3GPP TSG CN Plenary Meeting #15
6th – 8th March 2002. Jeju, Korea.

NP-020051

Source:	**MCC**
Title:	**CN2#22 Draft Meeting Report**
Agenda item:	**6.2.1**
Document for:	**INFORMATION**

DRAFT Meeting Report v1.1.0

TSG CN WG2#22
Sophia Antipolis, France

28January – 1 February 2002

Chairman: Keijo Palviainen (Nokia)

MCC support: Andrijana Jurisic (ETSI)

Host: ETSI

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_22_SophiaAntipolis/Docs

1   Opening of the meeting and approval of the agenda

N2-020001: CN2 chairman, Title: Proposed meeting agenda

Discussion:

Conclusion: approved

2   Allocation of documents to agenda items

N2-020002: CN2 chairman, Title: Allocation of documents to agenda items

Discussion: Delegates would like to include CN#14 Plenary Meeting report as an input document. Discussion on SDT tool versions should be included in the discussion in agenda item no.5. Documents N2-020035, N2-020036, N2-020016, N2-020017, N2-020019, N2-020023, N2-020026, N2-020056 are withdrawn.

Conclusion: approved, working document

3   Reports

N2-020071: MCC, Title: Draft Meeting Report from CN2#21, Cancun

Discussion: The document was sent to CN2 list with incorporated comments (version 1.1.0). No comments received to version 1.1.0.

Conclusion: approved, the document will become CN2#21Meeting Report

N2-020144: MCC, Title: Draft Meeting Report from CN#14 v 1.0.0, Kyoto

Discussion: All CN2 CR packages were approved in Plenary CN#14. CN approved the work split between CN2 and CN4 regarding Si interface. CN2 will do stage 2 work and CN4 will do stage 3 work and decide the protocol to be used for Si interface.

CN Plenary has sent LS to SA and SA1 with recommendation to remove Charging notification and Enhancements to dialled services from CAMEL4.

Conclusion: noted

4   Input Liaison Statements

N2-020037: SA5, Type: LS IN, Title: Liaison Statement: "Reply to LS on VASP MMS Connectivity"

Discussion: SA5 believes that VASP CDR definition and content are not intended to be standardized in 3GPP. Therefore this issue is out of the scope of SA5.

For Release 5, the content of CDRs generated by MMS Relay/Server will be defined by SA5. However, in the specific case of VASP MMS, it appears that for Release 5 the exchange of charging parameters between the MMS Relay/Server and VASP is out of the scope of MM7. Therefore it will not be possible for the MMS Relay/Server to deliver specific charging information relating to VASP connectivity in the MMS-CDRs.

At the moment (i.e. in Release 5) SA5 is not working on any specific prepaid solutions. We assume that SA2 is active on architectural impacts on on-line Charging and CN2 is active on CAMEL based prepaid Charging. We envisage that these activities would have an impact on T2's ongoing considerations of Prepaid for MMS, as indicated in liaison. SA5 is willing to incorporate work on MMS prepaid in Release 6, pending further guidance based on the result of the above considerations in T2, SA2, and CN2. In conclusion VASP MMS will not have any impacts on the charging specifications in the Release 5 and may be scheduled for Release 6 time frame.

CN2 is of opinion that SA1 should define requirements for Release6. They may want to be able to generate CDRs from VASP for both postpaid and prepaid. Currently there is no plan to have new CAMEL phase in Release 6. In order to include this work in CN2, CN2 needs requirements from SA1. CN2 will draft outgoing liaison statement to clarify this and will send to SA5 with a copy to SA1.

Conclusion: noted, response in N2 -020145

<u>N2-020145</u>: Type: LS OUT from CN2 to SA5, CC: SA1, T2, Title: Liaison Statement: "Reply to LS on VASP MMS Connectivity"

Discussion: Location of the next meeting is still TBD. Location will be changed off-line by MCC

Conclusion: approved, will be sent to SA5 and copy to SA1 and T2

<u>N2-020038</u>: SA5, Type: LS IN, Title: Liaison Statement: Reply on "Handling of e-parameters provided by the SCP"

Discussion: If the SCP sends e-parameters to the MSC/gsmSSF, but the MSC/gsmSSF does not send these e-parameters to the MS, shall the bit "onlineCharging" of the "LevelOfCAMELService" parameter in the CDR be set?

Because the e-parameters are not actually sent to the MS, SA5 believe that the bit "onlineCharging" of the "LevelOfCAMELService" parameter shall not be set in the CDRs.
For the purposes of CDR generation, SA5 does not see the need for the MSC/gsmSSF to retain these parameters.

For the Packet-switched domain, it is anticipated that this scenario does not have impacts on PS-domain charging, but the issue will be investigated until next meeting. SA5 will send a further liaison only if the above conclusion is contradicted by this investigation.

CN2 delegates should notify CN5 colleagues to improve charging specifications in order to reflect conclusions of this LS.

Conclusion: noted

<u>N2-020113</u>: SA5, Type: LS IN, Title: LS reply on "Handling of e-parameters provided by the SCP" in the scope of the PS domain

Discussion : SA5 would like to inform CN2 that supplementary services per se and the Advice of Charge supplementary service as such are not provided via the PS domain (refer to TS 22.004 Annex A).

However, both, TS 22.078 and TS 23.078 assume that the Advice of Charge supplementary service is applicable in the PS domain.
We should wait for SA1 decision if AoC should be taken out of TS 23.078 for packet switched domain and we should indicate to SA1 what would be the impact to CAMEL specs.

Conclusion: noted, outgoing LS to SA1 will be sent in document N2 -020146

<u>N2-020146</u>: Type: LS OUT, Title: LS reply on "Handling of e-parameters provided by the SCP" in the scope of the PS domain

Discussion: In their liaison statement, TSG SA 5 informed CN2 that that there is currently no support of AoC within the PS domain for Release 5. As part of CAMEL Phase 3, CN2 has completed the CAMEL specific work to support AoC parameters received from a CSE in a view of making the *sgsnSSF* "*feature-ready*" as we had anticipated that this supplementary service would eventually be included in a release after Release 99. However, we had anticipated that this would have occurred by Release 5. CN2 proposes possible rewording of the requirement, such that it remains in CAMEL Phase 3, indicating that this may be supported only in future releases of GPRS. A SGSN may discard any parameters received from the CSE if the supplementary service is not supported.

SA1 requires estimation how much work in each group is needed in order to make a decision. CN2 is opinion that it requires significant amount of work to remove this feature. Ericsson and Siemens are of the opinion that removal of the feature would require significant amount of the work, and it is better to leave it in specification. The case when SGSN doesn't support AoC is supported, so Vodafone is of opinion that CN2 should just inform SA1 in this LS that CN2 will leave the feature in the CN2 specifications. We will propose that SA1 makes health warning to CAMEL specification stage 1. In charging specification there is a statement that AoC is not supported by terminals.

We've already indicated in CN2 specifications that Aoc in SGSN may not be supported.

Conclusion: revised to N2 -020168

N2-020168: Type: LS OUT, Title: LS reply on "Handling of e-parameters provided by the SCP" in the scope of the PS domain

Discussion:

Conclusion: approved, will be sent to SA1

N2-020069: SA2, Type: LS IN, Title: Liaison Statement on Restoration of R'96 Any Time Interrogation functionality

Discussion: The LS proposes that the RNC would return age-of-location. The RAN working groups are to decide in which release the enhancement is done. Vodafone proposes R99 onwards.

Conclusion: noted

N2-020070: Chairman 3GPP TSG-SA WG3-LI, Type: LS IN, Title: Liaison to SA, CN

Discussion: SA3 request WGs to check if there is any impact to legal interception specifications. In the *CPH open issues* document we should put the note concerning legal interception (LI).

Conclusion: noted

N2-020112: SA5, Type: LS IN, Title: Liaison Statement on Impacts of Subscriber and Equipment Trace

Discussion: Subscriber and Equipment trace is concerning tracing the HW on the network (related to IMEI). In CAMEL phase 4 there is Vodafone proposal to report IMEI to SCP. Is there any interaction to trace?

Conclusion: noted

N2-020111: SA2, Type: LS IN, Title: Liaison Statement on " IP version interworking on the transport plane"

Discussion: At the *PDP context establishment ack* DP we sent the parameter that support both Ipv6 and Ipv4 parameter, only one at the time. What should we do if both Ipv6 and Ipv4 addresses are received? Orange France has an opinion that we should report Ipv4 address since the target SGSN may be Ipv4 only . What should happen during migration to Ipv6?

In CAP, if we receive both GGSN addresses (Ipv6 and Ipv4), we should report Ipv4. If we report 2 addresses, SCP should know which to use with charging ID to form unique identifier for the CDRs.

If IPv4 is available, we report Ipv4 address and if Ipv4 is not available, we report Ipv6 only.

Contributions are needed in CN2 to clarify this.

Conclusion: noted

5 Work item management & miscellaneous

5.1 IPR call reminder

> *Reminder to Individuals Members and the persons making the technical proposals about their obligations under their respective Organizational Partners IPR Policy.*

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

5.2 Work Item (WI) status review

N2-020086: CN2 Chairman, Title: Contents of each CAMEL phase

Discussion: This is document for information. Delegates are encouraged to study the document and give off line comments for the next meeting.

Conclusion: noted

N2-020142: MCC, Type: Work plan, Title: Latest version of the Work plan

Discussion: Progress of the items is adjusted according to the work assumption in Cancun.

Conclusion: GPRS Mobility Management is almost complete; it remains only to include some changes to GPRS specifications. ODB is Complete. Charging notification is marked 60% complete. Handover DP is marked 80% complete, some further study needed. In ATI for GPRS some progress is done (80% completed). Mid Call procedure has not progressed, target date will be moved to June. As far as SDLs is concerned additional work is needed.

Support of CAMEL by the IMS is splited into subtasks: stage 2 - general, stage 2 - Si interface and stage 3. Stage 2 is marked 60% completed (some CRs are not handled in the meeting and postponed to next meeting). IMS information flows are missing in stage 2. Stage 2 for Si interface is marked 15% complete. There was no work done in stage 3.

"IMEI reporting to SCP" is new task. If stage 1 CR that proposes introduction of this feature is approved, new building block "IMEI reporting to SCP" will be added in work plan under Work Item "CAMEL4".

23.018 and 23.083 collective CR are submitted (CPH open issues are hidden within 23.078, and CPH changes to 23.018 are stabile). 23.079 collective CRs will be sent for approval. All collective CRs will be sent for approval to CN plenary in March.

N2-020196: CN2 Chairman, Type: Work plan, Title: Comments on the progress of the CAMEL4 work

Discussion: The Work Plan will be updated according to this document.

Conclusion: approved

N2-020003: CN2 Chairman, Title: Update of CN2 Terms of Reference

Discussion:

Conclusion: approved by CN2, will be presented in plenary meeting in March

N2-020160: Siemens, Type: Discussion and decision document, Title: Reconsideration of CAMEL4 release date

Discussion: Siemens proposal is to postpone CAMEL specifications to CN#16 plenary meeting. This implies to collective CRs that introduces CAMEL4 in other specifications.

Ericsson's proposal is to make the effort to submit the specifications to plenary in March, but to indicate that some features are not implementable and indicate what is the status of the specification.

Meeting in February is still an editorial meeting and CN2 specifications will be submitted to Plenary with an advice that CN2 prefers that CN plenary releases first version in June. All the collective CRs are sent to CN4 for approval. CN4 will send them to plenary for approval.

Conclusion: noted

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	6.10.0	N2	LANTELME, Isabelle
TS	03.78	CAMEL Phase 2; Stage 2	R1998	7.7.0	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	3.11.0	N2	HOMANN, Christian
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	Rel-4	4.3.0	N2	HOMANN, Christian
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	R1999	3.10.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	Rel-4	4.3.0	N2	NOLDUS, Rogier
Draft	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-5	5D.13.1	N2	SUMIO, Myagava
Draft	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-5	D5.7.0	N2	NOLDUS, Rogier

SDT tool version 4.1 could not be opened with (SDT file, process files) lower versions (3.5). MCC to find out which versions are incompatible.

After CN2#22 meeting, Protocol and Testing Competence Centre in ETSI suggested to all users of 3.x version in CN2, to ask for un upgrade to the latest version of SDT tool which is currently 4.3. Version 3.x is incompatible with version 4.1 used by the rapporteur of TS 23.078.

6 Maintenance of earlier CAMEL phases

6.1 CAMEL phase 1

6.2 CAMEL phase 2

No contributions.

7 CAMEL3, Resolution of outstanding issues for Release 99

7.1 CAMEL3, Miscellaneous

N2-020030: TS 29.078, R99, Ericsson, Type: CR, CR#233, Title: Error handling for sequential TCAP Operation components

Discussion: When the gsmSCF needs to send a set of Operations to the gsmSSF, smsSSF or gprsSSF, it may combine these Operation components into a single TC Message. TC receives these operation components and passes these individually on to the TC-User. If the processing of e.g. RequestReportBCSMEvent fails, then the remaining Operations carried in the same TC Message should not be processed by the TC-User. The present CR proposes that this behaviour be specified for CAP: "When multiple Operation components are received in a single TC Message and there is an error in processing one of the operations in the sequence, then the SSF FSM shall process the error and shall discard all remaining operations in the sequence."

TC primitives do not indicate in which TC message the CAP operation came; only indication of last component is in TC-continue. However, this is enough information for the TC user – if error then the user discards all CAP operations until *last component* indication is received.

The meaning of "sequence" is not clear. SCP is not sure what will happen with other operations; hence it is proposed to modify text to clarify the text "remaining operations in the sequence". SSF should be changed to gsmSSF.

Conclusion: revised to N2-020181

N2-020181: TS 29.078, R99, Ericsson, Type: CR, CR#233r1, Title: Error handling for sequential TCAP Operation components

Discussion: It is clarified that when the gsmSSF, gprsSSF or smsSSF receives multiple Operation components in a single TC Message and there is an error in the processing of one of these Operations, then the gsmSSF FSM, gprsSSF FSM or smsSSF FSM shall process the error and shall discard all Operation components in that TC Message of which the processing has not yet started.

If SSF has parallel handling of CAP operations in the same TC message, the SCP/SCF does not know for sure which operations have been discarded.

Conclusion: approved, Rel-4 mirror CR is in document N2-020212

N2-020212: TS 29.078, Rel-4, Ericsson, Type: CR, CR#241, Title: Error handling for sequential TCAP Operation components

Discussion:

Conclusion: approved without presentation

N2-020185: TS 23.078, R99, Ericsson, Type: CR, CR#390, Title: MSISDN to be made available to MSC

Discussion: The document was discussed in the joint meeting with CN4 (N4-020231). If a subscriber has a Multiple Subscriber Profile and VT-CSI stored in VLR and a subscriber receives a call, the VLR should contact the gsmSCF using the MSISDN dialled for this terminating call, but the VLR does not have this MSISDN and can only use the basic one corresponding to the default profile, since the MSISDN may be present in Provide Roaming Number only if it has to be stored in the CDR. Thus in order to provide an accurate MSP service, the VLR needs to receive the MSISDN with Provide Roaming Number and needs to transfer it to the MSC via Continue CAMEL Handling.

