3, what to do with it? The SCP must b e aware of this leg number 3.

Conclusion: revised to N2-030427 (The title is changed offline according to revised document)

N2-030427: TS 23.078, Rel-5, Ericsson, Type: CR, CR#573r2, Title: Reporting Disconnect (leg n)

Discussion:

Conclusion: approved

N2-030331: TS 23.078, Rel-5, Ericsson, Type: CR, CR#575, Title: Correction to procedure CAMEL_ICA_MSC
Discussion: This CR was postponed in CN2#29. Subcategory "essential correction" is added offline.

Conclusion: approved

N2-030335: TS 29.078, Rel-5, Ericsson, Type: CR, CR#313, Title: Correction to parameter name in Connect Operation
Discussion: This CR was postponed in CN2#29. Alcatel document N2-030341 addresses the same topic.

- Connect parameter will be LegToBeConnected

Conclusion: revised to N2-030428

N2-030428: TS 29.078, Rel-5, Ericsson, Type: CR, CR#313, Title: Correction to parameter name in Connect Operation
Discussion:

Conclusion: approved (agreed by consensus)

N2-030341: TS 23.078, Rel-5, Alcatel, Type: CR, CR#523r3, Title: Handling of Connect operation with and without LegID

Discussion: This CR was postponed in CN2#29.

Ericsson : CAMEL 4 should be compatible with CAMEL3 and Ericsson is concerned about the complexity introduced here in order to find out when it is allowed to send operation with or without legID. Ericsson proposes to include cases when legID is not included.

Ericsson finds that it is highly desirable to get this error corrected. The CN2 chairman prefers Ericsson's approach. We still may receive Int_Connect even if leg1 is not available. Whether LegID=2 is present or not will have different handling. T-Mobil agreed with that as well.

Alcatel is willing to accept naming proposed by Ericsson, so that we keep the stage 2 name. "Connect" parameter name is "LegToBeConnected".

Since Ericsson's document 335 is approved, the change regarding parameter name change has to be cancelled.

Conclusion: revised to N2-030429

N2-030429: TS 23.078, Rel-5, Alcatel, Type: CR, CR#523r4, Title: Handling of Connect operation with and without LegID

Discussion: The subcategory should be "essential correction". The cover page should additionally explain why Connect is mapped to Int_Continue.

"S" is the condition of the presence, and the description of the condition shall be in the table. LegID presence conditions will be moved to IF table.

One change needed to parameter name in the SDL.

The case when leg number is greater than 2, should be covered.

Conclusion: revised to N2-030466

N2-030466: TS 23.078, Rel-5, Alcatel, Type: CR, CR#523r4, Title: Handling of Connect operation with and without LegID

Discussion:

Conclusion: approved

N2-030348: TS 23.078, Rel-5, Ericsson, Type: CR, CR#578, Title: Reflecting default Leg Id for CWA in CS_gsmSSF

Discussion: This CR was postponed in the previous CN2 meeting. Deals with presence or absence of legID in ContinueWithArgument. The document in lines Connect operation with ContinueWithArgument.

Conclusion: withdrawn

N2-030342: TS 23.078, Rel-5, Alcatel, Type: CR, CR#524r2, Title: Handling of Information Flows with absent LegID and CS ID

Summary: It is clarified that in a Continue With Argument IF the Leg ID is used to continue EDP-Rs and the Call Segment ID is used to continue CPH and ICA information flows.
It is specified that a Leg ID and / or a Call Segment ID may only be absent in a case similar to CAMEL 3 case, i.e. "a CSA with a single call segment and this call segment is only containing leg1 or leg2 or both of them."
Update of the SDLs is necessary to show the case where neither LegID nor CSID is included in the ContinueWithArgument.

Discussion: This CR was postponed in CN2#29.

- In Sheet 6 of Process CASA_gsmSSF the wording could be aligned with the revised version of N2-030341 (question box "valid?" in SDL is not clear.

- Rogier Noldus will propose the revision of the text offline.

- In CWA (legID), why TDP-R and EDP-R are mentioned for LegID? In ICA and CPH case only CWA(CSid) is allowed.

- CAP PlayTone has a bit different handling and could be a separate input.

Conclusion: revised to N2-030430 (essential correction)

N2-030430: TS 23.078, Rel-5, Alcatel, Type: CR, CR#524r2, Title: Handling of Information Flows with absent LegID and CS ID

Discussion: Leg ID or CS ID may be present as required by the service logic. The usage of LegID is also dependent on number of the call legs in the Call segment. There are cases where legID or CSID are not required but may be present.

There was an existing SDL error which will be corrected

Conclusion: revised to N2-030467

N2-030467: TS 23.078, Rel-5, Alcatel, Type: CR, CR#524r2, Title: Handling of Information Flows with absent LegID and CS ID

Discussion:

Conclusion: approved

N2-030346: TS 23.078, Rel-5, Nokia&Alcatel, Type: CR, CR#592r1, Title: aChChargingAddress in ApplyCharging/ApplyChargingReport

Discussion: This CR was postponed in CN2#29 (revision of N2-030270). Change bar on page 2 shall be removed.

Conclusion: withdrawn

N2-030359: TS 23.078, Rel-5, Ericsson, Type: CR, CR#611, Title: Correction to Apply Charging and Apply Charging Report due to introduction of CPH

Discussion: This document presents the same topic as N2-030346. The CR corrects the Apply Charging IF description and the Apply Charging Report IF.

Nokia/Alcatel proposal is changing SDLs. The Ericsson proposal makes clear that the call is released if the timer expired in SRF case. Nokia supports wording in Ericsson's document.

- Alcatel does not like to change "call" to "call segment".

- Editorial change needed: "concerned" should be replaced by "applies".

- Ach Charging Address is included in Apply Charging Report.

- Ericsson proposes to take SDL from Nokia/ Alcatel contribution and the text from Ericsson contribution and it will be incorporated in Ericsson contribution.

- "Ach" shall be replaced by "aCh". Both contribution have wrong spelling of SRF.

Conclusion: revised to N2-030431 (N2-030346 contains correct SDL changes and it will be combined with N2-030359 in one document)

N2-030431: TS 23.078, Rel-5, Ericsson, Type: CR, CR#611r1, Title: Correction to Apply Charging and Apply Charging Report due to introduction of CPH

Discussion: If the timer expires, we will release user interraction but not the call segment. First modification will be the second one (sections will be swapped). Rogier did it with purpose in order to explain first the Apply Charging and then Apply charging report (section numbers could be changed offline)

The subcategory shall be essential correction

Conclusion: approved

N2-030360: TS 29.078, Rel-5, Ericsson, Type: CR, CR#327, Title: Correction to Apply Charging and Apply Charging Report due to introduction of CPH

Discussion: LegActive and callLegReleasedAtTcpExpiry are aligned with stage 2 names.

"If the parameter is present" on page 4 should be removed. Ericsson proposes to remove following sentence from srfConnection description: "The connection is related to the specified Call Segment indicated by the srfConnection parameter."

Conclusion: revised to N2-030432 (essential correction)

N2-030432: TS 29.078, Rel-5, Ericsson, Type: CR, CR#327, Title: Correction to Apply Charging and Apply Charging Report due to introduction of CPH

Discussion: The category shall be "essential correction"

Conclusion: approved

N2-030352: TS 23.078, Rel-5, Ericsson, Type: CR, CR#609, Title: Correction to usage of LegId in ICA Operation

Discussion: This CR was postponed in the previous CN2 meeting. This CR creates the restriction of the Leg Id value in ICA to 3 or higher. The CR is marked as essentiall correction offline.

Conclusion: approved

N2-030353: TS 29.078, Rel-5, Ericsson, Type: CR, CR#322r1, Title: Correction to usage of LegId in ICA Operation

Discussion: This CR was postponed in the previous CN2 meeting.

Conclusion: approved

N2-030374: TS 23.078, Rel-5, Nokia, Type: CR, CR#570r1, Title: Update of charging specifications references

Discussion: This CR was postponed in the previous CN2 meeting and revised for this meeting. Title shall be changed and last page cancelled. Titles of the changed references shall be changed. Rel-4 charging specifications have different name as well.

Conclusion: revised to N2-030433

N2-030433: TS 23.078, Rel-5, Nokia, Type: CR, CR#570r2, Title: Update of charging specifications references

Discussion: Category is changed to "F" "(essential correction)" offline.

Conclusion: approved

N2-030434: TS 23.078, Rel-4, Nokia, Type: CR, CR#623, Title: Update of charging specifications references

Discussion:

Conclusion: withdrawn

N2-030375: TS 32.205, Rel-5, Nokia, Type: CR, Title: CPH charging impacts on the CDRs

Discussion: This CR was postponed in the previous CN2 meeting and revised for this meeting.

Summary: Current Rel-5 includes CAMEL4 Call Party Handling (CPH). The CDR details, especially for SCP initiated calls, are not specified detailed enough. This CR is trying to resolve this.

Conclusion: If we release a certain leg should we use CAMEL initiated call release? We have a separate CDRs for each leg. Nokia will change a CR to use "CAMEL initiated call release" and will change the description of it.

The call is MO, but CDR type is SCP initiated. Ericsson proposes to use the term "gsmSCF initiated call". "GsmSCF initiated call leg" will be used for SCP created legs.

Since CPH is for speech only, Basic Service shall be mandatory, and always set to speech..

IF will be replaced by the "message".

We could send a LS to SA5 and inform SA5 that the CR has been discussed, but since no agreement reached it will remain the Nokia contribution.