Conclusion: revised to N2-020206

N2-020206: TS 23.078, R99, Ericsson, Type: CR, CR#390r1, Title: MSISDN to be made available to MSC

Discussion: The only requirement that is added to MSISDN is in Continue CAMEL handling: "shall be present if the call is to be forwarded or if it has been provided by the HLR in the Provide Roaming Number IF" in order to cover MSP service (MSISDN is received from HLR to VLR in PRN.) Reason for change should be updated off-line in order to reflect changes.

Conclusion: approved

N2-020186: TS 23.078, Rel-4, Ericsson, Type: CR, CR#391, Title: MSISDN to be made available to MSC

Discussion: The document was discussed in the joint meeting with CN4.

Conclusion: revised to N2-020207

N2-020207: TS 23.078, Rel-4, Ericsson, Type: CR, CR#391r1, Title: MSISDN to be made available to MSC

Discussion:

Conclusion: approved

N2-020187: TS 23.078, Rel-5, Ericsson, Type: CR, Title: MSISDN to be made available to MSC

Discussion: The document was discussed in the joint meeting with CN4.

Conclusion: revised to N2-020208

N2-020208: TS 23.078, Rel-5, Ericsson, Type: CR, Title: MSISDN to be made available to MSC

Discussion:

Conclusion: approved

N2-020188: TS 23.018, Rel-4, Ericsson, Type: CR, Title: Conditions for presence of Alerting Pattern in Complete Call

Discussion: The CR is modelled incorrectly since the VLR does not receive alerting pattern from the SCP (Visited MSC T-BCSM is in the VMSC-B, not in the VLR). Ericsson may revise the CR for the April CN2#23 meeting.

Conclusion: withdrawn

N2-020189: TS 23.018, Rel-5, Ericsson, Type: CR, Title: Conditions for presence of Alerting Pattern in Complete Call

Discussion:

Conclusion: withdrawn

7.2   CAMEL3/ATM&ATSI

N2-020087: TS 23.018, R99, Orange France, Type: CR, Title: Correction on the Active Location Retrieval description

Discussion: The document was discussed in the joint meeting with CN4 in *N4-020133.*

Conclusion: approved by CN4 in the joint meeting

N2-020088: TS 23.018, Rel-4, Orange France, Type: CR, Title: Correction on the Active Location Retrieval description

Discussion: The document was discussed in the joint meeting with CN4 in *N4-020134.*

Conclusion: approved by CN4 in the joint meeting

N2-020089: TS 23.018, Rel-5, Orange France, Type: CR, Title: Correction on the Active Location Retrieval description

Discussion: The document was discussed in the joint meeting with CN4 in *N4-020135.*

Conclusion: approved by CN4 in the joint meeting

N2-020074: TS 29.002, R99, Siemens, Type: CR, Title: Inclusion of complete ODB data for ATSI and NSDC

Discussion: This CR ads ODB categories in ODB-GeneralData to form the complete ODB in the HLR. New comment is added to the note that the additional ODBs are not used for InsertSubscriberData. NotificationToCSE flag is deleted from ODB Data. ODB info contains ODB data and Notification to CSE flag. Current ASN.1 for ATSI and NSDC contains ODB Info, not ODB data. In ASN1, all the missing ODB data are added to ODB-GeneralData.

If VLR or SGSN doesn't support certain parameter, then it echoes this parameter in the response message.

Conclusion: N4-020011 was revised in the joint meeting to N4-020209 (to use a proper base version and to remove 3 bits to remove barring categories in SGSN). Document N4-020209 is approved without presentation.

N2-020075: TS 29.002, Rel-4, Siemens, Type: CR, Title: Inclusion of complete ODB data for ATSI and NSDC

Discussion:

Conclusion: N4-020012 was revised to N4-020210, which was approved by CN4

N2-020076: TS 29.002, Rel-5, Siemens, Type: CR, Title: Inclusion of complete ODB data for ATSI and NSDC

Discussion:

Conclusion: N4-020013 is revised in N4-020211, which is approved by CN4

7.3   CAMEL3/GPRS

N2-020031: TS 23.078, R99, Ericsson, Type: CR, CR#374, Title: Correction to GPRS Dialogue Handler

Discussion: On receipt of TC_ABORT, TC dialogue will be closed. SCP has possibility to terminate an error situation by means of TC_END and TC_ABORT.

In last sentence of "consequences if not approved" on the cover sheet gprsSSF will be replaced by SCP off-line.

Conclusion: approved, cover sheet will be improved off line by MCC

N2-020169: TS 23.078, Rel-4, Ericsson, Type: CR, CR#388, Title: Correction to GPRS Dialogue Handler

Discussion:

Conclusion: approved without the presentation

N2-020032: TS 29.078, R99, Ericsson, Type: CR, CR#234, Title: Correction to GPRS operation error handling

Discussion:

Conclusion: revised to N2-020092

N2-020092: TS 29.078, R99, Ericsson, Type: CR, CR#234r1, Title: Correction to GPRS operation error handling

Discussion: This CR specifies gprsSSF behaviour for operation time-out. In ApplyChargingReportGPRS procedure, EntityReleasedGPRS procedure and EventReportGPRS procedure following is added to error handling: If the gprsSSF does not receive a RESULT or ERROR from the gsmSCF within the defined operation time, then the gprsSSF shall close the TC dialogue, terminate the GPRS dialogue and instruct the SGSN to handle the GPRS session or PDP context in accordance with the default GPRS handling parameter of the valid CSI.

When operation timer expires, TC will release TCInvokeId and TC user, and this is specified as error handling. It's up to TC user what will happen after that.

Delegates will check what happens when timer expires at TC level. The "ERROR" will be received. The wording should be changed in order to specify that if the operation timer expires, it would be done what is proposed.

Conclusion: revised to N2-020170

N2-020170: TS 29.078, R99, Ericsson, Type: CR, CR#234r2, Title: Correction to GPRS operation error handling

Discussion: Proposed wording is: If the operation timer expires, then the gprsSSF shall close the TC dialogue, terminate the GPRS dialogue and instruct the SGSN to handle the GPRS session or PDP context in accordance with the default GPRS handling parameter of the valid CSI.

It is proposed to change wording "close the TC dialogue" to "abort the TC dialogue" on 3 places.

Conclusion: revised to N2-020214

N2-020214: TS 29.078, R99, Ericsson, Type: CR, CR#234r3, Title: Correction to GPRS operation error handling

Discussion:

Conclusion: approved without presentation

N2-020215: TS 29.078, Rel-4, Ericsson, Type: CR, CR#242, Title: Correction to GPRS operation error handling

Discussion:

Conclusion: approved without presentation

N2-020077: TS 23.078, R99, Source: Siemens, Type: CR, CR#378, Title: Exact wordings for Apply Charging and Apply Charging Report in GPRS

Discussion: In order to avoid miss-interpretation to the reader that the same Apply Charging and/or Apply Charging Report that the CS calls use would be sent in the GPRS cases, this CR adds "GPRS" after "Apply Charging" or "Apply Charging Report" where "GPRS" is missing.

Conclusion: approved

N2-020078: TS 23.078, Rel-4, Siemens, Type: CR, CR#379, Title: Exact wordings for Apply Charging and Apply Charging Report in GPRS

Discussion:

Conclusion: approved without presentation

N2-020079: TS 29.078, R99, Siemens, Type: CR, CR#235, Title: Compatibility for RAI coding

Discussion:

Conclusion: revised to N2-020140

N2-020140: TS 29.078, R99, Siemens, Type: CR, CR#235r1, Title: Compatibility for RAI coding

Discussion: Previously approved CR changed RAIdentity to OCTET STRING (SIZE (6)) from 7, but, due to the late change in R99, it is very likely that the interworking problem occurs, when the SCP and the SGSN are provided by the different manufactures. This CR proposes to allow also SIZE (7). According to Siemens, if SCP receives 6 octets it is RAIdentity, but if it receives 7 octets, it should ignore first and use last 6 octets as RAIdentity.

Ericsson, Nokia and Orange France are not in favour to make this change, because with this change it will be even less backward compatible (not compatible to previous version of specification having length of 6 octets).

Conclusion: rejected

N2-020080: TS 29.078, Rel-4, Siemens, Type: CR, CR#236, Title: Compatibility for RAI coding

Discussion:

Conclusion: revised to N2-020141

N2-020141: TS 29.078, Rel-4, Siemens, Type: CR, CR#236r1, Title: Compatibility for RAI coding

Discussion:

Conclusion: rejected

7.4   CAMEL3/MO SMS

7.5   CAMEL3/Call Related

N2-020004: TS 23.078, R99, Nokia, Type: CR, CR#372, Title: Clarification on NP check at DP2

Discussion: The document is about the numbering plan check at DP2. Numbering plan indicator (NPI) should not be checked, but it should be ignored at DP2. We should specify that numbers stored in HLR could have any type of NPI and nature of address.

The CR specifies for destination number triggering criterion: "When the criterion is compared to the destination number the numbering plan indicators of both numbers are ignored." It should be clarified what means the expression "both numbers". One number is what you have dialled in DP2 and another is the number stored in the list of max. 10 numbers.

Note should be added under the neat of bullet list, that the numbering plan indicator is not checked. The note should be put as well in Inhibiting Criteria and Allowing Criteria lists.

Conclusion: revised to N2-020178

N2-020178: TS 23.078, R99, Nokia, Type: CR, CR#372, Title: Clarification on NP check at DP2

Discussion: In summary of change there should be more clarification that reflects the content of the CR. This CR is a clarification, not necessarily a change.

Conclusion: approved, cover sheet will be improved offline

N2-020213: TS 23.078, Rel-4, Nokia, Type: CR, CR#392, Title: Clarification on NP check at DP2

Discussion:

Conclusion: approved without presentation

N2-020005: TS 23.078, R99, Nokia, Type: CR, CR#373, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion: When non-American subscriber is roaming in US and dials operator number (0, 00, CAC+0), or operator assisted number (0+10d, 01+CC+NSN), the US operator's MSC has to decide how to map this number to CAP. Foreign SCP does not recognise this number. The idea is also that an American SCP is able to route calls to the operator's desk if necessary.

In destination address description it should be specified that the length of the digits part could be zero, or that no digits could be present. Alcatel proposal is to write the change only to stage 3 to make a clear that we can receive any nature of address and digits part can be zero.

Nokia changed stage 2 in order to make clear what DPs and operations it is about. The stage 3 shall specify the encoding. Receiving entity must be prepared to receive national specific values.

The *NatureOfAddress indicator* may contain nationally specific values of the gsmSSF (specific values of the MSC). We have option to follow the national rules of the MSC or nationally specific rules of the SCP.

For the Connect operation it is not needed to specify what happens if MSC does not recognise these values. " the certain national *NatureOfAddress indicator* values "should be replaced by "some national-specific *NatureOfAddress indicator* values". Ericsson will give comments to improve cover page off-line.

Conclusion: revised to N2-020179

N2-020179: TS 23.078, R99, Nokia, Type: CR, CR#373, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion: If the SCP and the MSC are in the different country we can use the national values of the MSC (MSC does routing). It is removed what SCP should do if it does not recognise the parameter. For the initial DP there is "the" added.

Conclusion: revised toN2-020 216

N2-020216: TS 23.078, R99, Nokia, Type: CR, CR#373, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion:

Conclusion: approved without the presentation

N2-020217: TS 23.078, Rel-4, Nokia, Type: CR, CR#393, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion:

Conclusion: approved without presentation

N2-020006: TS 29.078, R99, Nokia, Type: CR, CR#232, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion: In this CR is specified: The encoding of the national Nature Of Address indicator values shall be done according to the national ISUP of the gsmSSF, e.g. ANSI T1.113-1995. The destination address field is not present if the destination address length is set to zero. This is the case e.g. when the ANSI ISUP Nature Of Address indicator indicates no number present, operator requested (1110100) or no number present, cut-through call to carrier (1110101).

Encoding is done in CAP. Encoding refers to ASN encoding. Operation names will be removed. Called party number may contain no digits and this should be specified somewhere, instead for Destination number (Destination number is used in ETSI specifications).

For DestinationRoutingAddress it may not be required to repeat the comment of CalledPartyNumber. Same data type is used. Proper indication about the changes should be on cover sheet.
Conclusion: revised to N2-020180

N2-020180: TS 29.078, R99, Nokia, Type: CR, CR#232, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion: The data type as such does not contain "national value". A called party number may contain a national specific value. On page 4, "- - " is missing at the beginnig of one of the lines.

Conclusion: revised to N2-020218

N2-020218: TS 29.078, R99, Nokia, Type: CR, CR#232r1, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion:

Conclusion: approved without presentation

N2-020219: TS 29.078, Rel-4, Nokia, Type: CR, CR#243, Title: Clarification on national values of the Called Party Number's Nature of Address field

Discussion:

Conclusion: approved without presentation

N2-020034: TS 23.078, R99, Ericsson, Type: CR, CR#376, Title: Correction to Advice of Charge for MT calls

Discussion: One of the reasons for CAMEL control of MT call in the VMSC is the ability to provide Advice of Charge to MT calls. SendChargingInformation may be used in this "VT relationship". TS 23.078 is incomplete in this area, therefore this CR proposes to correct the description of AoC for MT calls in text and SDL.

In the response to MS indicating answer, MSC will send AoC parameters (for MT case). Note 1 should clarify that note1 applies only for MO calls.

Conclusion: revised to N2-020182

N2-020182: TS 23.078, R99, Ericsson, Type: CR, CR#376, Title: Correction to Advice of Charge for MT calls

Discussion: Note1 should clarify that it applies only for MO calls. For MT calls, e-parameters must be sent at DP12 otherwise they can not be sent to the MS in the beginning of the call.

Conclusion: approved, not incorporated to Rel-5 draft

N2-020183: TS 23.078, Rel-4, Ericsson, Type: CR, CR#389, Title: Correction to Advice of Charge for MT calls

Discussion:

Conclusion: approved, not incorporated to Rel-5 draft

N2-020184: TS 23.078, Rel-5, Ericsson, Type: CR, Title: Correction to Advice of Charge for MT calls

Discussion: The document was not available.

Conclusion: postponed to next meeting

N2-020107: TS 23.078, R99, Nokia, Type: CR, CR#380, Title: FCI handling harmonisation

Discussion: Due to different handling of the FCI operation in Dialled Services and normal subscriber services, the "Append" handling is added to the dialled services and the FCI is allowed in Dialled Services User Interaction states. Consequences if not approved are changed off-line.

Conclusion: approved

N2-020108: TS 23.078, Rel-4, Nokia, Type: CR, CR#381, Title: FCI handling harmonisation

Discussion: Consequences if not approved are changed off line.

Conclusion: approved

N2-020109: TS 23.078, R99, Nokia, Type: CR, CR#382, Title: The waiting for new AC timers

Discussion: Currently, after ACR, the waiting of the AC is supervised by Tccd and Tssf and will affect different handling depending the length of the timers. The supervision of the new AC will be based only on the Tccd timer.

In monitoring state Tssf should not be running. Tssf is restarted only if any operation is received from SCP and set first time when something is sent to SCP. Tssf for UI shall be quite long. If Tssf expires during UI, then SSF goes to state where Tccd is not received; the call can be without charge.