Conclusion: revised to N2-030435

N2-030435: TS 32.205, Rel-5, Nokia, Type: CR, Title: CPH charging impacts on the CDRs

Discussion: The CR will be sent to SA5 as an attachment to LS in revision of N2-030436.

Conclusion: noted

N2-030436: Nokia, Type: LS OUT, Title: LS on CPH charging impacts on the CDRs

Discussion:

- CN2 notes that the Call Party Handling (CPH) requires some work on the 32.215 specification for CAMEL4 in Rel-5.

- CN2 does not recommend any particular CDR format, or CDR type. The Nokia CR proposes a certain one but this decision belongs to SA5 SWG-B.

- CN2 did not review all the CDR fields. SA5 SWG-B should consider which fields to populate. The availability and value of some fields depend on CAMEL. CN2 is happy to provide consultation on this kind of issues.

- CN2 asks SA5 SWG-B to enhance Rel-5 charging to make CPH usage chargeable.

The referenced specification should be 32.205 instead of 32.215. It should be mentioned that attached document contains CN2 comments.

Attachment shall be put into zip file, not as embedded document. Some wording changes will be included in revised document.

Conclusion: revised to N2-030457

N2-030457: Nokia, Type: LS OUT, Title: LS on CPH charging impacts on the CDRs

Discussion:

Conclusion: approved

N2-030380: Nokia, Type: LS IN, Title: LS on SA3 on Legal Interception of SCP initiated calls

Discussion: N2-030214 was postponed in the previous CN2 meeting and this document is the result of e-mail comments. The wording of "Actions" shall be improved. Location of the next meeting shall be changed. In Action 1 CN2 shall ask SA3 whether SA3 specification cover listed problem cases.

Shall CN2 modify their specifications to deny SCP initiated calls to non-HPLMN VPLMNs (Denial would be a limitation to SA1 requirements)?

Conclusion: revised to N2-030437

N2-030437: Nokia, Type: LS IN, Title: LS on SA3 on Legal Interception of SCP initiated calls

Discussion:

Conclusion: approved, will be sent to SA3 by MCC

N2-030332: TS 29.078, Rel-5, Ericsson, Type: CR, CR#325, Title: Correction to CAP Operation Error values

Discussion: Subcategory is Essential correction. We cancel some already approved ASN.1 changes.

Conclusion: revised to N2-030460

N2-030460: TS 29.078, Rel-5, Ericsson, Type: CR, CR#325r1, Title: Correction to CAP Operation Error values

Discussion:

Conclusion: approved without presentation

N2-030345: TS 23.078, Rel-5, Alcatel, Type: CR, CR#601, Title: Corection of "Int_leg_Status_Report" to avoid double state changes in the CSA

Discussion: The subcategory is updated offline (essential correction). Some offline comment will be provided for reason for change field update.

Conclusion: approved

N2-030376: TS 23.078, Rel-5, Nokia, Type: CR, CR#616, Title: Allow user interaction at answer DP

Discussion: Cover page shall be updated.

Conclusion: approved

N2-030379: TS 29.078, Rel-5, Nokia, Type: CR, CR#329, Title: MoveLeg precondition for source and target CS

Summary: Call Party Handling (CPH) would not work as desired. MoveLeg is not possible when the target call segment (CS) is at TDP2 or TDP12. MoveLeg precondition is kept as it is for source CS. The target CS precondition is changed to allow Move into it while at TDP-R or EDP-R. MSC/SSP then preceed when SCP sends ContinueWithArgument to the answered leg and target CS/leg.

Discussion: Precondition for SplitLeg may be changed. Preconditions will be separated to the target side and source side. We expect this to be a separate tdoc in the next meeting(s).

Target call segment could be replaced by CSID1. WI shall be CAMEL4 instead of CAMELx.

Conclusion: revised to N2-030461

N2-030461: TS 29.078, Rel-5, Nokia, Type: CR, CR#329r1, Title: MoveLeg precondition for source and target CS

Discussion: In the last bullet of the gsmSSF preconditions, Analysed_Information shall be removed since this is a Rel-5 CR. Wording of the last bullet is changed so that target Call Segment fulfils the following precondition: The original BCSM in the target Call Segment is at Terminating_Attempt_Authorised or Collected_Info detection point, and the outgoing leg of that BCSM has been disconnected by the gsmSCF.

Conclusion: revised to N2-030468

N2-030468: TS 29.078, Rel-5, Nokia, Type: CR, CR#329r2, Title: MoveLeg precondition for source and target CS

Discussion:

Conclusion: approved without presentation

N2-030382: TS 23.078, Rel-5, Alcatel, Type: CR, CR#619, Title: CAMEL Leg Handling

Discussion: This CR clarifies when a leg begins to exist and when the leg ceases to exist.

Ericsson: If the incoming leg releases, the leg is released as soon as incoming release has been processed by the MSC.

Conclusion: postponed to next meeting

N2-030349: TS 23.078, Rel-5, Ericsson, Type: CR, CR#606, Title: Correction to Release Leg handling in CPH call
Discussion: Late document

Conclusion: withdrawn

N2-030350: TS 23.078, Rel-5, Ericsson, Type: CR, CR#607, Title: Correction to DP description for O-BCSM and T-BCSM

Discussion: Late document

Conclusion: withdrawn

7.5 CAMEL4/DTMF Mid-call DP

7.6 CAMEL4/IMS

N2-030369: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#043r1, Title: Incorrect handling of failure SIP response for MT

Discussion: This document was postponed in the previous CN2 meeting. The similar change should be done for MO case. Subcategory shall be essential correction. Cover page shall be improved.

Page 7 change shall be undone.

Conclusion: revised to N2-030438

N2-030438: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#043r2, Title: Incorrect handling of failure SIP response for MT

Discussion: revision of N2-030369

Conclusion: approved

N2-030439: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#045, Title: Incorrect handling of failure SIP response for MO

Discussion: This document is the result of N2-030369.

Conclusion: revised toN2-030443

N2-030443: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#045, Title: Incorrect handling of failure SIP response for MO

Discussion:

Conclusion: approved

N2-030370: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#044, Title: Setting of Timers not specified for IMSSF process

Discussion:

- On page 3, the connector number 3 shall be removed.

- IETF RFC3261 is mentioned in the page 3. Lucent prefer to reference 3GPP specification. CN1 refers to IETF RFCs, but we should refer to 3GPP specifications.

- On sheet 2 (page 6) :Task box “stop B Timer” should contain only the name of the timer.

- On sheet 3: Label “No” should be located closer to the exit of the test. This comment applies to the document in general.

- On the page 15, sheet 3 of the Procedure CAMEL_IMCN_MO_O_IM_CSI_INIT, new branch is added, but there is no end state. This applies to 2 other procedures.

Conclusion: revised to N2-030440

N2-030440: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#044r1, Title: Setting of Timers not specified for IMSSF process

Discussion:

- One of the SDL pages was not cut and pasted correctly, but it is contained in SDL source file.

- Sheet 1 of process IM_MT_SSF shall be splitted to 2 pages so that there are not so many lines crossing. “:=” shall be used instead of “=”.

- “rcvd” shall be replaced by “received” in the SDL.

- Revision marks shall not be visible in the cover page.

Conclusion: revised in N2-030465

N2-030465: TS 23.278, Rel-5, Lucent Technologies, Type: CR, CR#044r2, Title: Setting of Timers not specified for IMSSF process

Discussion:

Conclusion: approved

7.7 CAMEL4/ MT SMS

N2-030365: TS 29.078, Rel-5, T-Mobile, Type: CR, CR#328, Title: Usage of Alphanumeric Characters in SMS Address Fields

Discussion: On the page 4, there is a reference to TS 24.008, and there is a request to have a reference to TS 23.038.

Conclusion: revised to N2-030462

N2-030462: TS 29.078, Rel-5, T-Mobile, Type: CR, CR#328r1, Title: Usage of Alphanumeric Characters in SMS Address Fields

Discussion:

Conclusion: approved

N2-030338: TS 23.078, Rel-5, Ericsson, Type: CR, CR#603, Title: Correction to SMS Event Disarming

Discussion: subcategory is essential correction

Conclusion: approved

N2-030339: TS 23.078, Rel-5, Ericsson, Type: CR, CR#604, Title: Correction to SMS Error handling

Discussion: In TP Data Coding Scheme, Since "M" is changed to "C", the following sentence in the description is not needed: "For SMS-STATUS-REPORT, the inclusion of this IE is subject to its presence in the SMS-STATUS-REPORT TPDU."

Conclusion: revised to N2-030463

N2-030463: TS 23.078, Rel-5, Ericsson, Type: CR, CR#604, Title: Correction to SMS Error handling

Discussion:

Conclusion: approved

7.8 CAMEL4/ Flexible tone

N2-030340: TS 23.078, Rel-5, Alcatel, Type: CR, CR#525r2, Title: Playing of tones to the same leg or call segment

Discussion: Vodafone does not prefer long text descriptions in the SDLs. Those could be moved to text descriptions outside the SDL.

Alcatel's document proposes : "If the MSC is already playing a tone then the tones do not intervene and shall be played." Alcatel document tries also to specify what shall be played, and Nokia states only that the latter tone overwrites the existing tone, but does not specify what is played.

Nokia: If the tones are for different legs, they are not concurrent. We shall specify only cases for concurrent tones.

Ericsson proposes that we accept the Nokia's approach, but while revising the text, to implement parts of Alcatel text. Lucent prefers the layout of Nokia's proposal.

Conclusion: rejected

N2-030378: TS 23.078, Rel-5, Nokia, Type: CR, CR#617, Title: Handling of concurrent tones

Summary: In addition to AC(warningtone), also the PlayTone(legID) is an exception of rules in 4.5.1 section. In that case the entire CS will not hear that tone. Concurrent tones are described in a separate clause in the text. SDL refers to the text.

Discussion: The document updates the section 4.5.1, what is not done in Alcatel document. Alcatel documents includes one more change which is forgotten here. Some changes in this document are done in SDLs, while Alcatel document is explaining them in the textual part.

Alcatel finds that in section 4.5.2.1.6A, the item 4 should be specified in more details. It is agreed that A and B cases will be introduced (as an MSC option).

Ericsson proposes to define exceptions that exist in 4.5.2.1.6A (exceptions in warning tones and play tones without going into details). Ericsson will draft the proposal to describe exceptions without restricting to those exceptions only.

Title in the section 4.5.2.1.6A (Actions of the MSC on receipt of Int_Apply_Warning_Tone) shall not only apply to Int_Apply_Warning_Tone.

Ericsson and T-Mobil raised concerns that the CR gives impression in subclause 4.5.1 *Overall SDL architecture* that PlayTone(CSid) would not be allowed. CN2 chairman believes it does not because the bullet#5 gives only the exeption to the general rule, and PlayTone (CSid) does not cause an exeption to the rule. I.e. also the all legs in the CS hear the same tone.

Conclusion: revised to N2-030464

N2-030464: TS 23.078, Rel-5, Nokia, Type: CR, CR#617r1, Title: Handling of concurrent tones

Discussion: Points 5 and 6 are added:

5. If the MSC is already playing a tone for the call segment and the Int_Apply_Warning_Tone instructs another tone for a leg in that call segment then the particular leg would either hear (as an MSC option):
    a. Latter tone only, or

b. Two tones. The two tones may be played in parallel or in a sequence.

The other leg(s) would keep hearing the (old) call segment tone.

6. If the MSC is already playing a tone for a leg and the Int_Apply_Warning_Tone instructs another tone for that call segment then the particular leg would either hear (as an MSC option):

c. Latter tone only, or

d. Two tones. The two tones may be played in parallel or in a sequence.

The other leg(s) would start hearing the new call segment tone.

- Wording in bullet b) in point 5 shall be changed

- In option b in points 5 and 6 we allow playing 2 tones. Vodafone is questioning whether there is a since to play 2 tones in the same time? CN2 decided not to change the decision made in the previous meetings.

Conclusion: revised to N2-030469

N2-030469: TS 23.078, Rel-5, Nokia, Type: CR, CR#617r2, Title: Handling of concurrent tones

Discussion: Vodafone had additional comments that were taken into account for revised version.

Conclusion: revised to N2-030472

N2-030472: TS 23.078, Rel-5, Nokia, Type: CR, CR#617r3, Title: Handling of concurrent tones

Discussion:

Conclusion: approved without presentation

N2-030347: TS 23.078, Rel-5, Ericsson, Type: CR, CR#605, Title: Correction to PlayTone pre-conditions

Discussion: Subcategory is changed offline to “essential correction”.

Conclusion: approved

N2-030336: TS 29.078, Rel-5, Ericsson, Type: CR, CR#326, Title: Correction to PlayTone pre-conditions

Discussion: Subcategory is changed offline to “essential correction”.

Conclusion: approved

7.9 CAMEL4/ Charging Notification

7.10 CAMEL4/ Dialled Services

7.11 CAMEL4/ Cd party location

7.12 CAMEL4/ GPRS Mobility Management

N2-030367: TS 23.078, Rel-5, Alcatel, Type: CR, CR#615, Title: Correction on MG-CSI sending to the SGSN

Discussion: Subcategory is added offline (essential correction).

Conclusion: approved

7.13 CAMEL4/ ODB in HLR-SCP interface

7.14 CAMEL4/ Location Information during ongoing call

N2-030366: TS 23.078, Rel-5, Alcatel, Type: CR, CR#614, Title: Correction to Change of position processes

Discussion: In the last sentence of the reason for change, "previously memorised" (related to SAI reported) shall be removed so that it is not missinterpreted.

Second instance of CAMEL_O_CHANGE_OF_POSITION_MSC in the cover page shall be changed to CAMEL_T_CHANGE_OF_POSITION_MSC.

Is this iapplicable to UMTS access networks only? Regardless of radio access network technelogy the interface between radio network and serving node can be Iu.

Conclusion: approved

7.15 CAMEL4 / GPRS AnyTimeInterrogation

N2-030405: TS 23.003, Rel-5, NTTDoCoMo, Type: CR, CR#614, Title: Assignment of SSN value for Presence Network Agent

Discussion: The CR proposes allocation of SSN value to Presence Network Agent**.** It has been planed to handle the document during CN2-CN4 Joint meeting (N4-030847). Late document in CN2.

Conclusion: concluded in CN4 only

N2-030406: TS 23.003, Rel-5, NTTDoCoMo, Type: CR, CR#069, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server~~Assignment of SSN value for Presence Network Agent~~

Discussion: N4-030849

Conclusion: revised to N2-030413/N4-030961

N2-030413: TS 23.003, Rel-5, NTTDoCoMo, Type: CR, CR#069r1, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server~~Assignment of SSN value for Presence Network Agent~~

Discussion: This was late document in CN2. The document was presented in CN2-CN4 Joint meeting.

Conclusion: revised to N2-030448/N4-031019

N2-030448: TS 23.003, Rel-5, NTTDoCoMo, Type: CR, CR#069r2, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server~~Assignment of SSN value for Presence Network Agent~~

Discussion: N4-031012~~9~~

Conclusion: noted (postponed to next meeting in CN4)

7.16 CAMEL4 / CAMEL4 partial implementation

N2-030334: TS 29.078, Rel-5, Ericsson, Type: CR, CR#558, Title: Correction to partial implementation of CAMEL4

Discussion: This CR was postponed in the previous CN2 meeting. Wording should be left as it is, for consistency reasons (T-Mobil). Either "S" has to be changed to something else (par example "M"), or another specific condition has to be specified (Vodafone).

T-Mobil: If we change the description of the specific condition, we could leave it as "S".

"M" means in stage 2 that we receive the information which is true or false. False means that the parameter is not sent at all or with a value "0". According to T-Mobil, there is a possibility of misinterpretation of "M".

Working assumption is that we will leave as proposed in the document. Summary of change and the category will be corrected offline.

Conclusion: approved

N2-030337: TS 23.078, Rel-5, Ericsson, Type: CR, CR#602, Title: Alignment of Offered CAMEL4 functionalities

Discussion: The names are already used in the stage 3, no related change is required for stage 3.

We don't provide location information at alerting phase, but in the alerting DP. That is the reason to delete alerting phase from "Provision of location information of called subscriber". "DP O_Term_Seized" change shall be cancelled in the same part of the change. The CR has to be revised so that originating side changes are cancelled. We cancel the changes in parameter names.

Conclusion: revised to N2-030441

N2-030441: TS 23.078, Rel-5, Ericsson, Type: CR, CR#602r1, Title: Alignment of Offered CAMEL4 functionalities

Discussion:

Conclusion: approved

7.17 CAMEL4 / Reporting of IMEI and MSClassMark to SCP

7.18 CAMEL4 / Service Change and UDI Fallback (SCUDIF)

N2-030326: Source: CN4-CN3-CN2 Joint meeting, Type: LS IN , Title: LS on CAMEL interactions with SCUDIF

Discussion: N4-030719

Conclusion: noted

N2-030354: Source: SA1, Type: LS IN , Title: LS on CAMEL interactions with SCUDIF

Discussion: SA1 have considered the LS from CN4 (N4-030719) on CAMEL interactions with SCUDIF and have concluded as follows.

It is required that CAMEL subscribers can originate and receive SCUDIF calls and still use their CAMEL services as usual. The detailed interworking between SCUDIF and CAMEL, however, is felt to be beyond the scope and knowledge of SA1, and SA1 therefore leaves the standardisation of this to CN2 and CN4. CN2 and CN4 are asked to standardise this interworking within Rel-5.

It should be noted that this is not a new requirement because, as a result of a detailed study of the relevant Stage 1 specifications, it has been determined by SA1 that CAMEL support with SCUDIF is already clearly specified within Rel-5.

SA1 kindly request CN2 and CN4 group to standardise, in Rel-5, CAMEL interactions with SCUDIF such that CAMEL subscribers can originate and receive SCUDIF calls and still use their CAMEL services as usual and to provide feedback regarding the progress of the work for Rel-5.

Conclusion: noted

N2-030395: LM Ericsson, Type: Discussion document, Title: CAMEL Interactions For SCUDIF In Release 5

Discussion: This discussion paper has proposed a set of features that would allow to fulfil the requirements set by SA1 in the incoming LS previously mentioned. If this approach is agreeable and can be accepted by CN2, Ericsson will then contribute and prepare CRs for the October meetings to pursue this. (The document was presented during CN2-CN3-CN4 Joint session ***N4-030904)*.**

Conclusion: noted

N2-030391: LM Ericsson, Type: Discussion document, Title: SCUDIF HLR Interrogation

Discussion: The document was presented during CN2-CN3-CN4 Joint session on SCUDIF (N4-030900).

Conclusion: revised to N2-030451

N2-030451: LM Ericsson, Type: Discussion document, Title: SCUDIF HLR Interrogation

Discussion: The document was presented during CN2-CN3-CN4 Joint session (N4-0301021).