Conclusion: revised to N2-020194

N2-020194: TS 23.078, R99, Nokia, Type: CR, CR#382r1, Title: The waiting for new AC timers

Discussion:

Conclusion: approved

N2-020110: TS 23.078, Rel-4, Nokia, Type: CR, CR#383, Title: The waiting for new AC timers

Discussion:

Conclusion: revised to N2-020195

N2-020195: TS 23.078, Rel-4, Nokia, Type: CR, CR#383r1, Title: The waiting for new AC timers

Discussion:

Conclusion: approved

N2-020115: TS 29.078, R99, Vodafone, Type: CR, CR#237, Title: Mapping of CUG information from CAP to ISUP

Discussion: This CR adds the necessary entries to tables A.2 and A.3 to show the mapping of the cug-Interlock and cug-OutgoingAccess parameters to the ISUP message IAM (to avoid possible wrong implementations of CAMEL control of CUG). "Connect" should be replaced by "ContinueWithArgument" (A.2, first paragraph, not part of the change in this CR).

Initial DP does not contain Interlock code. Initial DP operation should be present for VT call case (table is missing).

Conclusion: revised to N2-020190

N2-020190: TS 29.078, R99, Vodafone, Type: CR, CR#237, Title: Mapping of CUG information from CAP to ISUP

Discussion:

Conclusion: approved without presentation

N2-020116: TS 29.078, Rel-4, Vodafone, Type: CR, CR#238, Title: Mapping of CUG information from CAP to ISUP

Discussion:

Conclusion: revised to N2-020191

N2-020191: TS 29.078, Rel-4, Vodafone, Type: CR, CR#238, Title: Mapping of CUG information from CAP to ISUP

Discussion:

Conclusion: approved without presentation

N2-020127: TS 23.078, R99, Siemens, Type: CR, CR#384, Title: Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs

Discussion: It should be specified what M (Mandatory) means in case of ASN1 default. In stage 2, the parameter is specified as "M" and in stage 3 it's optional. Nokia's opinion is that for the protocol is good to have optional parameter. Stage 2 defines rules when to send parameters and when not. ASN has to keep optional, so when we have new scenario, this parameter can be omitted. It would be useful to clarify what ASN optional means when stage 2 has "M".

All Boolean variables have default value in stage 3, while the stage 2 has them as Mandatory. Stage 2 is talking about the application (in SSF - CAP application that have encoding and decoding), and if default value is received. The wording of Play announcement should stay the same ("M" should not be changed to "O") and Prompt And Collect User Information, "O" is changed to "M". In the description of Play announcement "may" should not be changed to "shall".

Conclusion: revised to N2-020192

N2-020192: TS 23.078, R99, Siemens, Type: CR, CR#384r1, Title: Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs

Discussion: Disconnect From IP Forbidden is changed to Mandatory and in description of the IE "shall" is changed to "may"

Conclusion: approved

N2-020128: TS 23.078, Rel-4, Siemens, Type: CR, CR#385, Title: Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs

Discussion:

Conclusion: revised to N2-020193

N2-020193: TS 23.078, Rel-4, Siemens, Type: CR, CR#385r1, Title: Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs

Discussion:

Conclusion: approved

N2-020129: TS 29.078, R99, Siemens, Type: CR, CR#239, Title: Handling disconnectFromIPForbidden parameter in PlayAnnouncement and PromptAndCollectUserInformation operations

Discussion:

Conclusion: rejected

N2-020130: TS 29.078, Rel-4, Siemens, Type: CR, CR#240, Title: Handling disconnectFromIPForbidden parameter in PlayAnnouncement and PromptAndCollectUserInformation operations

Discussion: R99 shall not be changed unless really needed.

Conclusion: rejected

N2-020131: TS 23.078, R99, Siemens, Type: CR, CR#386, Title: Correction: CSI handling at several Fes

Discussion:

Conclusion: approved

N2-020132: TS 23.078, Rel-4, Siemens, Type: CR, CR#387, Title: Correction: CSI handling at several Fes

Discussion:

Conclusion: approved

N2-020036: TS 29.002, R99, Ericsson, Type: CR, Title: Clarification on "dp-AnalysedInfoCriteriaList"

Discussion:

Conclusion: withdrawn

N2-020035: TS 23.078, R99, Ericsson, Type: CR, CR#377, Title: SCP-induced call release for Dialled Services

Discussion:

Conclusion: withdrawn

N2-020033: TS 23.078, R99, Ericsson, Type: CR, CR#375, Title: Correction to CAP dialogue termination rules

Discussion: In the proposal TC_Abort is sent if non-armed EDP is met. Problem exists only if no EDP is armed at all. Application end and Abort are mutually exclusive. If we want to send Abort, we should not send Application end. TC_END could be sent instead of Application end. This CR can make R99 specification to look unstable to outside world.

Vodafone's opinion is that this CR is too big for R99 change.

It is Nokia's view that the "Abort" should be used only in error cases. Non-armed EDP is not seen as an abnormal case. TC_END should be used whenever possible – when non-armed DP is met and no reports are sent. TC_ABORT looks bad in CAP statistics.

Conclusion: rejected

8 CAMEL for Release 4

8.1 General and miscellaneous Rel-4 issues

8.2 CAP over IP

9 CAMEL4, Release 5

9.1 CAMEL 4 / Stage 1

N2-020093: TS 22.078, Rel-5, Alcatel, Type: CR, Title: Alignment of tables A.1 and A.2 with stage 2

Discussion: This CR corresponds to changes to earlier releases that have already been sent to SA1. These tables are not in line with stage 2 and stage 3 of Release 5. Further contributions will achieve alignment with stage 2 and stage 3 of Release 5. "GMSC" should be changed to "GMSC address".

Conclusion: revised to N2-020166

N2-020166: TS 22.078, Rel-5, Alcatel, Type: CR, Title: Alignment of tables A.1 and A.2 with stage 2

Discussion:

Conclusion: endorsed, will be sent to SA1 with source CN2

N2-020094: TS 22.078, Rel-5, Alcatel, Type: CR, Title: Further alignment of tables A.1 and A.2 with stage 2 for CAMEL Phase 4

Discussion: "Called party" will be created and "new call segment" will be deleted. Addition of "Call party to be continued" and "Call group to be continued" should be cancelled in the table. These parameters that are used in the CAP protocol to address the correct Call Segment or leg do not need to be in Stage 1.

Conclusion: revised to N2-020167

N2-020167: TS 22.078, Rel-5, Alcatel, Type: CR, Title: Further alignment of tables A.1 and A.2 with stage 2 for CAMEL Phase 4

Discussion:

Conclusion: endorsed, will be sent to SA1 with source CN2

9.2 Miscellaneous CAMEL 4 issues

N2-020028: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Latest draft 3GPP TS 29.078

Discussion: The document contains cover sheet only, but the document refers to URL ftp://ftp.3gpp.org/TSG_CN/WG2_camel/Draft_Specs/Latest_drafts/ where draft specifications are located. All improved CRs have been included. This draft specification will be basis for the further work.

Conclusion: noted

N2-020029: TS 29.002, Rel-5, Ericsson, Type: CR, Title: Collective CR on TS 29.002

Discussion: The document was sent to the joint meeting with CN4 in document N4-020189. This collective CR contains all approved and endorsed CRs except CRs that were endorsed in this meeting.

Conclusion: Revised to N2-020222 (N4-020287) in order to include CRs that are endorsed in this meeting (148, 200 and 204) and approved by CN4. Updated version of the collective CR will be sent to CN2 e-mail list for information and to CN4 for approval in CN4#12bis meeting. Delegates can sent collective CRs to CN2 MCC support person.

N2-020222: TS 29.002, Rel-5, Ericsson, Type: CR, Title: Collective CR on TS 29.002

Discussion:

Conclusion: endorsed without presentation

N2-020081: TS 23.078, Rel-5, Rapporteur, Type: TS/INFO, Title: Draft TS 23.078 v5d.12.1

Discussion:

Conclusion: noted

N2-020007: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (complete)

Discussion:

Conclusion: noted

N2-020008: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (condensed)

Discussion: The document will be revised to include new endorsed CRs. "or later" should be added (N4-020007).

Conclusion: revised to N2-020162. Revised collective CRs will be handled in CN2 and will be sent back to CN4 for approval

N2-020162: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (condensed)

Discussion: One document (N2-020057) is missing in the list of included CRs in the cover page.

Conclusion: endorsed, will be sent to CN4 for approval. CN4 number has been already allocated. (To be sent to March plenary for approval)

N2-020103: TS 23.008, Rel-5, Alcatel, Type: CR, Title: 23.008 collective CR

Discussion: (N4-020194, CR#039)

Conclusion: revised to N2-020163 (N4-020194 is revised toN4-020243)

N2-020163: TS 23.008, Rel-5, Alcatel, Type: CR, Title: 23.008 collective CR

Discussion:

Conclusion: endorsed by CN2, will be sent to CN4 for approval (N4-020243)

N2-020009: TS 23.079, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (complete)

Discussion:

Conclusion: noted

N2-020010: TS 23.079, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (complete)

Discussion: This document was noted by CN4 as N4 document N4-020008.

Conclusion: endorsed

N2-020164: TS 23.079, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4 (complete)

Discussion:

Conclusion: withdrawn

N2-020011: TS 23.083, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL Phase 4

Discussion: The document was noted by CN4 in N4-020011.

Conclusion: endorsed by CN2, will be sent to CN4 for approval

N2-020082: TS 23.016, Rel-5, Siemens, Type: Collective CR, Title: Collective CR on 23.016

Discussion: *(N4-020084)* Since the base version 5.0.0 was not available, the document is based on version 4.0.0.

Conclusion: endorsed by CN2, will be sent to CN4 for approval

N2-020165: TS 23.016, Rel-5, Siemens, Type: Collective CR, Title: Collective CR on 23.016

Discussion: The document does not exist.

Conclusion: withdrawn

N2-020099: Rel-5, Alcatel, Type: Discussion document, Title: Split of CAMEL phase into functional subsets

Discussion: Currently, only support of the full CAMEL phase is negotiated between a VPLMN and the HPLMN. The CAMEL phase negotiation mechanism is done in HLR using the Supported CAMEL phases IE of the VLR/SGSN or GMSC and the CAMEL capability handling stored in each CSI for a given subscriber. The negotiation result is stored in the HLR as "Negotiated CAMEL capability handling" variable. Negotiated CCH variable for CSI indicates what CAMEL phase is indicated in that CSI in the VLR or SGSN.

As operators may have interest to introduce only limited subsets of CAMEL phase 4 functionalities, in addition to CAMEL phase 3, it is proposed to introduce functional subsets for CAMEL phase 4 that could be deployed independently in the network. A negotiation mechanism similar to the CAMEL phase negotiation mechanism, but at function level can be added in the HLR to allow the support of CAMEL services when roaming in foreign PLMN. This document proposes to add a new IE "SupportedCAMELFunctionsList".

Functional subsets are indicated in introduction – list of functionalities in addition to CAMEL4 basic function.

On the picture, ATI for GPRS is negotiated. At which moment of the time HLR is aware of the service that it shall to support? It is idea to indicate in early point of the time whether ATI for GPRS is supported.

The best option for Vodafone would have no subsets at all. List of 9 subsets is not acceptable for Vodafone. Vodafone's compromised proposal is to have split on functional subsets: Calls, PS, MT-SMS and IMS. Nokia supports Vodafone proposal. Logica supports Vodafone's proposal of only 4 subsets. There is no strong objection against the principle to have functional subsets in CN2, but SA1 decision is needed.

Conclusion: noted

N2-020114: TS 22.078, Rel-5, T-Mobil, Type: CR, Title: Introduction of functional subsets for CAMEL phase 4

Discussion: This CR introduces functional subsets for CAMEL phase 4 to stage 1 specification. During registration in a VPLMN, VPLMN shall indicate in the registration request to the HPLMN the phase of CAMEL supported in VPLMN and additionally, for CAMEL phase 4, VPLMN shall indicate functional subsets of CAMEL phase 4 that VPLMN does not support.

GMSC may not need support D-CSI. It is necessary to support negotiation between GMSC and HLR. Inclusion of IMS is not necessary since control of IMS is in HPLMN.

VLR reports to HLR what it supports (CAMEL capability). HLR should not send down anything what VLR does not support. If we introduce functional subsets to negotiation mechanism, do we have to define HLR behaviour in more details? This could be important for HLR designers. If the feature is not supported, CSI should not be sent (T-Mobil).

Charging notification is seen as optional feature – separate feature.

Conclusion: noted, SA1 decision is needed

N2-020100: TS 23.008, Rel-5, Alcatel, Type: CR, Title: Introduction of functional subsets

Discussion:

Conclusion: postponed to next meeting, SA1 decision should be known

N2-020101: TS 23.002, Rel-5, Alcatel, Type: CR, Title: Introduction of functional subsets

Discussion:

Conclusion: postponed to next meeting, SA1 decision should be known

N2-020102: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Introduction of functional subsets

Discussion:

Conclusion: postponed to next meeting, SA1 decision should be known

N2-020098: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Editorial corrections on 23.078

Discussion:

Conclusion: postponed

N2-020012: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Correction to CAMEL4 handling

Discussion: CN2 didn't have comments to this document, so it will be handled in the joint meeting with CN4.

Conclusion: approved by CN4, will be incorporated to collective CR

N2-020015: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 4

Discussion:

Conclusion: postponed

N2-020020: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 11

Discussion:

Conclusion: postponed

N2-020021: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 12

Discussion:

Conclusion: postponed

N2-020022: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 13

Discussion:

Conclusion: postponed

N2-020024: TS 23.078, Rel-5, Ericsson, Type: CR, Title: Clarifications on the usage of PSI

Discussion:

Conclusion: postponed

N2-020051: Rel-5, Vodafone, Type: Discussion document, Title: Contents of CWA at DP3

Discussion:

Conclusion: postponed

N2-020104: TS 23.008, Rel-5, Alcatel, Type: CR, Title: Criteria for MT-SMS-Alignment with 23.078

Discussion: In section describing Subscriber Data stored in HLR and Subscriber Data stored in VLR, DP criteria is added to the list of MT SMS TDP descriptions. For MT-SMS the DP criteria is the TDPU type. Note that Triggering criterion is optional should be added and "No criterion" should then be deleted from the table. "Default SMS Handling" should replace "Default Call Handling" in the table. There are no Triggering criteria in MO SMS, but there is a Criterion in MT SMS, therefore there is additional table only for MT SMS. "Criteria" should be changed to "criterion" and some other editorial comments will be given off line.