DoCoMo has provided a proposal for HLR interrogation, which would be performed in a single step. Refinements proposed by Ericsson to the original One-Step solution will allow the "one-step interrogation" to be both efficient signalling-wise, and still leave the call control logic in the GMSC. It will still allow a backward compatibility mechanism for non-compliant HLRs. Thus, it is acceptable to both Ericsson and NTT DoCoMo and should be concluded that this is most appropriate solution.

It was also proposed by Ericsson to introduce a new Bearer Service for SCUDIF. This method proposes to define a new basic service for SCUDIF. This would mean that SCUDIF can be treated independently of existing basic services.
Conclusion: noted

N2-030397: Vodafone, Type: Discussion document, Title: Should SCUDIF have a single basic service code?

Discussion: The document was presented in CN2-CN3-CN4 Joint meeting in N4-030846.

Vodafone recommend that CN2 and CN4 decide to continue the specification work for the handling of SCUDIF calls on the basis of a single basic service for SCUDIF.

SA1 has agreed already that SCUDIF is not a separate basic service. If Ericsson proposal is complete and works, Vodafone and Siemens could live with the proposal of 2 SS codes. For the time being we will proceed with Ericsson's CRs.

Conclusion: noted

N2-030377: TS 23.018, Rel-5, Nokia, Type: CR, Title: One step HLR enquiry for SCUDIF

Discussion: N4-030842

Conclusion: withdrawn

N2-030381: TS 23.078, Rel-5, Nokia, Type: CR, CR#618, Title: One step HLR enquiry for SCUDIF-CSI criteria

Discussion: N4-030842

Conclusion: withdrawn

N2-030396: TS 23.018, Rel-5, LM Ericsson, Type: CR, , Title: SCUDIF Impacts to Basic Call

Discussion: N4-030905

Conclusion: noted

N2-030384: TS 23.078, Rel-5, NTT DoCoMo, Type: CR, CR#620, Title: SCUDIF Impacts to Basic Call

Discussion: The document was discussed in the Joint meting with CN3 and CN4.

Do we need SCUDIF interrraction for all call types (MO, MT,CF)? According to NTT DoCoMo, SCUDIF is applied for all call types except for Call Party Handling.

More information should be provided about mapping of parameters between 2 protocols, ISUP and CAP.

- The description of the BearerCapability2 should be clarified in two sentences which explain what the parameter is and when it is applied.
- Vodafone: Do we already have the BearerCapability to send all bearer capabilities? Do we just report the preferred or the one which will be used, or do we report both of them. Vodafone: Logical is to indicate both, i.e. to send the prefferred one first.
- This CR is to notify the bearer information to SCF, but not to notify the service change. This is just that SCF knows that it has a possibility to change to the bearer capability 2. It is useful for service control
- If we send 2 bearer capabilities to SCP, in which order? Vodafone proposes to send the preferred one the first.
- The remaining issue is alternate speech and fax, and how to deal with basic service code in alternate speech and fax case. Nokia: In the alternate speech and fax, the "preferred" has a meaning. If we have 2 bearer capabilities one is preferred and second one is non-preferred.

- Should we improve wording of the description of the bearer capability 1 and 2 to include alternate speech and fax case?
- At which phase of the call it is decided that CPH cannot be used for SCUDIF. It will be added to open issues list (how CPH interacts with SCUDIF?).
- The specific condition for the BearerCapability2 should be absent, if the BearerCapability2 is not present.
- Wording for BearerCapability1 and basic service code1 should indicate the preferred service.
- In Operations and Arguments listing, Capital B should be the lower case.
- Parameters will be moved to InitialDPArg extension.
- ~~At the very end of the CR in Annex A, the table is updated. The linking between BearerCapability in CAP and ISUP is changed. User service information (2nd priority) can be reported now only in BearerCapability2. User service information , 1st and 2nd priority was belonging to the Bearer Capability before. The whole change is not visible (the left side table is splitted into 2 cells). It is left to NTT DoCoMo to make the old functionality and new functionality possible.~~

Conclusion: revised to N2-030458

N2-030458: TS 23.078, Rel-5, NTT DoCoMo, Type: CR, CR#620r1, Title: SCUDIF Impacts to Basic Call

Discussion:

Conclusion: approved

N2-030385: TS 29.078, Rel-5, NTT DoCoMo, Type: CR, CR#330, Title: Correction to InitialDP for SCUDIF

Discussion: Will be discussed in the Joint meting with CN4. Bearer capability2 and Ext-Basic Service Code2 are added to InitialDP.

For BearerCapability2, the chairman's proposal is to have only one sentence and to delete the text about the network option. It should say: " This parameter indicates the type of the bearer capability connection or the transmission medium requirements to the user."

- At the very end of the CR in Annex A, the table is updated. The linking between BearerCapability in CAP and ISUP is changed. User service information (2nd priority) can be reported now only in BearerCapability2. User service information , 1st and 2nd priority was belonging to the Bearer Capability before. The whole change is not visible (the left side table is splitted into 2 cells). It is left to NTT DoCoMo to make the old functionality and new functionality possible.

Conclusion: revised to N2-030459 (all the notes in 396)

N2-030459: TS 29.078, Rel-5, NTT DoCoMo, Type: CR, CR#330, Title: Correction to InitialDP for SCUDIF

Discussion: Parameters shall be moved to extension field.

Note 3: we should mention that if the call is SCUDIF we would use the 2nd of the two mapping rules. If the call is not SCUDIF, the first set of rules is applied. It shall be made clear when each set of rules is applied.

It is also possible to refer to TS 23.078, IF table so that the reader can have the information when to apply those two mapping rules. Vodafone's proposal is to give explicit definition, but TS 23.078 already defines those mapping rules. The conclusion is to insert the reference to TS 23.078.

Conclusion: revised to N2-030470

N2-030470: TS 29.078, Rel-5, NTT DoCoMo, Type: CR, CR#330, Title: Correction to InitialDP for SCUDIF

Discussion:

Conclusion: approved without presentation

N2-030393: TS 29.002, Rel-5, LM Ericsson, Type: CR, CR#613, Title: SCUDIF HLR Interrogation

Discussion: The document was handled during the joint meeting with CN3 and CN (N4-030902).

Conclusion: revised to N2-030453/N4-031023

N2-030453: TS 29.002, Rel-5, LM Ericsson, Type: CR, CR#613, Title: SCUDIF HLR Interrogation

Discussion:

Conclusion: noted

N2-030394: TS 29.002, Rel-6, LM Ericsson, Type: CR, CR#614, Title: SCUDIF HLR Interrogation

Discussion: N4-030903

Conclusion: revised to N2-030454

N2-030454: TS 29.002, Rel-6, LM Ericsson, Type: CR, CR#614r1, Title: SCUDIF HLR Interrogation

Discussion: N4-030903

Conclusion: noted

N2-030392: TS 23.172, Rel-6, LM Ericsson, Type: CR, CR#11, Title: SCUDIF HLR Interrogation

Discussion: This was a late document in CN2. The document handled in CN2-CN3-CN4 Joint session (N4-030901).

Conclusion: revised to N2-030452/N4-0301022

N2-030452: TS 23.172, Rel-6, LM Ericsson, Type: CR, CR#11r1, Title: SCUDIF HLR Interrogation

Discussion: The CR was discussed in the joint meeting with CN3 and CN4 (N4-031022/N3-030510). The principle of the CR is accepted with some changes. It has been agreed that the text which is related to basic call handling will be changed to an SDL and these will be incorporated into 23.018

The resulting CRs have to be submitted to CN2, CN3 and CN4 (N3-030614 and N4-031025, no CN2 document number has been allocated).

Conclusion: CN2 and CN4 noted

N2-030407: TS 23.018, Rel-5, NTT DoCoMo, Type: CR, Title: Repeat subscription checking regarding SCUDIF

Discussion: Will be discussed in the Joint meting with CN4 in N4-030852

Conclusion: revised to N2-030449

N2-030449: TS 23.018, Rel-5, NTT DoCoMo, Type: CR, Title: Repeat subscription checking regarding SCUDIF

Discussion:

Conclusion: noted

N2-030408: TS 23.079, Rel-5, NTT DoCoMo, Type: CR, Title: Notification of the 2nd BSG in case of Late CF with OR

Discussion: Will be discussed in the Joint meting with CN4 in N4-030930

Conclusion:CN4 has approved, no conclusion in CN2

N2-030450: TS 23.079, Rel-5, NTT DoCoMo, Type: CR, Title: Notification of the 2nd BSG in case of Late CF with OR

Discussion:

Conclusion: The document was withdrawn. It was allocated for the revision of N2-030408, but later the revision of 408 was cancelled

8 CAMEL for Release 6

8.1 General and miscellaneous Rel-6 issues

N2-030325: Source: CN4, Type: LS IN , Title: LS response on CAMEL support for the Presence Service

Discussion:

Conclusion: noted

N2-030415: Release 6, WI: Presence, Type: LS IN, Source: SA2, Title: LS response on "LS response CAMEL support for the Presence Service" from CN4

Discussion:

Conclusion: noted

N2-030399: TS 23.078, Rel-5, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion: Will be discussed in the Joint meting with CN4. It was postponed in the previous CN2 meeting.

Conclusion: revised to N2-030409 before the meeting

N2-030409: TS 23.078, Rel-5, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion: ~~The document was discussed in the Joint meting with CN4.~~ This CR is considered as technical enhancement and is handled under the WI TEI_6. Change is introduced due to the stage 1 change (CR 22.078-160, S1-030727, approved by SA1#21 Sofia Antipolis, 7 - 11 July 2003)

There is no text in Criteria on Mobility Event.Before it was a subclause on each type of criteria.