Conclusion: revised to N2-020147 which will have CN4 number N4-020195 and CR#040

N2-020147: TS 23.008, Rel-5, Alcatel, Type: CR, r1, Title: Criteria for MT-SMS-Alignment with 23.078

Discussion:

Conclusion: endorsed by joint meeting by CN2 and CN4, will be incorporated to collective CR (N4-020195, CR#040)

N2-020133: TS 23.078, Rel-5, Siemens, Type: CR, Title: Correction of LCS-related references

Discussion:

Conclusion: postponed

N2-020134: TS 23.078, Rel-5, Siemens, Type: CR, Title: Improvement TIF-CSI description

Discussion:

Conclusion: postponed

N2-020135: TS 23.078, Rel-5, Siemens, Type: CR, Title: Improvement gsmSCF list description

Discussion:

Conclusion: postponed

N2-020136: TS 23.078, Rel-5, Siemens, Type: CR, Title: Route_Select_Failure shall not be disarmed implicitly when DP O_Term_Seized is encountered

Discussion:

Conclusion: postponed

N2-020137: TS 23.078, Rel-5, Siemens, Type: CR, Title: Additional signal in CAMEL_OCH_MSC_ALERTING

Discussion:

Conclusion: postponed

N2-020027: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Editorial and technical conventions for TS 29.078

Discussion:

Conclusion: withdrawn

N2-020016: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 5

Discussion:

Conclusion: withdrawn

N2-020017: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 6

Discussion:

Conclusion: withdrawn

N2-020018: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 7

Discussion:

Conclusion: withdrawn

N2-020019: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 8

Discussion:

Conclusion: withdrawn

N2-020023: TS 29.078, Rel-5, Ericsson, Type: CR, Title: Technical and editorial corrections to section 14

Discussion:

Conclusion: withdrawn

N2-020026: TS 23.078, Rel-5, Ericsson, Type: CR, Title: Clarification on GPRS relationships

Discussion:

Conclusion: withdrawn

N2-020161: Ericsson, Type: Discussion document, Title: Improvements of "History" section in CAMEL specifications

Discussion:

Conclusion: postponed

N2-020158: TS 29.078, Rel-5, Source: France Telecom, Title: ASN.1 changes in the 29.078 specification

Discussion: CN2 had following questions and comments that have been answered after the meeting by the originator of the document:

- In reference 52 (ITU-T Recommendation X.680) there is an option to use 2002 or 1997 edition. X.680 2002 is not available yet. The recommendation of the originator of the CR is to reference ASN.1:1997 edition of the standard in our specification if it is going to be stabilized before the summer.

CN2 comment: undated references will be used (without specifying the year of the specification) what means that the latest available specification is used.

- Is it recommended to use the same edition of ASN.1 for CAP and MAP?

Orange France Telecom: This is up to the working group to decide. If one of specifications will be based on ASN.1:1997 while the other on ASN.1:2002, this would not be a problem, as 1997 and 2002 are not that far away one from the other (that was not the case for 1988 compared to 1994 because of the macro concepts that was replaced with informed object classes).

- Orange France Telecom explanations of the encoding rules options:

Basic Encoding Rules (BER) has encoding options that an encoder is free to choose, meaning that a decoder must be prepared to receive any of these options. If CN2 want to avoid such options, one of the two canonical variants of BER can be used, i.e., CER (Canonical Encoding Rules) or DER (Distinguished Encoding Rules) which are described in Chapter 19 of the book available from http://www.oss.com/asn1/dubuisson.html.
CER has not been used that much, which implies that there aren't a lot of CER compilers on the marketplace.
DER is used a lot, particularly for digital signatures and encryption.

Mr. Olivier Dubuisson from Orange France Telecom offered to discuss encoding rules with CN2 ASN.1 experts, if needed.
Conclusion: postponed to next meeting

9.3   CAMEL4 / Interactions with Optimal Routing

9.4   CAMEl4 / Call Party Handling

N2-020013: Rel-5, Vodafone, Type: Discussion document, Title: CPH: Open Issues & decisions

Discussion:

Conclusion: postponed

N2-020039: Rel-5, Vodafone, Type: Discussion document, Title: Disconnect Leg operation in Alerting Phase

Discussion: The current CAMEL Phase 4 draft specifications allow the Release Call operation at any point in the call, but the Disconnect Leg operation is only permitted in the active phase of the call so the stage 1 requirement is not currently met. Vodafone describes service requirement in this contribution and asks CN2 to accept the service requirement and the solution to meet the service requirement or to agree on alternative solution in this meeting.

This contribution looks at introducing the Disconnect Leg operation during the Alerting Phase of the call. What happens to Leg3 if Leg1 is disconnected? It stays in the separate CS. Leg2 is always in same CS as Leg1. One option is to keep leg1 in one CS and create all called legs with ICA.

 Conclusion: noted

N2-020043: Rel-5, Vodafone, Type: Discussion document, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion: This contribution looks at introducing the Disconnect Leg operation during Unsuccessful Call Establishment.

Conclusion: noted

N2-020154: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion: There is a service requirement to have control of individual call legs from the set-up phase. However, allowing the Disconnect Leg operation before the active phase of the '*normal A-B*' call is very complex, and involves jumping between different detection points of the BCSM. The possible jumping around BCSM, as in the previous proposal, concerns Nokia since some point-in-call tasks would be skipped thus some critical tasks may be omitted. The service requirement can be met using ICA if the calling party is not linked (in SDL modelling) to any of the called parties.

At DP2 (collected_info), the gsmSCF can indicate that the handling of the calling party (Leg1) should proceed without a called party in that MSC process / BCSM. If this happens, the handling of Leg1 is passed over to 23.078 (for the MO Case, Procedure OG_Call_Setup_MSC in 23.018 calls the Procedure CAMEL_OCH_LEG1_MSC in 23.078 where Leg1 is handled). This allows the gsmSCF to create additional call legs, using ICA, with individual MSC processes and BCSMs, which makes disconnection of individual legs less complex

Nokia likes the principle of the SDL modelling in this contribution. Separate changes should be done for call forwarding and terminating phases. This new behaviour should be allowed also after user interaction.

Conclusion: endorsed, will be incorporated to collective CR

N2-020155: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP2

Discussion:

Conclusion: noted

N2-020171: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP2 for MO

Discussion: This Tdoc was reserved for revision of 154 what was not necessary.

Conclusion: withdrawn

N2-020172: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP2 for MO

Discussion: This document is a result of N2-020155

Conclusion: approved

N2-020173: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP2 for CF

Discussion:

Conclusion: endorsed

N2-020174: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP2 for CF

Discussion: In Procedure CAMEL_MT_CF_LEG1_MSC, in Perform call forwarding ack, "Mandatory parameter is FTN" is FFS.

Conclusion: approved

N2-020175: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP12 for MT

Discussion:

Conclusion: endorsed

 N2-020176: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Continue Without Leg2 at DP12 for MT

Discussion:

Conclusion: approved

N2-020040: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation in Alerting Phase

Discussion:

Conclusion: withdrawn

N2-020041: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation in Alerting Phase

Discussion:

Conclusion: withdrawn

N2-020042: TS 23.083, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation in Alerting Phase

Discussion:

Conclusion: withdrawn

N2-020044: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion:

Conclusion: withdrawn

N2-020045: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion:

Conclusion: withdrawn

N2-020046: TS 23.079, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion:

Conclusion: withdrawn

N2-020047: TS 23.083, Rel-5, Vodafone, Type: CR, Title: Disconnect Leg operation at unsuccessful call establishment

Discussion: withdrawn

Conclusion:

N2-020049: TS 22.078, Rel-5, Vodafone, Type: CR, Title: Clarification on Releasing Individual Call Parties

Discussion: Revision needed due to new SDL modelling of tdocs N2-020154 and N2-020155.

Conclusion: revised to 177

N2-020177: TS 22.078, Rel-5, Vodafone, Type: CR, Title: Clarification on Releasing Individual Call Parties

Discussion: There is no distinction between new call case and new party case. It is not clear: "Continue the handling of the calling party without routeing the call to the destination ".

 Is it proposal to send Disconnect leg for leg2? Till now there was not specified, but based on the decision of the meeting, Vodafone will make a contribution for the next meeting. Alcatel proposes to use "Disconnect leg" operation, and after to send "Continue" or "ContinueWithArgument".

Continue call processing of the original calling party without the routing the call to the final destination. - Could be the wording.

Conclusion: noted, principle of this contribution is agreed in CN2, but because of lack of time to specify exact wording document will be submitted to SA1 as Vodafone's contribution

N2-020052: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of UUS and CCBS for reconnect on Leg2 disconnect

Discussion:

Conclusion: postponed

N2-020054: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Moving to MidCall DP after CPH operation

Discussion:

Conclusion: postponed

N2-020055: TS 29.078, Rel-5, Vodafone, Type: CR, Title: Moving to MidCall DP after CPH operation

Discussion:

Conclusion: postponed

N2-020057: TS 23.018, Rel-5, Ericsson, Type: CR, Title: Remodelling of CAMEL_ICH_LEG2_MSC

Discussion: The document has N4 number N4–020259. On page 6 should be "CAMEL4 and later". Will be corrected directly to collective CR.

Due to further progression with CPH, current modelling in procedure CAMEL_ICH_LEG2_MSC (handling of both Wait_For_Clear and Wait_For_Forward_Clear states) has became complex. When ICH_MSC would norma lly move into Wait_For_Clear state, procedure CAMEL_ICH_LEG2_MSC is called if a CAMEL4 control relationship exists. When ICH_MSC would normally move into Wait_For_Forward_Clear state, new procedure CAMEL_ICH_LEG2_CF_MSC is called if a CAMEL4 control relationship exists.

Conclusion: endorsed

N2-020058: TS 23.078, Rel-5, Ericsson, Type: CR, Title: Remodelling of CAMEL_ICH_LEG2_MSC

Discussion:

Conclusion: approved

N2-020066: TS 29.078, Rel-5, Vodafone, Type: CR, Title: Mapping from CAP to ISUP of parameters of ICA and CWA

Discussion:

Conclusion: postponed

N2-020095: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Use of Abort and of Application begin and end between the CS_gsmSSF, CSA_gsmSSF and gsmSCF

Discussion:

Conclusion: postponed

N2-020096: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Leg Status update for leg 1 due to change in leg 2

Discussion:

Conclusion: postponed

N2-020097: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Alignment of HLR and SCF on Provide Roaming Number

Discussion:

Conclusion: postponed

N2-020048: Rel-5, Vodafone, Type: Discussion document, Title: Clarification on Releasing Individual Call Parties

Discussion:

Conclusion: withdrawn

N2-020053: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Interactions between CPH and Change Of Position DP

Discussion:

Conclusion: withdrawn

N2-020056: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of CPH configuration after CAP dialogue ends

Discussion:

Conclusion: withdrawn

N2-020159: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Introduction of disconnect leg ack

Discussion:

Conclusion: postponed

9.5   CAMEL4 / DTMF Mid-call DP

N2-020059: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Mid Call DP

Discussion:

Conclusion: postponed

N2-020050: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Introduction of StartDTMF and StopDTMF signals

Discussion:

Conclusion: postponed

9.6   CAMEL4/IMS

N2-020072: Lucent Technologies, Type: Discussion document, Title: (CN2/4) Si Interface: HSS to IM-SSF Interface

Discussion:

Conclusion: revised to N2-020143 before the meeting

N2-020143: Lucent Technologies, Type: Discussion document, rev1, Title: (CN2/4) Si Interface: HSS to IM-SSF Interface

Discussion: The Si interface will be used to download CSI information from HSS to IM-SSF. IMSI information is needed for CAP either if the protocol is MAP or Diameter.

Message is called Update location for CSI. Diameter proposal: HSS will download CSI directly to IM-SSF. Trigger for this download of CSI is registration. *(N4-020159)*

CN1 has rejected the original proposal (N1-020031). According to Lucent it is relevant how AS is notified regarding to this proposal. Cx interface uses Diametar. Sh is proposed to be diameter. Lucent favours Diameter in this case as well. In Diameter case 19.002 is used and those data types are exported to Diameter.

This proposal maybe needs modification of the diameter protocol. Choice of the protocol for Si interface should be done before CN#15. Motorola requested time for further analysis. CN4 will not come up with the decision for protocol that will be used for Si interface.

Lucent plans to use CAPv4 for IMS. According to Ericsson CAPv3 would be more appropriate for IMS purposes since the CSI specifies the CAP version (Capability Handling).

Conclusion: postponed to the joint meeting with CN4 (N4-020154 and N4-020155 are postponed). CN4 postponed the protocol decision until next CN4 meeting

N2-020117: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title Definition of CAMEL Subscription Information data for IMS

Discussion: This CR modifies the IM-CSI definition to include the following: O-IM-CSI, D-IM-CSI, and T-IM-CSI. Currently there is only service requirement for originating and terminating call, but not for dialled services for IMS. There is distinction about the voice type. Dialled number – whatever was passed to HPLMN will be used for trigger in Collected info. In S-CSCF there is filter criteria, which knows which condition is forwarded to IM-SSF.

According Lucent presentation, only voice calls use CAMEL in IMS. CAMEL is applicable for legacy services. As some noted, legacy CS service can convey video calls. Angelica will check whether CAMEL in IMS is to be applicable only for voice calls and how the voice call is detected.

-     T-IM-CSI should be changed to VT-IM-CSI.

-     Term *Default handling* should be consistently used.

-     DP triggering criteria should be defined.

-     It should be checked whether SCP list is missing from notification flag parameter.

Conclusion: revised to N2-020197

N2-020197: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title Definition of CAMEL Subscription Information data for IMS

Conclusion: approved without presentation, will be included in draft specification

N2-020118: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Description of Detection Points for IMS/CAMEL

Discussion: Inclusion of the description of the DPs and triggering criteria are based on the circuit switched DPs in 23.078. Changes from 23.078 reflect what is applicable in IMS and excludes any non-applicable text (e.g. basic service codes as triggering criteria).

Criteria at DP T_Busy and T_No_Answer: The HSS may store a list of up to 5 cause values. The criteria will be based on cause values received. The actual meaning of cause values is FFS.

Siemens proposes to add media type as criteria. It is up to SA1 to decide.

Conclusion: approved

N2-020119: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: IP Multimedia CAMEL BCSM Description

Discussion: The inclusion of DPs O_Mid_Call, O_Change_Of_Position, O_Term_seized and T_Mid_Call are either not applicable in IMS or can not at this stage be mapped to SIP methods due to incomplete work in other CN groups. It is thus proposed that these DPs are removed from the Originating and Terminating Basic Call State Models.

R99 SDL modelling is used for IMS. Lucent is of the opinion that latest version of CAP protocol should be used. If it is triggered on CAP v4 that allows CPH, but CPH is not used in IMS. CAPv4 allows some detection points that SDL modelling, which is R99, does not allow. Therefore, we should use CAP v3.

ImcnSSF is analogue to gsmSSF. IM-SSF contains call control handling similar to MSC but related to IMS call handling.

Conclusion: approved

N2-020120: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Removal of N-CSI SDL Procedures

Discussion: Since the N-CSI is not applicable to IM CAMEL processing, it is proposed to remove/modify any SDL procedures specifying the handling of N-CSI. "Called party number" should not be put to "Destination address". Destination could be "called party identity" (it could be URL as well). We leave this for the time being, because this numbering issue affects lot of other places in specification.

Conclusion: approved, will be incorporated to the draft specification

N2-020121: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Various corrections/modifications to TS 23.278

Discussion:

Conclusion: postponed

N2-020122: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Si Interface Information Flows

Discussion:

Conclusion: postponed

N2-020123: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: CAP Information Flow description for IMS CAMEL

Discussion:

Conclusion: postponed

N2-020125: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Correction of SDLs for CAMEL_IMCN_Register/DeRegister

Discussion: This CR provides the changes to the procedures CAMEL_IMCN_Register/DeRegister. S-CSCF based on initial filter criteria, knows that it has to transfer particular SIP message to IM-SSF. Between Update MS profile request and Update MS profile response there will be indicated actual messages, dependent of the protocol decided for the Si interface.

Conclusion: postponed until CN4 selects protocol for the Si interface

N2-020126 : TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Si Interface Via Diameter Protocol

Discussion:

Conclusion: postponed

N2-020073: TS 23.278, Rel-5, Lucent Technologies, Type: Document for information, Title: Modifications to TS 23.278

Discussion:

Conclusion: withdrawn

N2-020124: TS 23.278, Rel-5, Lucent Technologies, Type: CR, Title: Handling of CAMEL failure in IM-SSF

Discussion:

Conclusion: withdrawn

9.7 CAMEL control over MT SMS

N2-020105: TS 29.002, Rel-5, Alcatel, Type: CR, Title: Correction on MT SMS SDL

Discussion: Correction of MT SMS SDL is done in order to contact the CSE after receiving MT-SMS-CSI from the VLR. Then when the CSE allows continuing the MT-SMS Handling, the MSC resumes the normal handling and Page/Search procedure is performed.

Vodafone will give off-line comments about alignment of message names.

Conclusion: revised to N2-020148 (N4-020191, CR#404))

N2-020148: TS 29.002, Rel-5, Alcatel, Type: CR, Title: Correction on MT SMS SDL

Discussion: CAMEL_MT_SMS_VLR is a procedure.

Conclusion: approved by CN4, will be incorporated to collective CR (N4-020191)

N2-020106: TS 23.078, Rel-5, Alcatel, Type: CR, Title: Correction on MT SMS SDL

Discussion: In section 7.5.4.2 Handling of mobile terminating SMS in the VLR, "terminating MSC" should be replaced by "terminating VLR".

The functional behaviour of the terminating VLR is specified in 3GPP TS 29.002. The procedures specific to CAMEL are: Procedure CAMEL_MT_SMS_VLR; Procedure CAMEL_MT_SMS_CHECK_VLR.

CR cover sheet could be improved. The triggering of CAMEL is done before the paging/search procedure.

Conclusion: revised to N2-020149

N2-020149: TS 23.078, Alcatel, Type: CR, Title: Correction on MT SMS SDL

Discussion: In section 7.4.3.1.1.1, external behaviour is described in "Actions", but not signals between MSC and VLR. "MT-SMS subscription check" covers as well "Send Info for MT SMS information flow is sent to the VLR (at the MSc only)"; therefore third bullet should be removed. Comment in brackets for forth bullet should clarify the purpose to distinquish MSC and SGSN. "B subscriber" should be replaced by "served subscriber".

In 7.6.6.1.2 "Suppress MT-SMS-CSI" description needs rewording. "MT-SMS-CSI shall be suppressed" has meaning that MSC should not receive it.

Conclusion: revised to N2-020221

N2-020221: TS 23.078, Alcatel, Type: CR, Title: Correction on MT SMS SDL

Discussion:

Conclusion: approved without presentation

9.8 Inclusion of flexible tone injection

N2-020014: TS 29.078, Rel-5, Logica, Type: CR, Title: Tones support for CAMEL phase 4

Discussion: This is updated document N2-010969 from CN2#21 in Cancun.

Conclusion: approved

9.9 Charging notification to CSE

N2-020139: TS 23.078, Rel-5, Siemens (Rapporteur), Type: CR, Title: Removing the feature: Charging Notification

Discussion: This document is Siemens proposal to remove the feature Charging Notification from TS 23.078. CN Plenary forwarded a liaison statement to remove CAMEL phase 4 functionalities *Charging Notification* and *Enhancements of dialled services*, to SA plenary and SA1. CN2 waits for SA1 reply in order to proceed with removal of the feature.

C-DOT finds that their contributions in this meeting resolve all open issues regarding Charging Notification. According to Ericsson the mapping to/from ISUP is missing. According to Alcatel the complete handling to/from ISUP is missing.

If the feature stays in CAMEL4 , it should be marked as optional feature, but this should be SA1 decision. T-Mobil wants to see this as an optional feature. The support of the features could be indicated in Initial DP. Lucent does not like the option where the negotiation is done in Initial DP.

The implementers will have a problem implementing this feature as mandatory as it is not specified completely. C-DOT thinks that negotiation should be done in Initial DP.

*Conclusion: This CR was conditionally approved in CN2#22, depends on SA1 decision (mutually exclusive with document N2-020223). After SA1#15 meeting, based on SA1 decision, this CR was **rejected.***

N2-020090: TS 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: In context of CPH configuration, the RNC and ENC operations have been modified so that they may be requested on a per leg basis.

NC and NP columns have been added to the tabular descriptions of the RNC/ENC operations. If the SCP has requested monitoring of e.g. leg2, e-parameters will be reported for that leg only.

Existing wording for e-values should be used. Editorial comments are received.

Term "higher" exchange us used for hither exchange in hierarchy. This term should be replaced with "charging point". Special conditions should be specified (missing since Puerto Rico meeting).

Conclusion: revised to N2-020156

N2-020156: TS 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: Both cases are possible: that the leg is terminated actively or he/she terminated the leg. Call shall be replaced by leg.

Conclusion: revised to N2-020210

N2-020210: TS 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: Vodafone prefers not to have one example specified in specification, but to have general description that covers other scenarios. Using type of leg is preferred terminology (A, B, C should not be used).

The CR introduces the quotation that is not according to ETSI drafting rules.

Conclusion: revised to N2-020220

N2-020220: TS 23.078, Rel-5, C-DOT, Type: CR, r, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: Vodafone's proposal is to make a note that SCI interaction is for further study. C-DOT should maintain the document that lists all the open issues.

Conclusion: revised to N2-020223

N2-020223: TS 23.078, Rel-5, C-DOT, Type: CR, r, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: CR can be editorially revised in the editorial meeting.

Conclusion: Conditionally approved in CN2#22, dependend on SA1 decision (mutually exclusive with document N2-020139).

*After SA1#15, based on SA1 decision, this CR was **approved.***

N2-020091: TS 29.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion: Wording for tresholdCounterValue is not good. "Call leg" should be replaced by "Leg".

"Net applicable e-values" is sum of the MSC e-values and the charging pulses received from ISUP. It should be mentioned that this is nationally specific.

Conclusion: revised to N2-020157

N2-020157: TS 29.078, Rel-5, C-DOT, Type: CR, r1, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion:

Conclusion: revised to N2-020211

N2-020211: TS 29.078, Rel-5, C-DOT, Type: CR, r2, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion:

Conclusion: postponed

9.10   Enhancements of dialled services

9.11   Provision of location information of called subscriber

9.12   Notification of GPRS mobility management to CSE

N2-020060: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Enhancements to subscriber information reporting in the PS domain

Discussion: The document was presented in joint meeting with CN4 (N4-020201). The conclusion was that package of CRs to 23.078, 29.002 and 29.078 needs some further work before it's ready for incorporation in CAMEL phase 4. This CR introduces changes to support enhancements to the provision of subscriber information in the PS domain, as required in stage 1.

This CR is based on approved CR to stage 1. The content of this CR is the same as the content of the CR presented in Cancun. The only difference is the base version used for this CR.

Do we need to make a change 23.060? Maybe it is easier to change only CAMEL stage 2. For GPRS MM, there are diagrams for attach and detach, so it would be useful to have diagrams for this change request.

Stage 1 has a requirement that gsmSCF indicate to HLR whether it is asking for information for CS domain or PS domain. gsmSCF can ask Location information in SGSN, and this is already there in the latest draft. This CR is only an enhancement.

In PDP context information, *RNC Address in Use* is in the list. It was question whether BSC address is necessary as well. Vodafone is of opinion that it is not necessary. PDP context information is sent only if the SCP requested the subscriber status and that fact should be documented. In Any Time Interrogation ack it is sent when it is available (C).

GGSN Address in Use is copied from 23.060. *PDP Context Charging Characteristics is* copied from 23.060. This is stored in SGSN. *PDP context information list* is part of subscriber state. It shall be present if the PS domain Subscriber State has the value "CAMEL connected"

Conclusion: revised to N2-020201, in June plenary 23.008 and 23.060 can be modified

N2-020201: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Enhancements to subscriber information reporting in the PS domain

Conclusion: approved without presentation

N2-020061: TS 29.078, Rel-5, Vodafone, Type: CR, Title: Enhancements to subscriber information reporting in the PS domain

Discussion: This document was presented in the joint meeting with CN4 in N4-020202. This CR replaces the explicit definitions of GPRSChargingID, LocationInformationGPRS and RAIdentity with IMPORT from TS 29.002. Definition of data types is in 29.002 and is imported to 29.078.

If the data type is needed in MAP and CAP, we define it in MAP and import it in CAP.

Conclusion: approved by CN2

N2-020062: TS 29.002, Rel-5, Vodafone, Type: CR, Title: Enhancements to subscriber information reporting in the PS domain

Discussion: The document was discussed in the joint meeting with CN4 in N4-020203. This CR is a complement to previous one, i.e. to apply principle that data types used in both protocols MAP and CAP are defined in MAP.

To support enhancements to the provision of subscriber information in the PS domain, as required in the stage 1, the CR updates table 5.1/3 to include the subscriberInfoEnquiry AC for the SGSN as a responder, adds a definition of the parameter Location Information for GPRS, update the MAP-NOTE-MM-EVENT service definition to show PS domain MM events and to include the parameter Location Information for GPRS, updates the MAP-ANY-TIME-INTERROGATION service definition to point to 23.018 & 23.078 for use of parameters and to include the parameter Location Information for GPRS, updates the MAP-PROVIDE-SUBSCRIBER-INFO service definition to show its use for the SGSN and to include the parameter Location Information for GPRS (as defined in TS 23.078).

The CR updates the operation package and application context for subscriberInfoEnquiry to show the possibility of using them between SGSN and HLR, expands the definition of MM-Code to include PS domain MM events, add a PS subscriber state and location information for GPRS to the data type SubscriberInfo, defines the PS-SubscriberState and LocationInfoGPRS data types and their subordinate data types, exports the GPRSChargingID, LocationInformationGPRS and RAIdentity data types for use in TS 29.078.

Location information in GPRS and RAIdentity is copied from 23.078. AnyTimeInterrogation CR from T-Mobil is already part of the collective CR. At the time of the drafting of this CR, collective CR to 29.002 was not available.

Current Location retrieved and geodetic info is added to LocationInformationGPRS.For CS there is Location information, and for GPRS it is introduced Location information GPRS. In Rel-5, CAPv3 is used for this pdp context control.

Assumptions:

- In section 8.1.8.1, M-CSI should be replaced to MG-CSI.

- On page 10, second instance of LocationInformation should be Location Information for GPRS.

- On page 16, SubscriberInfo tag number 3 is used twice.

- In HLR there is a flag whether Location Information is needed from CS of PS. Stage 2 defines when Location information GPRS is used (SGSN-HLR Information flows) and when Location Information (VLR-HLR information flows)

- Information elements that are added are not present currently in stage 2 (7.6.1.2). In revised version of document N2-020060 alignment will be insured. Age of location information could be added in stage2 (in Location Information for GPRS).

- If SGSN receives any other MM code than one listed for SGSN, SGSN should ignore it. The same rule applies for VLR.

Conclusion: revised toN2-020204

N2-020204: TS 29.002, Rel-5, Vodafone, Type: CR, r1, Title: Enhancements to subscriber information reporting in the PS domain

Discussion:

Conclusion: approved without presentation

N2-020138: TS 23.078, Rel-5, Siemens, Type: CR, Title: MM-GPRS not reported by the old SGSN

Discussion:

Conclusion: postponed

9.13   CAMEL4/ ODB in HLR-SCP interface

N2-020083: TS 23.078, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion: This CR adds new procedure ATM_Modify_ODB_Data in CAMEL_ATM_HLR. "Check new ODB data against TS 22.015" reference in SDL on page 7 is not correct. TS 22.015 does not exist, the correct specification is TS 22.041. We have to check internal consistency.

Maybe it should be better to send only a candidate for new ODB data - final, replacement string instead of current proposal of sending set and reset string. With the replacement strings the order of the execution becomes relevant. Then the SCP must know the history. Vodafone points out that for some services the history (the previous value) is irrelevant, e.g. if the pre-paid SCP wants to set barring due to out-bound roaming.

Conclusion: revised to N2-020150

N2-020150: TS 23.078, Rel-5, Siemens, Type: CR, r1, Title: Inclusion of ODB data in ATM

Discussion: This document is discussed in the joint meeting with CN4, in *N4-020192*. If ODB data is not present in the ATM request, then it is assumed that the ODB data is not modified. When present, the modification is done by overwriting the existing ODB data.

We do not need to check ODB data with CF. When ODB data is changed with category CF, CF goes to quiescent state.

In description of ODB Data IE: "This IE contains ODB General Data and ODB HPLMN Specific Data whose features the network operator or the service provider can regulate", reference to clause where ODB Data is defined would be useful and wording about regulation by the service provider should be removed.

Conclusion: revised to N2-020199, it will be handled only in CN2

N2-020199: TS 23.078, Rel-5, Siemens, Type: CR, r2 Title: Inclusion of ODB data in ATM

Discussion:

Conclusion: Approved without presentation

N2-020084: TS 29.002, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion:

Conclusion: Revised to N2-020151

N2-020151: TS 29.002, Rel-5, Siemens, Type: CR, r1, Title: Inclusion of ODB data in ATM

Discussion: Collective CR is based on the version 5.0.0.This is based on Rel-4 version.

Conclusion: revised to N2-020200 (N4-020193, CR#374r1)

N2-020200: TS 29.002, Rel-5, Siemens, Type: CR, r2, Title: Inclusion of ODB data in ATM

Discussion: This version is based on the Rel-5 version 5.0.0.

Conclusion: approved, will be incorporated to collective CR 29.002

9.14   CAMEL4/ Location Information during ongoing call

N2-020085: TS 23.078, Rel-5, Siemens, Type: CR, Title: Location information during an ongoing call

Discussion: Cover sheet and all SDLs except SSF are changed.

Conclusion: revised to N2-020152

N2-020152: TS 23.078, Rel-5, Siemens, Type: CR, Title: Location information during an ongoing call

Discussion: RAN specifications need to send message to CAMEL process, so that SSF can inform SCP.

Conclusion: approved

9.15 CAMEL4/GPRS AnyTimeInterrogation

N2-020067: TS 22.078, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the CSE

Discussion: This document was handled in the joint meeting with CN4 in **N4-020207**. CAMEL currently allows the GPRS MS class information to be transferred to the CSE for CAMEL control of GPRS traffic. In addition, transfer of the IMEI to the CSE would allow the opportunity of a database lookup to determine capabilities such as screen size of the MS. This CR adds IMEI, GPRS MS class and MS class to the information which the CSE can request from the HLR, adds MS class to the information transferred to the CSE on CS call set-up and IMEI to the information transferred to the CSE on CS call set-up, GPRS Attach and GPRS PDP context establishment.