- Information necessary to check whether the criteria is fullfild means that SSF has to store where the mobile was or/and wher where the mobile has gone to. Vodafone finds better to leave this processing to MSC. It is concluded that MSC needs to store the criteria, and information to check whether criteria is fulfilled.

If inter PLMN HO is also Inter-system HO, then the criteria is matched.

Vodafone: Inter system HO and Inter PLMN HO are independend of each other. Inter PLMN HO is more unusuall HO than Inter MSC HO. Inter PLMN HO requires agreement between two operators and cells planning. The Other PLMN should know identities of the neighbour cell which belong to competitors network.

From Ericsson's experience, there are networks where inter PLMN HO is already operational.

Contribution is proposing that:

The instruction by the CSE may contain a list of up to 10 location changes to be reported as the criterion. The criteria contains the border over which the subscriber changes in terms of one of the following information: -
cell id;

- location area id;
- service area id;

or following changes;

- "inter-system hand over";
- "inter-PLMN hand over".

If more then one criteria is met, then only one change of position event shall be reported to the CSE.

If this list of location change is not included in the instruction, the criteria upon any change of position shall be regarded as fulfilled.

Questions:

- Are those handovers mutually exclusive?

- When we give a cell Id, is it source or target cell id?

- Every time when the subscriber moves from one cell to another, the change would be reported. That could be checked in SA1 CR. This is mutually exclusive choice, cell id and service area id. SA didn't specify if the source or target cell is reported.

- What is the handling of the criteria? Can we receive the criteria multiple times from SCP? Does it change the status of previously armed criteria? Vodafone: complete set of the parameters should be sent as one block. Second request would overwrite the first set of criteria.

Chairman's proposal is to write the LS to the SA1 to clarify how we currently undersand the service requirement.

Changes needed in the document:

- The subclause where the criteria is explained should be modified. The revised CR should give the answers to questions: Issue of the border (source or target), issue of the overwriting the criteria (should be given as one block). Some improvements will be adviced offline by Ericsson.

Conclusion: revised to N2-030419

N2-030419: TS 23.078, Rel-5, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion:

Conclusion: revised to next meeting

N2-030418: ~~Siemens AG~~Alcatel, Type: LS OUT, Title: LS on CN2 understanding and assumption for the "Criteria for "change of position" procedures"

Discussion: CN2 meeting schedule shall be changed.

Do we want to verify from SA1 that the inter PLMN HO is not of interest for CAMEL service? The bullet will be removed.

Conclusion: revised to N2-030455

N2-030455: Siemens AG, Type: LS OUT, Title: LS on CN2 understanding and assumption for the "Criteria for "change of position" procedures"

Discussion:

Conclusion: approved

N2-030400: TS 29.078, Rel-6, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion: ~~Will be discussed in the Joint meting with CN4.~~ It was postponed in the previous CN2 meeting.

Conclusion: revised to N2-030410 before the meeting

N2-030410: TS 29.078, Rel-6, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion: If we make this change, we should change Rel-5 also.

Siemens proposes to introduce Rel-6 capabilities by a separate CR. Rel-6 capabilities would enable to operators to implement EDS enhancements without enhancing the change of position reporting. The Rel-6 SCP should be able to send down the criterion and MSC ignores the criterion (if we don't have separate subsets).

We cannot now conclude whether we want this now as a subset. If we have later more Rel-6 features, this can be done later as well. Following was concluded:

1. We enhance the protocol according to TR 30.902
2. There is no decision at the moment about the subset issue.
3. The consistent naming of the parameters should be used (Change of Position control info)
4. In 23.003 there is the fundamental definition of LAI, Service Area ID, Cell Global ID

Off-line comments given by Ericsson: in section 11.27.1.1, replace:

"changeOfLocationControlInfo:
This parameter defines the criterion for the detection and reporting of change of location. If this parameter is absent, then any change of position shall be reported.

Into:

changeOfLocationControlInfo:
This parameter defines the criterion for the reporting of change of location. If this parameter is absent, then any change of position shall be reported."

Rationale for this change: the "detection" of the change of position event is unconditional. The reporting, of the event, is, however, subject to the criteria. Similar change may be needed for the CR on TS 23.078.

Conclusion: revised to N2-030420

N2-030420: TS 29.078, Rel-6, Siemens AG, Type: CR, Title: Change of position procedures armed with criteria

Discussion:

Conclusion: postponed to next meeting

N2-030421: TS 29.078, Rel-5, Siemens AG, Type: CR, CR#331, Title: Change of position procedures armed with criteria

Discussion: The title is changed and the WI is CAMEL4. The document is the result of the discussion of the Release 6 document. Vodafone proposes to strike out the alternative solution in the revised CR.

For Release 5 we will take both alternatives. The CR# shall be 331. The subcategory is "essential correction".

Conclusion: revised to N2-030471

N2-030471: TS 29.078, Rel-5, Siemens AG, Type: CR, CR#331r1, Title: Change of position procedures armed with criteria

Discussion:

Conclusion: approved without presentation

N2-030383: TS 23.078, Rel-6, NTT DoCoMo, Type: CR, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN

Discussion: Will be discussed in the Joint meting with CN4 in N4-030853

Conclusion: revised to N2-030412

N2-030412: TS 23.078, Rel-6, NTT DoCoMo, Type: CR, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN

Discussion: N4-030955

Conclusion: revised to N2-030447

N2-030447: TS 23.078, Rel-6, NTT DoCoMo, Type: CR, Title: Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN

Discussion: The document was presented during CN2/CN4 Joint meeting in N4-031018.

Ericsson: It would be good to request the service requirement in stage 1. If the CAMEL requirement for Presence in stage 1 is added, stage 2 should have the reference to the stage 1 Presence specification.

Questions:

- Is Presence an option in Rel-6?. Is CAMEL optional part or mandatory part of the Presence service (is CAMEL support is required to have this feature?). This questions should be addressed to SA1 and SA2.. There was no volunteer to draft a LS to SA1.

- Do we need another subset for Presence requirement?

- PSI operation may be enhanced.

Conclusion: noted

8.2 Enhanced Dialled Services

N2-030318: TS 23.078, Rel-6, Nokia, Type: CR, CR#553r1, Title: Collective CR for Rel-6 Enhanced Dialled Services

Discussion: The document was also seen in the Joint meeting with CN4 in N4-030840.

Conclusion: noted, will be revised to the next meeting (revised version will include any approved CR in this meeting and editorial comments)

N2-030319: TS 23.018, Rel-6, Nokia, Type: CR, CR#126, Title: Collective CR for Rel-6 Enhanced Dialled Services

Discussion: On page 6, sheet 1(6), in the output "yes" of the check "Result=Leg1_only?", instead of connecting to the connector "A", it could go directly to the "Leg1_status:=set-up".

The document was also seen in the Joint meeting with CN4 in ***N4-030841***.

Conclusion: noted, it will be revised to the next meeting

N2-030343: TS 23.078, Rel-6, Alcatel, Type: CR, CR#580r1, Title: Re-connect for Enhanced Dialled Services

Discussion: This CR was postponed in the previous CN2 meeting. On page 3, "Re-Connect" shall be changed with the "Reconnect" in Procedure CAMEL_MO_Dialled_Services. The same editorial mistake is appearing in other procedures. This editorial change will be done in the collective CR.

Conclusion: approved

N2-030344: TS 29.002, Rel-6, Alcatel, Type: CR, CR#525, Title: Re-connect for Enhanced Dialled Services

Discussion: This CR was postponed in the previous CN2 meeting (N4-030750). The CAMEL Phase 4 feature of Partial Implementation shall be available for Enhanced Dialled Services. This CR introduces extra bits indicating the new OfferedCamel4Functionalities. The name of the bit is similar to the 23.078 information element names "Subscribed Enhanced Dialled Services" and "Serving Network Enhanced Dialled Services".

This document will be discussed in the Joint meeting with CN4 in ***N4-030750.*** Additional bits for indicating the new OfferedCamel4Functionalities are included for backward compatibility. The question is whether the size should be increased . It should be left as 15 because of backwards compatibility

Conclusion: approved, will be incorporated to collective CR which will be sent to next CN4 meeting

N2-030368: TS 23.078, Rel-6, Alcatel, Type: CR, CR#590, Title: EDS and TDP-RouteSelectFailure

Discussion: This CR was postponed in the previous CN2 meeting.

Conclusion: revised to N2-030444 (will be part of the collective CR)

N2-030~~444368~~: TS 23.078, Rel-6, Alcatel, Type: CR, CR#590r1, Title: EDS and TDP-RouteSelectFailure

Discussion:

Conclusion: approved without presentation, will be part of the collective CR

N2-030371: TS 29.078, Rel-6, Samsung Electronics, SK Telecom, Type: CR, Title: Implementation of enhanced dialled service

Discussion: This CR was postponed in the previous CN2 meeting. SK Telecom finds that this is all necessary changes needed for 29.078.

- Offered CAMEL4 functionality indicates whether EDS is allowed for this call.

- MAP module version 9 shall be referenced here

- Words “for this call” on page 9 shall be added(end of description).

- “enhancedDialledServicesAllowed” parameter indicates that the gsmSCF may use the Enhanced Dialled Services (EDS) for this call.