IMEI can be received from both domains. If SCP asks for IMEI, is the intention that VLR returns what it has at that point of the time? If PSI is sent, there will be always active retrieval of the IMEI from the mobile.

Do we have a requirement for active retrieval at the initial service event? ATI and PSI and the HLR can request MS classmark or IMEI explicitly and that leads to active retrieval.

Conclusion: noted, this CR will be sent to SA1 as sourceVodafone

N2-020063: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion: This document was handled in the joint meeting with CN4 in **N4-020204**. We don't want to delay call set-up by initiating IMEI retrieval. For MT SMS, IMEI is not available, because the triggering is done before paging.

Procedures for CS and PS side are not identical. In the PS there is not report on change of service area. The question box *Location undetermined* is missing in circuit switched case.

MSclassmark2 is used since it is returned in the Page-ack by the mobile.

Conclusion: revised to N2-020205

N2-020205: TS 23.078, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion:

Conclusion: Conditionally approved during CN2#22 meeting, if SA1 approves service requirement. If SA1 approves stage1 CR, it will be sent to plenary as part of collective CR.. After SA1#15 meeting, based on SA1 decision, this CR is approved by CN2.

N2-020064: TS 29.078, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion: As the MS classmark & IMEI of the ME allow the gsmSCF to determine information about the capabilities of the ME, which can be useful to service logic designers, this CR proposes to add the MS classmark 2 as a parameter to the argument of each of the operations: InitialDP and InitialDPSMS, GPRS MS class as a parameter to the argument of the operation InitialDPSMS and IMEI as a parameter to the argument of each of the operations: InitialDP, InitialDPSMS and InitialDPGPRS. It is proposed as well to replace the explicit definition of the GPRSMSClass data type with an IMPORT from a MAP ASN.1 module.

Conclusion: postponed to next meeting, delegates are urged to give offline comments to originator of the CR before the April meeting

N2-020065: TS 29.002, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion: This CR adds parameters IMEI, GPRS MS Class and MS Classmark 2 to Any_Time_Interrogation and Provide_Subscriber_Information.

Conclusion: postponed to CN4#12bis meeting

N2-020068: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion: The document describes retrieval of MS classmark and IMEI in circuit switched domain. There is no requirement on VLR to store IMEI. Therefore it is not possible to specify to retrieve information that is currently stored and active retrieval of the IMEI from the mobile is applied. If IMEI can be stored in VLR, we could avoid the case that for information retrieval paging is done every time.

CN2 and CN4 will study the possibility that VLR stores IMEI. In this CR it is specified that IMEI with software version is requested, but in stage 1 it is specified only IMEI. Siemens requested that the same requirement is specified in stage 1 CR. Vodafone will revise stage 1 CR to be more specific in service requirement.

Conclusion: revised to N2-020209.

N2-020209: TS 23.018, Rel-5, Vodafone, Type: CR, Title: Transferring the MS classmark & IMEI to the gsmSCF

Discussion: This document has N4 number N4-020288.

Conclusion: This CR was conditionally endorsed in CN2#22, if SA1 approves corresponding stage 1 CR; If SA1 approves stage 1 CR, this will become part of CR package to TS 23.018. The package will contain 2 CRs: collective CR to TS 23.018 and this CR..

After SA1#15 this CR is **endorsed by CN2.**

N2-020025: TS 23.078, Rel-5, Ericsson, Type: CR, Title: Location Service for PS terminals

Discussion:

Conclusion: postponed to next meeting

10   Review of dates and hosts for future meetings

CN2 has decided that the venue of the April meeting will be Helsinki, Finland. CAMEL phase 4 editorial cleanup AdHoc meeting on Rel-5 TS 23.078 and TS 29.078 will be held in Rijen, The Netherlands from 19th –20th of February. Only editorial changes are allowed.

CN2#22 gives the mandate to February Editorial meeting to do editorial changes to Rel-5 specifications 23.078 and 29.078. Ericsson would like to correct ambiguities presented in document N2-020020. Titles for contributions for editorial meeting should contain clause, which it concerns. The deadline to ask Tdoc number is Thursday noon 12:00 CET, February 14th. Deadline to send documents is 14th of February, 23:59 CET.

Deadline for April meeting, for Tdoc request is Wednesday, 3rd of April, 12:00 CET. The deadline for sending documents is Wednesday 23:59 CET, 3rd of April.

The deadline for CN Plenary documents is preceding Wednesday, 27th of February.

Review of the N2 meeting schedule for 2002

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPCN2-Editorial cleanup AdHoc	AdHoc	19th – 20st Feb 2001	Rijen	Netherlands
3GPPCN2-#23	WG	8 – 12 April 2002	Helsinki	Finland
3GPPCN2#24	WG	13-17 May 2002	Aachen	Germany
3GPPCN2#25	WG	29July-2 August 2002	TBD	Finland
3GPPCN2#26	WG	23-27September	TBD	USA
3GPPCN2#27	WG	11-15 November	Penang	Malaysia

11   Closing of the meeting **(15:40 Friday)**

-      MCC will check which versions of SDT tool are incompatible.

-      23.278, 23.078 and 29.078 will be sent to CN#15 plenary for information, but should be approved in June plenary.

-      23.018 29.002, 23.008, 23.016, 23.083 and 23.079 collective CRs should be approved in CN#15 plenary in March.

Meeting was closed on at 16:30 on Friday. Chairman thanked delegates for their contributions and MCC for the support during the meeting.

Annex A   Attendees list

Name	Organization represented	Status, partner	Phone	Fax	e-mail
Mr. Christian Homann c.homann@alcatel.de	ALCATEL S.A.	3GPPMEMBER (ETSI)	+49 711 821 45632		+49 711 821 40017
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Mr. Rogier Noldus	ERICSSON L.M.	3GPPMEMBER (ETSI)	+31 161 249 400	+31 161 249 904	rogier.noldus@eln.ericsson.se
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Mr. Ralph Woodman	LOGICA ALDISCON	3GPPMEMBER (ETSI)	+44 117 9017644		woodmanr@logica.com
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Mr. Rajeev Singh	C-DOT	3GPPMEMBER (ETSI) IN	+91 11 4678974		rajeev@cdot.ernet.in
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Mrs Veronique Belfort	Alcatel	3GPPMEMBER (ETSI) FR	+33 1 30 77 86 11		veronique.belfort@alcatel.fr
Ms. Ruth Hewson	Vodafone	3GPPMEMBER (ETSI) GB	+44 1635 637 148		rth.hewson@vf.vodafone.co.uk
Mr. Dietmar Kohnenmergen	E-PLUS Mobilfunk	3GPPMEMBER (ETSI) DE	+49 211 448 2946		dietmar.kohnenmergen@eplus.de
Mrs. Eliisa Pihonen	SONERA Corporation	3GPPMEMBER (ETSI) FI	+358 2040 64284		eliisa.pihonen@sonera.com

Member of 3GPP (T1)

Name	Organization represented	Status, partner	Phone	Fax	e-mail
Mrs. Angelica Remoquillo	Lucent Technologies	3GPPMEMBER (T1)	US +1 630 713 9548		atr@lucent.com

Member of 3GPP (TTC)

| Mr. Noriyuki Iwasawa | NEC Corporation | 3GPPMEMBER (TTC) | JP | +81 3 3798 5194 | iwasawa@ncos.nec.co.jp |

Organisation partner representative (ETSI)

| Mrs. Andrijana Jurisic | Mobile Competence Centre | | FR | +33 4 92 94 43 09 | andrijana.jurisic@etsi.fr |

Annex B   Output Documents

Approved Change Requests for CAMEL Phase 3

TDoc #	WI	Rel	Title	Spec	CR #	Rev	Cat	Version	Conclusion	Source
N2-020031	CAMEL3	R99	Correction to GPRS Dialogue Handler	23.078	374		F	3.11.0	approved	Ericsson
N2-020077	CAMEL3	R99	Exact wordings for Apply Charging and Apply Charging Report in GPRS	23.078	378		F	3.11.0	approved	Siemens AG
N2-020078	CAMEL3	Rel-4	Exact wordings for Apply Charging and Apply Charging Report in GPRS	23.078	379		A	4.3.0	approved	Siemens AG
N2-020107	CAMEL3	R99	FCI handling harmonisation	23.078	380		F	3.11.0	approved	Nokia
N2-020108	CAMEL3	Rel-4	FCI handling harmonisation	23.078	381		A	4.3.0	approved	Nokia
N2-020131	CAMEL3	R99	Correction: CSI handling at several FEs	23.078	386		F	3.B.0	approved	Siemens AG
N2-020132	CAMEL3	Rel-4	Correction: CSI handling at several FEs	23.078	387		A	4.3.0	approved	Siemens AG
N2-020169	CAMEL3	Rel-4	Correction to GPRS Dialogue Handler	23.078	388		A	4.3.0	approved	Ericsson
N2-020178	CAMEL3	R99	Clarification on NP check at DP2	23.078	372	1	F	3.11.0	approved	Nokia
N2-020181	CAMEL3	R99	Error handling for sequential TCAP Operation components	29.078	233	1	F	3.10.0	approved	Ericsson
N2-020182	CAMEL3	R99	Correction to Advice of Charge for MT calls	23.078	376	1	F	3.11.0	approved	Ericsson
N2-020183	CAMEL3	Rel-4	Correction to Advice of Charge for MT calls	23.078	389		A	4.3.0	approved	Ericsson
N2-020190	CAMEL3	R99	Mapping of CUG information from CAP to ISUP	29.078	237	1	F	3.10.0	approved	Vodafone
N2-020191	CAMEL3	Rel-4	Mapping of CUG information from CAP to ISUP	29.078	238	1	A	4.3.0	approved	Vodafone
N2-020192	CAMEL3	R99	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	23.078	384	1	F	3.B.0	approved	Siemens AG
N2-020193	CAMEL3	Rel-4	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	23.078	385	1	A	4.3.0	approved	Siemens AG
N2-020194	CAMEL3	R99	The waiting for new AC timers	23.078	382	1	F	3.11.0	approved	Nokia
N2-020195	CAMEL3	Rel-4	The waiting for new AC timers	23.078	383	1	A	4.3.0	approved	Nokia
N2-020206	CAMEL3	R99	MSISDN to be made available to MSC	23.078	390	1	F	3.B.0	approved	Ericsson

N2-020207	CAMEL3	Rel-4	MSISDN to be made available to MSC	23.078	391	1	A	4.3.0	approved	Ericsson
N2-020208	CAMEL3	Rel-5	MSISDN to be made available to MSC	23.078		1	A	5.D.C1	approved	Ericsson
N2-020212	CAMEL3	Rel-4	Error handling for sequential TCAP Operation components	29.078	241		A	4.3.0	approved	Ericsson
N2-020213	CAMEL3	Rel-4	Clarification on NP check at DP2	23.078	392		A	4.3.0	approved	Nokia
N2-020214	CAMEL3	R99	Correction to GPRS operation error handling	29.078	234	3	F	3.10.0	approved	Ericsson
N2-020215	CAMEL3	Rel-4	Correction to GPRS operation error handling	29.078	242		A	4.3.0	approved	Ericsson
N2-020216	CAMEL3	R99	Clarification on national values of the Called Party Number's Nature of Address field	23.078	373	2	F	3.11.0	approved	Nokia
N2-020217	CAMEL3	Rel-4	Clarification on national values of the Called Party Number's Nature of Address field	23.078	393		A	4.3.0	approved	Nokia
N2-020218	CAMEL3	R99	Clarification on national values of the Called Party Number's Nature of Address field	29.078	232	2	F	3.10.0	approved	Nokia
N2-020219	CAMEL3	Rel-4	Clarification on national values of the Called Party Number's Nature of Address field	29.078	243		A	4.3.0	approved	Nokia

Approved Output Liaison Statements

TDoc #	Type	Title	Source	TO	CC	Conclusion
N2-020145	LS OUT	Liaison Statement: "Reply to LS on VASP MMS Connectivity"	Lucent Technologies	SA5	SA1, T2	approved
N2-020168	LS OUT	LS "On the Handling of e-parameters provided by the SCP" in the scope of the PS domain	Lucent Technologies	SA1		approved

Approved and endorsed Change Requests for CAMEL Phase 4

TDoc #	Title	WI	Rel	Spec	CR #	Rev	Version	Conclusion	Source
N2-020010	Introduction of CAMEL Phase 4 (condensed)	CAMEL4	Rel-5	23.079			4.0.0	endorsed	Vodafone Group Plc
N2-020011	Introduction of CAMEL Phase 4	CAMEL4	Rel-5	23.083		1	4.3.0	endorsed	Vodafone Group Plc
N2-020012	Correction to CAMEL4 handling	CAMEL4	Rel-5	23.018			5.2.0	endorsed	Vodafone Group Plc
N2-020014	Tones support for Camel Phase 4	CAMEL4	Rel-5	29.078			5.6.0	approved	Logica
N2-020057	Remodelling of CAMEL_ICH_LEG2_MSC	CAMEL4	Rel-5	23.018			N2-020007	endorsed	Vodafone Group Plc
N2-020058	Remodelling of CAMEL_ICH_LEG2_MSC	CAMEL4	Rel-5	23.078			5dC1	approved	Vodafone Group Plc
N2-020061	Enhancements to subscriber information reporting in the PS domain	CAMEL4	Rel-5	29.078			d5.6.1	approved	Vodafone
N2-020082	Collective CR on 23.016	CAMEL4	Rel-5	23.016			4.0.0	endorsed	Siemens AG
N2-020089	Correction on the Active Location Retrieval description	CAMEL3	Rel-5	23.018			5.2.0	endorsed	Orange France
N2-020118	Description of Detection Points for IMS/CAMEL	IMS-CAMEL	Rel-5	23.278			V1.0.0	approved	Lucent Technologies
N2-020119	IP Multimedia CAMEL BCSM Description	IMS-CAMEL	Rel-5	23.278			V1.0.0	approved	Lucent Technologies
N2-020120	Removal of N-CSI SDL Procedures	IMS-CAMEL	Rel-5	23.278			V1.0.0	approved	Lucent Technologies
N2-020147	Criteria for MT-SMS-Alignement with 23.078	CAMEL4	Rel-5	23.008		1	4.1.0	endorsed	Alcatel
N2-020148	Correction on MT SMS SDL	CAMEL4	Rel-5	29.002		1	5.0.0	endorsed	Alcatel SA
N2-020152	Location information during an ongoing call	CAMEL4	Rel-5	23.078			15dC1	approved	Siemens AG
N2-020154	Continue wihtout leg2 at DP2	CAMEL4	Rel-5	23.018			N2-020007	endorsed	Vodafone
N2-020162	Introduction of CAMEL Phase 4 (condensed)	CAMEL4	Rel-5	23.018		2	5.2.0	endorsed	Vodafone Group Plc
N2-020163	23.008 collective CR	CAMEL4	Rel-5	23.008		1	4.1.0	endorsed	Alcatel
N2-020166	Alignment of tables A.1 and A.2 with stage 2	CAMEL4	Rel-5	22.078		1	5.5.0	endorsed	Alcatel
N2-020167	Further alignment of tables A.1 and A.2 with stage 2 for CAMEL Phase 4	CAMEL4	Rel-5	22.078		1	5.5.0	endorsed	Alcatel

ID	Title		Rel	TS				Status	Company
N2-020172	Continue without leg2 at DP2 for MO calls	CAMEL4	Rel-5	23.078			5dC1	approved	Vodafone
N2-020173	Continue without leg2 at DP2 for MF calls	CAMEL4	Rel-5	23.018			N2-020007	endorsed	Vodafone
N2-020174	Continue without leg2 at DP2 for MF calls	CAMEL4	Rel-5	23.078			5dC1	approved	Vodafone
N2-020175	Continue Without Leg2 at DP12 for MT and VT calls	CAMEL4	Rel-5	23.018			N2-020007	endorsed	Vodafone
N2-020176	Continue Without Leg2 at DP12 for MT and VT calls	CAMEL4	Rel-5	23.078			5dC1	approved	Vodafone
N2-020197	Definition of CAMEL Subscription Information data for IMS	IMS-CAMEL	Rel-5	23.278		1	V1.0.0	approved	Lucent Technologies
N2-020199	Inclusion of ODB data in ATM	CAMEL4	Rel-5	23.078		2	5dC1	approved	Siemens AG
N2-020200	Inclusion of ODB data in ATM	CAMEL4	Rel-5	29.002		2	5.0.0	approved	Siemens AG
N2-020201	Enhancements to subscriber information reporting in the PS domain	CAMEL4	Rel-5	23.078			5dC1	approved	Vodafone
N2-020204	Enhancements to subscriber information reporting in the PS domain	CAMEL4	Rel-5	29.002		1	5.0.0	approved	Vodafone
N2-020205	Transferring the MS classmark & IMEI to the gsmSCF	CAMEL4	Rel-5	23.078		1	5dC1	approved	Vodafone
N2-020209	Transferring the MS classmark & IMEI to the gsmSCF	CAMEL4	Rel-5	23.018		1	5.2.0	endorsed	Vodafone
N2-020208	MSISDN to be made available to MSC	CAMEL3	Rel-5	23.078		1	5.D.C1	approved	Ericsson
N2-020221	Correction on MT SMS SDL	CAMEL4	Rel-5	23.078		2	5dC1	approved	Alcatel SA
N2-020222	Collective CAMEL phase 4 CR on TS 29.002	CAMEL4	Rel-5	29.002		1	4.5.0	endorsed	Ericsson
N2-020223	Handling of RNC and ENC operations in a CPH configuration	CAMEL4	Rel-5	23.078		4	5dC1	approved	C-DOT

Annex C   List of Documents

TDoc #	Type	Title	Source	WI	CR #	Rev	Cat	Spec	Rel	Version	Conclusion
N2-020001	AGENDA	Proposed meeting agenda	CN2 chairman								approved
N2-020002	AGENDA	Allocation of documents to agenda items	CN2 chairman								approved
N2-020003	OTHER	Update of CN2 Terms of Reference	CN2 chairman								approved
N2-020004	CR	Clarification on NP check at DP2	Nokia	CAMEL3	372		F	23.078	R99	3.11.0	revised to N2-020178
N2-020005	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	373		F	23.078	R99	3.11.0	revised to N2-020179
N2-020006	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	232		F	29.078	R99	3.10.0	revised to N2-020180
N2-020007	CR	Introduction of CAMEL Phase 4 (complete)	Vodafone Group Plc	CAMEL4		8	B	23.018	Rel-5	5.2.0	noted
N2-020008	CR	Introduction of CAMEL Phase 4 (condensed)	Vodafone Group Plc	CAMEL4		1	B	23.018	Rel-5	5.2.0	revised to N2-020162
N2-020009	CR	Introduction of CAMEL Phase 4 (complete)	Vodafone Group Plc	CAMEL4		1	B	23.079	Rel-5	4.0.0	noted
N2-020010	CR	Introduction of CAMEL Phase 4 (condensed)	Vodafone Group Plc	CAMEL4			B	23.079	Rel-5	4.0.0	endorsed
N2-020011	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc	CAMEL4		1	B	23.083	Rel-5	4.3.0	endorsed
N2-020012	CR	Correction to CAMEL4 handling	Vodafone Group Plc	CAMEL4			F	23.018	Rel-5	5.2.0	endorsed
N2-020013	DISC	CPH: Open Issues & Decisions	Vodafone Group Plc	CAMEL4							postponed

N2-020014	CR	Tones support for Camel Phase 4	Logica	CAMEL4				B	29.078	Rel-5	5.6.0	approved
N2-020015	CR	Technical and Editorial corrections to section 4	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	postponed
N2-020016	CR	Technical and Editorial corrections to section 5	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	withdrawn
N2-020017	CR	Technical and Editorial corrections to section 6	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	withdrawn
N2-020018	CR	Technical and Editorial corrections to section 7	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	withdrawn
N2-020019	CR	Technical and Editorial corrections to section 8	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	withdrawn
N2-020020	CR	Technical and Editorial corrections to section 11	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	postponed
N2-020021	CR	Technical and Editorial corrections to section 12	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	postponed
N2-020022	CR	Technical and Editorial corrections to section 13	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	postponed
N2-020023	CR	Technical and Editorial corrections to section 14	Ericsson	CAMEL4				F	29.078	Rel-5	D5.6.1	withdrawn
N2-020024	CR	Clarifications on the usage of PSI	Ericsson	CAMEL4				D	23.078	Rel-5	D5.c.1	postponed
N2-020025	CR	Location Service for PS terminals	Ericsson	CAMEL4				B	23.078	Rel-5	D5.c.1	postponed
N2-020026	CR	Clarification on GPRS relationships	Ericsson	CAMEL3				D	23.078	Rel-5	D5.6.1	withdrawn
N2-020027	DISC	Editorial and technical conventions for TS 29.078	Ericsson	CAMEL4					29.078	Rel-5		withdrawn
N2-020028	CR	Latest draft 3GPP TS 29.078	Ericsson	CAMEL4					29.078	Rel-5		noted
N2-020029	CR	Collective CAMEL phase 4 CR on TS 29.002	Ericsson	CAMEL4				B	29.002	Rel-5	4.5.0	revised to N2-020222
N2-020030	CR	Error handling for sequential TCAP Operation components	Ericsson	CAMEL3	233			F	29.078	R99	3.10.0	revised to N2-020181
N2-020031	CR	Correction to GPRS Dialogue Handler	Ericsson	CAMEL3	374			F	23.078	R99	3.11.0	approved
N2-020032	CR	Correction to GPRS operation error handling	Ericsson	CAMEL3	234			F	29.078	R99	3.10.0	revised to N2-020092
N2-020033	CR	Correction to CAP dialogue termination rules	Ericsson	CAMEL3	375			F	23.078	R99	3.11.0	rejected
N2-020034	CR	Correction to Advice of Charge for MT calls	Ericsson	CAMEL3	376			F	23.078	R99	3.11.0	revised to N2-020182

N2-020035	CR	SCP-induced call release for Dialled Services	Ericsson	CAMEL3	377		F	23.078	R99	3.11.0	withdrawn
N2-020036	CR	Clarification on "dp-AnalysedInfoCriteriaList"	Ericsson	CAMEL3			F	29.002	R99	3.11.0	withdrawn
N2-020037	LS IN	Liaison Statement: "Reply to LS on VASP MMS Connectivity"	SA5								noted
N2-020038	LS IN	Liaison Statement: Reply on "Handling of e-parameters provided by the SCP"	SA5								noted
N2-020039	DISC	Disconnect Leg operation in Alerting Phase	Vodafone Group Plc	CAMEL4							noted
N2-020040	CR	Disconnect Leg operation in Alerting Phase	Vodafone Group Plc	CAMEL4		1	B	23.018	Rel-5	N2-020007	withdrawn
N2-020041	CR	Disconnect Leg operation in Alerting Phase	Vodafone Group Plc	CAMEL4		2	B	23.078	Rel-5	5D.12.1	withdrawn
N2-020042	CR	Disconnect Leg operation in Alerting Phase	Vodafone Group Plc	CAMEL4		1	B	23.083	Rel-5	N2-020011	withdrawn
N2-020043	DISC	Disconnect Leg operation at unsuccessful call establishment	Vodafone Group Plc	CAMEL4							noted
N2-020044	CR	Disconnect Leg operation at unsuccessful call establishment	Vodafone Group Plc	CAMEL4		1	B	23.018	Rel-5	N2-020007	withdrawn
N2-020045	CR	Disconnect Leg operation at unsuccessful call establishment	Vodafone Group Plc	CAMEL4		1	B	23.078	Rel-5	5D.12.1	withdrawn
N2-020046	CR	Disconnect Leg operation at unsuccessful call establishment	Vodafone Group Plc	CAMEL4		1	B	23.079	Rel-5	N2-020009	withdrawn
N2-020047	CR	Disconnect Leg operation at unsuccessful call establishment	Vodafone Group Plc	CAMEL4		1	B	23.083	Rel-5	N2-020011	withdrawn
N2-020048	DISC	Clarification on Releasing Individual Call Parties	Vodafone Group Plc	CAMEL4							withdrawn
N2-020049	CR	Clarification on Releasing Individual Call Parties	Vodafone Group	CAMEL4		1	C	22.078	Rel-5	5.5.0	revised to N2-020177

			Plc									
N2-020050	CR	Introduction of StartDTMF and StopDTMF signals	Vodafone Group Plc	CAMEL4				F	23.078	Rel-5	5dC1	postponed
N2-020051	CR	Contents of CWA at DP3	Vodafone Group Plc	CAMEL4				F	23.078	Rel-5	5dC1	postponed
N2-020052	CR	Handling of UUS and CCBS for reconnect on Leg2 disconnect	Vodafone Group Plc	CAMEL4				F	23.078	Rel-5	5dC1	postponed
N2-020053	CR	Interactions between CPH and Change Of Position DP	Vodafone Group Plc	CAMEL4				B	23.078	Rel-5	5dC1	withdrawn
N2-020054	CR	Moving to MidCall DP after CPH operation	Vodafone ne	CAMEL4				C	23.078	Rel-5	5dC1	postponed
N2-020055	CR	Moving to MidCall DP after CPH operation	Vodafone ne	CAMEL4				D	29.078	Rel-5	5d.6.1	postponed
N2-020056	CR	Handling of CPH configuration after CAP dialogue ends	Vodafone ne	CAMEL4				B	23.078	Rel-5	5dC1	withdrawn
N2-020057	CR	Remodelling of CAMEL_ICH_LEG2_MSC	Vodafone ne Group Plc	CAMEL4				C	23.018	Rel-5	N2-020007	endorsed
N2-020058	CR	Remodelling of CAMEL_ICH_LEG2_MSC	Vodafone ne Group Plc	CAMEL4				C	23.078	Rel-5	5dC1	approved
N2-020059	CR	Handling of Mid Call DP	Vodafone ne Group Plc	CAMEL4				B	23.078	Rel-5	5dC1	postponed
N2-020060	CR	Enhancements to subscriber information reporting in the PS domain	Vodafone ne	CAMEL4				C	23.078	Rel-5	5dC1	revised to N2-020201
N2-020061	CR	Enhancements to subscriber information reporting in the PS domain	Vodafone ne	CAMEL4				C	29.078	Rel-5	d5.6.1	approved
N2-020062	CR	Enhancements to subscriber information reporting in the PS domain	Vodafone ne	CAMEL4				C	29.002	Rel-5	5.0.0	revised to N2-020204
N2-020063	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone ne	CAMEL4				C	23.078	Rel-5	5dC1	revised to N2-020205
N2-020064	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone ne	CAMEL4				C	29.078	Rel-5	d5.6.1	postponed to

										CN4#13
N2-020065	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone	CAMEL4			C	29.002	Rel-5	5.0.0	postponed to CN4#12bis
N2-020066	CR	Mapping from CAP to ISUP of parameters of ICA and CWA	Vodafone	CAMEL4			C	29.078	Rel-5	d5.6.1	postponed
N2-020067	INFO	Transferring the MS classmark & IMEI to the CSE	Vodafone	CAMEL4			C	22.078	Rel-5	5.4.0	noted
N2-020068	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone	CAMEL4			C	23.018	Rel-5	5.2.0	revised to N2-020209
N2-020069	LS IN	Liaison Statement on Restoration of R'96 Any Time Interrogation functionality	SA2								noted
N2-020070	LS IN	Liaison to SA, CN	Chairman 3GPP TSG-SA WG3-LI								noted
N2-020071	Report	CN2#21 Draft Meeting Report	MCC								approved
N2-020072	DISC	(CN2/4) Si Interface : HSS to IM-SSF Interface	Lucent Technologies	IMS-CAMEL					Rel-5		revised to N2-020143
N2-020073	INFO	Modifications to TS 23.278	Lucent Technologies	IMS-CAMEL					Rel-5		withdrawn
N2-020074	CR	Inclusion of complete ODB data for ATSI and NSDC	Siemens AG	CAMEL3			F	29.002	R99	3.B.0	revised version approved by CN4 in N4-020209
N2-020075	CR	Inclusion of complete ODB data for ATSI and NSDC	Siemens AG	CAMEL3			A	29.002	Rel-4	4.6.0	revised version approved by CN4 in N4-020210
N2-020076	CR	Inclusion of complete ODB data for ATSI and NSDC	Siemens AG	CAMEL3			A	29.002	Rel-5	5.0.0	revised version approved by CN4 in N4-020211
N2-020077	CR	Exact wordings for Apply Charging and Apply Charging Report in GPRS	Siemens AG	CAMEL3	378		F	23.078	R99	3.11.0	approved

N2-020078	CR	Exact wordings for Apply Charging and Apply Charging Report in GPRS	Siemens AG	CAMEL3	379		A	23.078	Rel-4	4.3.0	approved
N2-020079	CR	Compatibility for RAI coding	Siemens AG	CAMEL3	235		F	29.078	R99	3.A.0	revised to N2-020140
N2-020080	CR	Compatibility for RAI coding	Siemens AG	CAMEL3	236		A	29.078	Rel-4	4.3.0	revised to N2-020141
N2-020081	TS/INFO	Draft 23.078 V5d.12.1	Rapporteur	CAMEL4				23.078	Rel-5		noted
N2-020082	CR	Collective CR on 23.016	Siemens AG	CAMEL4			B	23.016	Rel-5	4.0.0	endorsed
N2-020083	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4			B	23.078	Rel-5	5dC1	revised to N2-020150
N2-020084	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4			B	29.002	Rel-5	5.0.0	revised to N2-020151
N2-020085	CR	Location information during an ongoing call	Siemens AG	CAMEL4			F	23.078	Rel-5	5dC1	revised to N2-020152
N2-020086	OTHER	Contents of each CAMEL phase	CN2 chairman								noted
N2-020087	CR	Correction on the Active Location Retrieval description	Orange France	CAMEL3			F	23.018	R99	3.10.0	endorsed
N2-020088	CR	Correction on the Active Location Retrieval description	Orange France	CAMEL3			A	23.018	Rel-4	4.5.0	endorsed
N2-020089	CR	Correction on the Active Location Retrieval description	Orange France	CAMEL3			A	23.018	Rel-5	5.2.0	endorsed
N2-020090	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4			C	23.078	Rel-5	5dC1	revised to N2-020156
N2-020091	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4			C	29.078	Rel-5		revised to N2-020157
N2-020092	CR	Correction to GPRS operation error handling	Ericsson	CAMEL3	234	1	F	29.078	R99	3.10.0	revised to N2-020170
N2-020093	CR	Alignment of tables A.1 and A.2 with stage 2	Alcatel	CAMEL4			A	22.078	Rel-5	5.5.0	revised to N2-020166
N2-020094	CR	Further alignment of tables A.1 and A.2 with stage 2 for CAMEL Phase 4	Alcatel	CAMEL4			F	22.078	Rel-5	5.5.0	revised to N2-020167