Conclusion: revised to N2-030445

N2-030445: TS 29.078, Rel-6, Samsung Electronics, SK Telecom, Type: CR, Title: Implementation of enhanced dialled service

Discussion:

Conclusion: approved, will become the part of the collective CR for TS 29.078

9 Review of dates and hosts for future meetings

Review of the N2 meeting schedule for 2002

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPCN2#31	WG	27th-31st October	Bangkok	Thailand

10 Closing of the meeting (15:30 Friday)

Deadlines for the October meeting:

- the deadline to submit request for document numbers is 15th of October 2003 , 12:00 CET
- the deadline to send actual documents is: 15th of October 2003, 23:59 CET

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	Cat	Rev	Version	Conclusio
N2-030416	CAMEL3	R99	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	621	F		3.16.0	approved
N2-030417	CAMEL3	Rel-4	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	600	A	2	4.9.0	approved
N2-030425	CAMEL3	Rel-5	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	622	A		5.4.0	approved

Approved Output Liaison Statements

TDoc #	Type	Title	Source	Conclusion	To:
N2-030455	LS OUT	LS on CN2 understanding and assumption for the "Criteria for "change of position" procedures"	CN2	approved	SA1
N2-030457	LS OUT	LS on CPH charging impacts on the CDRs	CN2	approved	CN5
N2-030437	LS OUT	LS on SA3 on Legal Interception of SCP initiated calls.	CN2	approved	SA3

Approved and endorsed Change Requests for CAMEL Phase 4

TDoc #	WI	Rel	Title	Type	Spec	CR	Cat	Rev	Version	C
N2-030331	CAMEL4	Rel-5	Correction to procedure CAMEL_ICA_MSC	CR	23.078	575	F		5.4.0	appro
N2-030334	CAMEL4	Rel-5	Correction to partial implementation of CAMEL4	CR	23.078	558	F		5.4.0	appro
N2-030336	CAMEL4	Rel-5	Correction to PlayTone pre-conditions	CR	29.078	326	F		5.4.0	appro
N2-030338	CAMEL4	Rel-5	Correction to SMS Event Disarming	CR	23.078	603	F		5.4.0	appro
N2-030345	CAMEL4	Rel-5	Corection of "Int_leg_Status_Report" to avoid double state changes in the CSA.	CR	23.078	601	F		5.4.0	appro
N2-030347	CAMEL4	Rel-5	Correction to PlayTone pre-conditions	CR	23.078	605	F		5.4.0	appro
N2-030351	CAMEL4	Rel-5	Correction to procedure Handle_O_Answer	CR	23.078	608	F		5.4.0	appro

N2-030352	CAMEL4	Rel-5	Correction to usage of LegId in ICA Operation	CR	23.078	609	F		5.4.0	appro
N2-030353	CAMEL4	Rel-5	Correction to usage of LegId in ICA Operation	CR	29.078	322	F	1	5.4.0	appro
N2-030366	CAMEL4	Rel-5	Correction to Change of position processes	CR	23.078	614	F		5.4.0	appro
N2-030367	CAMEL4	Rel-5	Correction on MG-CSI sending to the SGSN	CR	23.078	615	F		5.4.0	appro
N2-030376	CAMEL4	Rel-5	Allow user interaction at answer DP	CR	23.078	616	F		5.4.0	appro
N2-030398	CAMEL4	Rel-5	Direction change of incoming message Answer	CR	23.078	584	F		5.4.0	appro
N2-030403	CAMEL4	Rel-5	Receiving Int_CWA after reporting Abandon	CR	23.078	612	F	1	5.4.0	appro
N2-030426	CAMEL4	Rel-5	Correction of "pty continues" and "LegActive" check boxes in SDL's	CR	23.078	610	F	1	5.4.0	appro
N2-030427	CAMEL4	Rel-5	Reporting Disconnect (leg n)	CR	23.078	573	F	2	5.4.0	appro
N2-030428	CAMEL4	Rel-5	Correction to parameter name in Connect Operation	CR	29.078	313	F	1	5.4.0	appro
N2-030431	CAMEL4	Rel-5	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	CR	23.078	611	F	1	5.4.0	appro
N2-030432	CAMEL4	Rel-5	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	CR	29.078	327	F	1	5.4.0	appro
N2-030433	CAMEL4	Rel-5	Update of charging specifications references	CR	23.078	570	~~A~~F	2	5.4.0	appro
N2-030441	CAMEL4	Rel-5	Alignment of Offered CAMEL4 functionalities	CR	23.078	602	F	1	5.4.0	appro
N2-030458	CAMEL4	Rel-5	Correction to InitialDP for SCUDIF	CR	23.078	620	F	1	5.4.0	appro
N2-030460	CAMEL4	Rel-5	Correction to CAP Operation Error values	CR	29.078	325	F	1	5.4.0	appro
N2-030462	CAMEL4	Rel-5	Usage of Alphanumeric Characters in SMS Address Fields	CR	29.078	328	F	1	5.4.0	appro
N2-030463	CAMEL4	Rel-5	Correction to SMS Error handling	CR	23.078	604	F	1	5.4.0	appro
N2-030466	CAMEL4	Rel-5	Handling of Connect operation with and without LegID	CR	23.078	523	F	5	5.4.0	appro
N2-030467	CAMEL4	Rel-5	Handling of Information Flows with absent LegID and CS ID	CR	23.078	524	F	4	5.4.0	appro

N2-030468	CAMEL4	Rel-5	MoveLeg precondition for source and target CS	CR	29.078	329	F	2	5.4.0	appro
N2-030470	CAMEL4	Rel-5	Correction to InitialDP for SCUDIF	CR	29.078	330	F	2	5.4.0	appro
N2-030471	CAMEL4	Rel-5	Introduction of extensibility mechanism in Release 5	CR	29.078	331	F	1	5.4.0	appro
N2-030472	CAMEL4	Rel-5	Handling of concurrent tones	CR	23.078	617	F	3	5.4.0	appro
N2-030456	CAMEL4	Rel-5	Using ATI for Mobile Number Portability	CR	23.078	530	F	2	5.4.0	Condi appro

*CN2 will send the CR in the separate NP document to CN#21. Since CN4 is sending 2 alternatives to CN plenary, this document shall be approved if corresponding CN4 proposal is approved. It will be left to CN pleanary to decide.

Approved and endorsed Change Requests for IMS-CAMEL

TDoc #	WI	Rel	Title	Type	Spec	CR	Cat	Rev	Versio	Conclusio	
N2-030438	IMS-CAMEL	Rel-5	Incorrect handling of failure SIP response for MT	CR	23.278	43	F	2	5.3.0	approved	Luc
N2-030443	IMS-CAMEL	Rel-5	Incorrect handling of failure SIP response for MO	CR	23.278	45	F	1	5.3.0	approved	Luc
N2-030465	IMS-CAMEL	Rel-5	Setting of Timers not specified for IMSSF process.	CR	23.278	44	F	2	5.3.0	approved	Luc

Annex C List of Documents

TDoc #	Type	Title	Source	WI	Spec	CR	R	C	Rel	Versi
N2-030316	Agenda	Meeting agenda	CN2 chairman							
N2-030317	Agenda	Allocation of documents to agenda items	CN2 chairman							
N2-030318	CR	Collective CR for Rel-6 Enhanced Dialled Services	Nokia	EDCAMEL	23.078	553	1	B	Rel-6	5.4.0
N2-030319	CR	Collective CR for Rel-6 Enhanced Dialled Services	Nokia	EDCAMEL	23.018			B	Rel-6	5.7.0
N2-030320	CR	Inclusion of check "pty continues" in procedure Handle_ACR.	Hughes Software Systems	CAMEL3	23.078	566		F	Rel-4	4.9.0
N2-030321	CR	Adding the definition "pty continues".	Hughes Software Systems	CAMEL3	23.078	595		F	Rel-4	4.9.0
N2-030322	CR	Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state".	Hughes Software Systems	CAMEL3	23.078	597		F	Rel-4	4.9.0

N2-030323	CR	Adding the definition "pty continues"	Hughes Software Systems	CAME L4	23.078	598		F	Rel-5	5.4.0	
N2-030324	CR	Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state".	Hughes Software Systems	CAME L4	23.078	599		F	Rel-5	5.4.0	
N2-030325	LS IN	LS response on CAMEL support for the Presence Service	CN4	Presenc e					Rel-6		
N2-030326	LS IN	LS on CAMEL interactions with SCUDIF	CN4-CN3-CN2	SCUDI F					Rel-5		
N2-030327	LS IN	LS on Charging Requirements on MNP for Pre-paid Subscribers	CN4	MNP					Rel-5&6		
N2-030328	LS IN	LS on MNP	CN	MNP					Rel-5		
N2-030329	CR	Correction in handling of Start-Delta and Stop-Delta operations.	Hughes Software Systems	CAME L3	23.078	600		F	Rel-4	4.9.0	
N2-030330	CR	Reporting Disconnect (leg n)	Ericsson	CAME L4	23.078	573	1	F	Rel-5	5.4.0	
N2-030331	CR	Correction to procedure CAMEL_ICA_MSC	Ericsson	CAME L4	23.078	575		F	Rel-5	5.4.0	
N2-030332	CR	Correction to CAP Operation Error values	Ericsson	CAME L4	29.078	325		F	Rel-5	5.4.0	
N2-030333	CR	Correction to interaction between ORLCF and forwarding notification	Ericsson	CAME L4	23.079	25	3	F	Rel-5	5.2.0	
N2-030334	CR	Correction to partial implementation of CAMEL4	Ericsson	CAME L4	23.078	558		F	Rel-5	5.4.0	
N2-030335	CR	Correction to parameter name in Connect Operation	Ericsson	CAME L4	29.078	313		F	Rel-5	5.4.0	
N2-030336	CR	Correction to PlayTone pre-conditions	Ericsson	CAME L4	29.078	326		F	Rel-5	5.4.0	
N2-030337	CR	Alignment of Offered CAMEL4 functionalities	Ericsson	CAME L4	23.078	602		F	Rel-5	5.4.0	
N2-030338	CR	Correction to SMS Event Disarming	Ericsson	CAME L4	23.078	603		F	Rel-5	5.4.0	
N2-030339	CR	Correction to SMS Error handling	Ericsson	CAME L4	23.078	604		F	Rel-5	5.4.0	
N2-030340	CR	Playing of tones to the same leg or call segment	Alcatel	CAME L4	23.078	525	2	F	Rel-5	5.4.0	
N2-030341	CR	Handling of Connect operation with and without LegID	Alcatel	CAME L4	23.078	523	3	F	Rel-5	5.4.0	
N2-030342	CR	Handling of Information Flows with absent LegID and CS ID	Alcatel	CAME L4	23.078	524	2	F	Rel-5	5.4.0	

N2-030343	CR	Re-connect for Enhanced Dialled Services	Alcatel	EDCA MEL	23.078	580	1	F	Rel-6	5.4.0	
N2-030344	CR	Enhancements for the Partial Implementation for Enhanced Dialled Services	Alcatel	EDCA MEL	29.002	525		B	Rel-6	6.2.0	
N2-030345	CR	Corection of "Int_leg_Status_Report" to avoid double state changes in the CSA.	Alcatel	CAME L4	23.078	601		F	Rel-5	5.4.0	
N2-030346	CR	aChChargingAddress in ApplyCharging/ApplyChargingReport	Nokia, Alcatel	CAME L4	23.078	592	1	F	Rel-5	5.4.0	
N2-030347	CR	Correction to PlayTone pre-conditions	Ericsson	CAME L4	23.078	605		F	Rel-5	5.4.0	
N2-030348	CR	Reflecting default Leg Id for CWA in CS_gsmSSF	Ericsson	CAME L4	23.078	578	1	F	Rel-5	5.4.0	
N2-030349	CR	Correction to Release Leg handling in CPH call	Ericsson	CAME L4	23.078	606		F	Rel-5	5.4.0	
N2-030350	CR	Correction to DP description for O-BCSM and T-BCSM	Ericsson	CAME L4	23.078	607		F	Rel-5	5.4.0	
N2-030351	CR	Correction to procedure Handle_O_Answer	Ericsson	CAME L4	23.078	608		F	Rel-5	5.4.0	
N2-030352	CR	Correction to usage of LegId in ICA Operation	Ericsson	CAME L4	23.078	609		F	Rel-5	5.4.0	
N2-030353	CR	Correction to usage of LegId in ICA Operation	Ericsson	CAME L4	29.078	322	1	F	Rel-5	5.4.0	
N2-030354	LS IN	LS on CAMEL interactions with SCUDIF	SA1								
N2-030355	LS IN	LS on possible re-organisation of 3GPP charging specification work	SA5								
N2-030356	CR	Correction of "pty continues" and "LegActive" check boxes in SDL's	Hughes Software Systems	CAME L4	23.078	610		F	Rel-5	5.4.0	
N2-030357	CR	Removal of blocks "Stop Delta" from the SDL "handling of DPs O/T-Busy, O/T-No Answer and Route Select Failure in Monitoring state".	Hughes Software Systems	CAME L4	23.078	599	1	F	Rel-5	5.4.0	
N2-030358	CR	Correction in handling of Start-Delta and Stop-Delta operations.	Hughes Software Systems	CAME L3	23.078	600	1	F	REL-4	4.9.0	
N2-030359	CR	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	Ericsson	CAME L4	23.078	611		F	Rel-5	5.4.0	
N2-030360	CR	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	Ericsson	CAME L4	29.078	327		F	Rel-5	5.4.0	
N2-030361	CR	Receiving Int_CWA after reporting Abandon	Nortel Networks	CAME L4	23.078	612		F	Rel-5	5.4.0	
N2-030362	CR	Handling AC Pending if ETC/ CTR fails	Nortel Networks	CAME L4	23.078	613		F	Rel-5	5.4.0	

N2-030363	DISC	MNP/ CAMEL pre-paid MNP-SRF solution	Nortel Networks								
N2-030364	CR	Incorrect CAMEL pre-paid charging in MNP networks	Nortel Networks	CAMEL4	23.066			F	Rel-5	5.1.0	
N2-030365	CR	Usage of Alphanumeric Characters in SMS Address Fields	T-Mobile	CAMEL4	29.078	328		F	Rel-5	5.4.0	
N2-030366	CR	Correction to Change of position processes	Alcatel	CAMEL4	23.078	614		F	Rel-5	5.4.0	
N2-030367	CR	Correction on MG-CSI sending to the SGSN	Alcatel	CAMEL4	23.078	615		F	Rel-5	5.4.0	
N2-030368	CR	EDS and TDP-RouteSelectFailure	Alcatel	EDCAMEL	23.078	590	1	F	Rel-6	5.4.0	
N2-030369	CR	Incorrect handling of failure SIP response for MT	Lucent Technologies	IMS-CAMEL	23.278	43	1	F	Rel-5	5.3.0	
N2-030370	CR	Setting of Timers not specified for IMSSF process.	Lucent Technologies	IMS-CAMEL	23.278	44		F	Rel-5	5.3.0	
N2-030371	CR	Implementation of enhanced dialled service	Samung Electronics, SK	EDCAMEL	29.078			B	Rel-6	5.4.0	
N2-030372	DISC	CAMEL open issue list	CN2 chairman								
N2-030373	DISC	Recorded CAMEL4 decisions	CN2 chairman								
N2-030374	CR	Update of charging specifications references	Nokia	CAMEL4	23.078	570	1	F	Rel-5	5.4.0	
N2-030375	CR	CPH charging impacts on the CDRs	Nokia	CAMEL4	32.205			F	Rel-5	5.4.0	
N2-030376	CR	Allow user interaction at answer DP	Nokia	CAMEL4	23.078	616		F	Rel-5	5.4.0	
N2-030377	CR	One step HLR enquiry for SCUDIF	Nokia	SCUDIF	23.018	Yes		B	Rel-5	5.7.0	
N2-030378	CR	Handling of concurrent tones	Nokia	CAMEL4	23.078	617		F	Rel-5	5.4.0	
N2-030379	CR	MoveLeg precondition for source and target CS	Nokia	CAMEL4	29.078	329		F	Rel-5	5.4.0	
N2-030380	LS OUT	LS on SA3 on Legal Interception of SCP initiated calls.	Nokia	CAMEL4							
N2-030381	CR	One step HLR enquiry for SCUDIF-CSI criteria	Nokia	SCUDIF	23.078	618		B	Rel-5	5.4.0	
N2-030382	CR	CAMEL Leg Handling	Alcatel	CAMEL4	23.078	619		F	Rel-5	5.4.0	

N2-030383	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN	NTT DoCoMo	Presenc	23.078			B	Rel-6	6.0.0	
N2-030384	CR	Correction to InitialDP for SCUDIF	NTT DoCoMo ,NEC	CAME L4	23.078	620		F	Rel-5	5.4.0	
N2-030385	CR	Correction to InitialDP for SCUDIF	NTT DoCoMo ,NEC	CAME L4	29.078	330		F	Rel-5	5.4.0	
N2-030386	DISC	SRF Based MNP Charging Solution	LM Ericsson	CAME L4							
N2-030387	CR	Incorrect Charging With MNP	LM Ericsson	CAME L4	29.002	615	1	F	Rel-5	5.6.2	
N2-030388	CR	Incorrect Charging With MNP	ERICSS ON L.M. Nortel	CAME L4	29.002	616	1	A	Rel-6	6.2.0	
N2-030389	CR	Incorrect Charging With MNP	LM Ericsson	CAME L4	23.066	25	1	F	Rel-5	5.1.0	
N2-030390	CR	Using ATI for Mobile Number Portability	LM Ericsson	CAME L4	23.078	530	1	F	Rel-5	5.4.0	
N2-030391	DISC	SCUDIF HLR Interrogation	LM Ericsson	SCUDI F							
N2-030392	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDI F	23.172	11	1	F	Rel-5	5.1.0	
N2-030393	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDI F	29.002	613	1	F	Rel-5	5.6.2	
N2-030394	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDI F	29.002	614	1	A	Rel-6	6.2.0	
N2-030395	DISC	CAMEL Interractions For SCUDIF In Release 5	LM Ericsson								
N2-030396	CR	SCUDIF Impacts to Basic Call	LM Ericsson	SCUDI F	23.018			F	Rel-5	5.7.0	
N2-030397	DISC	Should SCUDIF have a single basic service code?	Vodafon e								
N2-030398	CR	Direction change of incoming message Answer	Siemens AG	CAME L4	23.078	584		F	Rel-5	5.4.0	
N2-030399	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	23.078			F	Rel-6	5.4.0	
N2-030400	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	29.078			F	Rel-6	5.4.0	
N2-030401	Report	CN2#29 Draft Meeting Report	MCC								
N2-030402	Report	CN#20 Draft Meeting Report	MCC								

N2-030403	CR	Receiving Int_CWA after reporting Abandon	Nortel Networks	CAMEL4	23.078	612	1	F	Rel-5	5.4.0	
N2-030404	Work Plan	Latest version of the work plan	MCC								
N2-030405	CR	Assingment of SSN value for Presence Network Agent	NTT DoCoMo	Presenc	23.003			B	Rel-6	6.0.0	
N2-030406	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server	NTT DoCoMo	Presenc	23.018			B	Rel-6	6.0.0	
N2-030407	CR	Repeat subscription checking regarding SCUDIF	NTT DoCOMo	SCUDIF	23.018			F	Rel-5	5.7.0	
N2-030408	CR	Notification of the 2nd BSG in case of Late CF with OR	NTT DoCoMo	SCUDIF	23.079			F	Rel-5	5.2.0	
N2-030409	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	23.078		1	F	Rel-6	5.4.0	
N2-030410	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	29.078		1	F	Rel-6	5.4.0	
N2-030411	Discussion documen	CN's view on possible re-organisation of 3GPP charging specification work	CN Chairman and								
N2-030412	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN	NTT DoCoMo	Presenc	23.078		2	B	Rel-6	6.0.0	
N2-030413	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server	NTT DoCoMo	Presenc	23.018		2	B	Rel-6	6.0.0	
N2-030414	LS IN	Reply LS on possible re-organisation of 3GPP charging specification work	SA2								
N2-030415	LS IN	LS response on "LS response CAMEL support for the Presence Service" from CN4	SA2								
N2-030416	CR	Correction in handling of Start-Delta and Stop-Delta operations.	Hughes Software Systems	CAMEL3	23.078	621		F	R99	3.16.0	
N2-030417	CR	Correction in handling of Start-Delta and Stop-Delta operations.	Hughes Software Systems	CAMEL3	23.078	600	2	A	Rel-4	4.9.0	
N2-030418	LS OUT	LS on CN2 understanding and assumption for the "Criteria for "change of position" procedures"	~~Siemens~~ Alcatel								
N2-030419	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	23.078		2	F	Rel-6	5.4.0	
N2-030420	CR	Change of position procedures armed with criteria	Siemens AG	TEI_6	29.078		1	F	Rel-6	5.4.0	
N2-030421	CR	Introduction of extensibility mechanism in Release 5	Siemens AG	CAMEL4	29.078	331		F	Rel-5	5.4.0	
N2-030422	DISC	CAMEL open issue list	CN2 chairman								

N2-030423	DISC	Vendor responses on flexible tone injection	Vodafone								
N2-030424	CR	Correction to interaction between ORLCF and forwarding notification	Ericsson	CAMEL4	23.079	25	4	F	Rel-5	5.2.0	
N2-030425	CR	Correction in handling of Start-Delta and Stop-Delta operations.	Hughes Software Systems	CAMEL3	23.078	622		A	Rel-5	5.4.0	
N2-030426	CR	Correction of "pty continues" and "LegActive" check boxes in SDL's	Hughes Software Systems	CAMEL4	23.078	610	1	F	Rel-5	5.4.0	
N2-030427	CR	Reporting Disconnect (leg n)	Ericsson	CAMEL4	23.078	573	2	F	Rel-5	5.4.0	
N2-030428	CR	Correction to parameter name in Connect Operation	Ericsson	CAMEL4	29.078	313	1	F	Rel-5	5.4.0	
N2-030429	CR	Handling of Connect operation with and without LegID	Alcatel	CAMEL4	23.078	523	4	F	Rel-5	5.4.0	
N2-030430	CR	Handling of Information Flows with absent LegID and CS ID	Alcatel	CAMEL4	23.078	524	3	F	Rel-5	5.4.0	
N2-030431	CR	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	Ericsson	CAMEL4	23.078	611	1	F	Rel-5	5.4.0	
N2-030432	CR	Correction to Apply Charging and Apply Charging Report due to introduction of CPH	Ericsson	CAMEL4	29.078	327	1	F	Rel-5	5.4.0	
N2-030433	CR	Update of charging specifications references	Nokia	CAMEL4	23.078	570	2	~~A~~ F	Rel-5	5.4.0	
N2-030434	CR	Update of charging specifications references	Nokia	CAMEL4	23.078	623		F	Rel-4	4.9.0	
N2-030435	CR	CPH charging impacts on the CDRs	Nokia	CAMEL4	32.205		1	F	Rel-5	5.4.0	
N2-030436	LS OUT	LS on CPH charging impacts on the CDRs	CN2								
N2-030437	LS OUT	LS on SA3 on Legal Interception of SCP initiated calls.	CN2	CAMEL4							
N2-030438	CR	Incorrect handling of failure SIP response for MT	Lucent Technologies	IMS-CAMEL	23.278	43	2	F	Rel-5	5.3.0	
N2-030439	CR	Incorrect handling of failure SIP response for MO	Lucent Technologies	IMS-CAMEL	23.278	45		F	Rel-5	5.3.0	
N2-030440	CR	Setting of Timers not specified for IMSSF process.	Lucent Technologies	IMS-CAMEL	23.278	44	1	F	Rel-5	5.3.0	
N2-030441	CR	Alignment of Offered CAMEL4 functionalities	Ericsson	CAMEL4	23.078	602	1	F	Rel-5	5.4.0	
N2-030442	CR	Tdoc list for CN2/CN4 Joint meeting								N4-030736	

N2-030443	CR	Incorrect handling of failure SIP response for MO	Lucent Technologies	IMS-CAMEL	23.278	45	1	F	Rel-5	5.3.0	
N2-030444	CR	EDS and TDP-RouteSelectFailure	Alcatel	EDCAMEL	23.078	590	1	F	Rel-6	5.4.0	
N2-030445	CR	Implementation of enhanced dialled service	Samung Electronics, SK	EDCAMEL	29.078			B	Rel-6	5.4.0	
N2-030446	CR	Collective CR for EDS for TS 29.078	Samsung, SK Telecom	EDCAMEL		332					
N2-030447	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from SGSN	NTT DoCoMo	Presenc	23.078		3	B	Rel-6	6.0.0	
N2-030448	CR	Addition of a procedure that allows Presence Network Agent to obtain presence information from VLR/MSC server	NTT DoCoMo	Presenc	23.018		3	B	Rel-6	6.0.0	
N2-030449	CR	Repeat subscription checking regarding SCUDIF	NTT DoCOMo	SCUDIF	23.018		1	F	Rel-5	5.7.0	
N2-030450	CR	Notification of the 2nd BSG in case of Late CF with OR	NTT DoCoMo	SCUDIF	23.079		1	F	Rel-5	5.2.0	
N2-030451	DISC	SCUDIF HLR Interrogation	LM Ericsson	SCUDIF			1				
N2-030452	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDIF	23.172	11	2	F	Rel-5	5.1.0	
N2-030453	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDIF	29.002	613	2	F	Rel-5	5.6.2	
N2-030454	CR	SCUDIF HLR Interrogation	LM Ericsson	SCUDIF	29.002	614	2	A	Rel-6	6.2.0	
N2-030455	LS OUT	LS on CN2 understanding and assumption for the "Criteria for "change of position" procedures"	CN2								
N2-030456	CR	Using ATI for Mobile Number Portability	LM Ericsson	CAMEL4	23.078	530	2	F	Rel-5	5.4.0	
N2-030457	LS OUT	LS on CPH charging impacts on the CDRs	CN2								
N2-030458	CR	Correction to InitialDP for SCUDIF	NTT DoCoMo,NEC	CAMEL4	23.078	620	1	F	Rel-5	5.4.0	
N2-030459	CR	Correction to InitialDP for SCUDIF	NTT DoCoMo,NEC	CAMEL4	29.078	330	1	F	Rel-5	5.4.0	
N2-030460	CR	Correction to CAP Operation Error values	Ericsson	CAMEL4	29.078	325	1	F	Rel-5	5.4.0	
N2-030461	CR	MoveLeg precondition for source and target CS	Nokia	CAMEL4	29.078	329	1	F	Rel-5	5.4.0	
N2-030462	CR	Usage of Alphanumeric Characters in SMS Address Fields	T-Mobile	CAMEL4	29.078	328	1	F	Rel-5	5.4.0	

N2-030463	CR	Correction to SMS Error handling	Ericsson	CAME L4	23.078	604	1	F	Rel-5	5.4.0	
N2-030464	CR	Handling of concurrent tones	Nokia	CAME L4	23.078	617	1	F	Rel-5	5.4.0	
N2-030465	CR	Setting of Timers not specified for IMSSF process.	Lucent Technologies	IMS-CAME L	23.278	44	2	F	Rel-5	5.3.0	
N2-030466	CR	Handling of Connect operation with and without LegID	Alcatel	CAME L4	23.078	523	5	F	Rel-5	5.4.0	
N2-030467	CR	Handling of Information Flows with absent LegID and CS ID	Alcatel	CAME L4	23.078	524	4	F	Rel-5	5.4.0	
N2-030468	CR	MoveLeg precondition for source and target CS	Nokia	CAME L4	29.078	329	2	F	Rel-5	5.4.0	
N2-030469	CR	Handling of concurrent tones	Nokia	CAME L4	23.078	617	2	F	Rel-5	5.4.0	
N2-030470	CR	Correction to InitialDP for SCUDIF	NTT DoCoMo ,NEC	CAME L4	29.078	330	2	F	Rel-5	5.4.0	
N2-030471	CR	Introduction of extensibility mechanism in Release 5	Siemens AG	CAME L4	29.078	331	1	F	Rel-5	5.4.0	
N2-030472	CR	Handling of concurrent tones	Nokia	CAME L4	23.078	617	3	F	Rel-5	5.4.0	