Tdoc	Type	Title	Source		CR		Cat	Spec	Rel	Ver	Status
N2-020095	CR	Use of Abort and of Application begin and end between the CS_gsmSSF, CSA_gsmSSF and gsmSCF	Alcatel, Vodafone	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020096	CR	Leg Status update for leg 1 due to change in leg 2.	Alcatel	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020097	CR	Alignment of HLR and SCF on Provide Roaming Number	Alcatel	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020098	CR	Editorial corrections on 23.078	Alcatel	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020099	Disc	Split of CAMEL phase into functional subsets	Alcatel								noted
N2-020100	CR	Introduction of functional subsets	Alcatel	CAMEL4			B	23.008	Rel-5	4.1.0	postponed to next meeting
N2-020101	CR	Introduction of functional subsets	Alcatel	CAMEL4			B	23.002	Rel-5	4.5.0	postponed to next meeting
N2-020102	CR	Introduction of functional subsets	Alcatel	CAMEL4			B	23.078	Rel-5	5dC1	postponed to next meeting
N2-020103	CR	23.008 collective CR	Alcatel	CAMEL4			F	23.008	Rel-5	4.1.0	revised to N2-020163
N2-020104	CR	Criteria for MT-SMS-Alignement with 23.078	Alcatel	CAMEL4			F	23.008	Rel-5	4.1.0	revised to N2-020147
N2-020105	CR	Correction on MT SMS SDL	Alcatel SA	CAMEL4			F	29.002	Rel-5	5.0.0	revised to N2-020148
N2-020106	CR	Correction on MT SMS SDL	Alcatel SA	CAMEL4			F	23.078	Rel-5	5dC1	revised to N2-020149
N2-020107	CR	FCI handling harmonisation	Nokia	CAMEL3	380		F	23.078	R99	3.11.0	approved
N2-020108	CR	FCI handling harmonisation	Nokia	CAMEL3	381		A	23.078	Rel-4	4.3.0	approved
N2-020109	CR	The waiting for new AC timers	Nokia	CAMEL3	382		F	23.078	R99	3.11.0	revised to N2-020194
N2-020110	CR	The waiting for new AC timers	Nokia	CAMEL3	383		A	23.078	Rel-4	4.3.0	revised to N2-020195
N2-020111	LS IN	Liaison Statement on " IP version interworking on the transport plane"	SA2								noted
N2-020112	LS IN	Liaison Statement on Impacts of Subscriber and Equipment Trace	SA5								noted

N2-020113	LS IN	LS reply on "Handling of e-parameters provided by the SCP" in the scope of the PS domain	SA5								noted
N2-020114	CR	Introduction of functional subsets for CAMEL Phase 4	T-Mobil	CAMEL4			B	22.078	Rel-5	5.5.0	noted
N2-020115	CR	Mapping of CUG information from CAP to ISUP	Vodafone	CAMEL3	237		F	29.078	R99	3.10.0	revised to N2-020190
N2-020116	CR	Mapping of CUG information from CAP to ISUP	Vodafone	CAMEL3	238		A	29.078	Rel-4	4.3.0	revised to N2-020191
N2-020117	CR	Definition of CAMEL Subscription Information data for IMS	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	revised to N2-020197
N2-020118	CR	Description of Detection Points for IMS/CAMEL	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	approved
N2-020119	CR	IP Multimedia CAMEL BCSM Description	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	approved
N2-020120	CR	Removal of N-CSI SDL Procedures	Lucent Technologies	IMS-CAMEL			F	23.278	Rel-5	V1.0.0	approved
N2-020121	CR	Various corrections/modifications to TS 23.278	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	postponed
N2-020122	CR	Si Interface Information Flows	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	postponed
N2-020123	CR	CAP Information Flow description for IMS CAMEL	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	postponed
N2-020124	DISC	Handling of CAMEL failure in IM-SSF	Lucent Technologies	IMS-CAMEL							withdrawn
N2-020125	CR	Correction of SDLs for CAMEL_IMCN_Register/DeRegister	Lucent Technologies	IMS-CAMEL			F	23.278	Rel-5	V1.0.0	postponed
N2-020126	CR	Si Interface Via Diameter Protocol	Lucent Technologies	IMS-CAMEL			B	23.278	Rel-5	V1.0.0	postponed
N2-020127	CR	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	Siemens AG	CAMEL3	384		F	23.078	R99	3.B.0	revised to N2-020192

N2-020128	CR	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	Siemens AG	CAMEL3	385		A	23.078	Rel-4	4.3.0	revised to N2-020193
N2-020129	CR	Handling disconnectFromIPForbidden paremeter in PlayAnnouncement and PromptAndCollectUserInformation operations	Siemens AG	CAMEL3	239		F	29.078	R99	3.A.0	rejected
N2-020130	CR	Handling disconnectFromIPForbidden paremeter in PlayAnnouncement and PromptAndCollectUserInformation operations	Siemens AG	CAMEL3	240		A	29.078	Rel-4	4.3.0	rejected
N2-020131	CR	Correction: CSI handling at several FEs	Siemens AG	CAMEL3	386		F	23.078	R99	3.B.0	approved
N2-020132	CR	Correction: CSI handling at several FEs	Siemens AG	CAMEL3	387		A	23.078	Rel-4	4.3.0	approved
N2-020133	CR	Correction of LCS-related references	Siemens AG	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020134	CR	Improvement TIF-CSI description	Siemens AG	CAMEL4			D	23.078	Rel-5	5dC1	postponed
N2-020135	CR	Improvement gsmSCF list description	Siemens AG	CAMEL4			D	23.078	Rel-5	5dC1	postponed
N2-020136	CR	Route_Select_Failure shall not be disarmed implicitly when DP O_Term_Seized is encountered	Siemens AG	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020137	CR	Additional signal in CAMEL_OCH_MSC_ALERTING	Siemens AG	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020138	CR	MM-GPRS not reported by the old SGSN	Siemens AG	CAMEL4			F	23.078	Rel-5	5dC1	postponed
N2-020139	CR	Removing the feature: Charging Notification	Siemens (Rapporteur)	CAMEL4			C	23.078	Rel-5	5dC1	rejected
N2-020140	CR	Compatibility for RAI coding	Siemens AG	CAMEL3	235	1	F	29.078	R99	3.A.0	rejected
N2-020141	CR	Compatibility for RAI coding	Siemens AG	CAMEL3	236	1	A	29.078	R99	4.3.0	rejected
N2-020142	WP	Latest version of the work plan	MCC								noted
N2-020143	DISC	(CN2/4) Si Interface : HSS to IM-SSF Interface (REVISION)	Lucent Technologies	IMS-CAMEL					Rel-5		postponed
N2-020144	Report	CN#14 Draft Meeting report	MCC								noted

N2-020145	LS OUT	Liaison Statement: "Reply to LS on VASP MMS Connectivity"	Lucent Technol ogies								approved
N2-020146	LS OUT	LS "On the Handling of e-parameters provided by the SCP" in the scope of the PS domain	Lucent Technol ogies								revised to N2-020168
N2-020147	CR	Criteria for MT-SMS-Alignement with 23.078	Alcatel	CAMEL4		1	F	23.008	Rel-5	4.1.0	endorsed
N2-020148	CR	Correction on MT SMS SDL	Alcatel SA	CAMEL4		1	F	29.002	Rel-5	5.0.0	endorsed
N2-020149	CR	Correction on MT SMS SDL	Alcatel SA	CAMEL4		1	F	23.078	Rel-5	5dC1	revised to N2-020221
N2-020150	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4		1	B	23.078	Rel-5	5dC1	revised to N2-020199
N2-020151	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4		1	B	29.002	Rel-5	5.0.0	revised to N2-020200
N2-020152	CR	Location information during an ongoing call	Siemens AG	CAMEL4		1	F	23.078	Rel-5	5dC1	approved
N2-020153	Disc ussio n	ASN.1 presentation	France Teleco m								noted
N2-020154	CR	Continue wihtout leg2 at DP2	Vodafo ne	CAMEL4			B	23.018	Rel-5	N2-020007	endorsed
N2-020155	CR	Continue wihtout leg2 at DP2	Vodafo ne	CAMEL4			B	23.078	Rel-5	5dC1	noted
N2-020156	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		1	C	23.078	Rel-5	5dC1	revised to N2-020210
N2-020157	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		1	C	29.078	Rel-5	5.6.1	revised to N2-020211
N2-020158	CR	ASN.1 changes in the 29.078 specification	France Teleco m	CAMEL4				29.078	Rel-5	5.6.1	postpone d to next meeting
N2-020159	CR	Introduction of Disconnect leg ack	Vodafo ne	CAMEL4			B	23.078	Rel-5	5dC1	postpone d
N2-020160	Disc ussio n&d ecisi on	Reconsideration of CAMEL4 release data	Siemens	CAMEL4							noted
N2-020161	Disc ussio n	Improvements of "History" section in CAMEL specifications	Ericsso n								postpone d

TDoc	Type	Title	Source		CR#	Rev	Cat	Spec	Rel	Ver	Status
N2-020162	CR	Introduction of CAMEL Phase 4 (condensed)	Vodafone Group Plc	CAMEL4		2	B	23.018	Rel-5	5.2.0	endorsed
N2-020163	CR	23.008 collective CR	Alcatel	CAMEL4		1	F	23.008	Rel-5	4.1.0	endorsed
N2-020164	CR	Introduction of CAMEL Phase 4 (condensed)	Vodafone Group Plc	CAMEL4			B	23.079	Rel-5	4.0.0	withdrawn
N2-020165	CR	Collective CR on 23.016	Siemens AG	CAMEL4		1	B	23.016	Rel-5	4.0.0	withdrawn
N2-020166	CR	Alignment of tables A.1 and A.2 with stage 2	Alcatel	CAMEL4		1	A	22.078	Rel-5	5.5.0	endorsed
N2-020167	CR	Further alignment of tables A.1 and A.2 with stage 2 for CAMEL Phase 4	Alcatel	CAMEL4		1	F	22.078	Rel-5	5.5.0	endorsed
N2-020168	LS OUT	LS "On the Handling of e-parameters provided by the SCP" in the scope of the PS domain	Lucent Technologies								approved
N2-020169	CR	Correction to GPRS Dialogue Handler	Ericsson	CAMEL3	388		A	23.078	Rel-4	4.3.0	approved
N2-020170	CR	Correction to GPRS operation error handling	Ericsson	CAMEL3	234	2	F	29.078	R99	3.10.0	revised to N2-020214
N2-020171	CR	Continue without leg2 at DP2 for MO calls	Vodafone	CAMEL4			B	23.018	Rel-5	5dC1	withdrawn
N2-020172	CR	Continue without leg2 at DP2 for MO calls	Vodafone	CAMEL4			B	23.078	Rel-5	5dC1	approved
N2-020173	CR	Continue without leg2 at DP2 for MF calls	Vodafone	CAMEL4			B	23.018	Rel-5	N2-020007	endorsed
N2-020174	CR	Continue without leg2 at DP2 for MF calls	Vodafone	CAMEL4			B	23.078	Rel-5	5dC1	approved
N2-020175	CR	Continue Without Leg2 at DP12 for MT and VT calls	Vodafone	CAMEL4			B	23.018	Rel-5	N2-020007	endorsed
N2-020176	CR	Continue Without Leg2 at DP12 for MT and VT calls	Vodafone	CAMEL4			B	23.078	Rel-5	5dC1	approved
N2-020177	CR	Clarification on releasing individual call parties	Vodafone	CAMEL4		2	C	22.078	Rel-5	5.5.0	noted
N2-020178	CR	Clarification on NP check at DP2	Nokia	CAMEL3	372	1	F	23.078	R99	3.11.0	approved
N2-020179	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	373	1	F	23.078	R99	3.11.0	revised to N2-020216

N2-020180	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	232	1	F	29.078	R99	3.10.0	revised to N2-020218
N2-020181	CR	Error handling for sequential TCAP Operation components	Ericsson	CAMEL3	233	1	F	29.078	R99	3.10.0	approved
N2-020182	CR	Correction to Advice of Charge for MT calls	Ericsson	CAMEL3	376	1	F	23.078	R99	3.11.0	approved
N2-020183	CR	Correction to Advice of Charge for MT calls	Ericsson	CAMEL3	389		A	23.078	Rel-4	4.3.0	approved
N2-020184	CR	Correction to Advice of Charge for MT calls	Ericsson	CAMEL3	376		F	23.078	Rel-5	3.11.0	potponed to next meeting
N2-020185	CR	MSISDN to be made available to MSC	Ericsson	TEI	390		F	23.078	R99	3.B.0	revised to N2-020206
N2-020186	CR	MSISDN to be made available to MSC	Ericsson	TEI	391		A	23.078	Rel-4	4.3.0	revised to N2-020207
N2-020187	CR	MSISDN to be made available to MSC	Ericsson	TEI			A	23.078	Rel-5	5.D.C1	revised to N2-020208
N2-020188	CR	Conditions for presence of Alerting Pattern in Complete Call	Ericsson	TEI4			F	23.018	Rel-4	4.5.0	withdrawn
N2-020189	CR	Conditions for presence of Alerting Pattern in Complete Call	Ericsson	TEI4			A	23.018	Rel-5	5.2.0	withdrawn
N2-020190	CR	Mapping of CUG information from CAP to ISUP	Vodafone	CAMEL3	237	1	F	29.078	R99	3.10.0	approved
N2-020191	CR	Mapping of CUG information from CAP to ISUP	Vodafone	CAMEL3	238	1	A	29.078	Rel-4	4.3.0	approved
N2-020192	CR	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	Siemens AG	CAMEL3	384	1	F	23.078	R99	3.B.0	approved
N2-020193	CR	Handling Disconnect From IP Forbidden IE in Play Announcement and Prompt And Collect User Information IFs	Siemens AG	CAMEL3	385	1	A	23.078	Rel-4	4.3.0	approved
N2-020194	CR	The waiting for new AC timers	Nokia	CAMEL3	382	1	F	23.078	R99	3.11.0	approved
N2-020195	CR	The waiting for new AC timers	Nokia	CAMEL3	383	1	A	23.078	Rel-4	4.3.0	approved
N2-020196	work plan	CN2 Status of CAMEL4 functionalities	CN2 Chairman	CAMEL4							approved

Number	Type	Title	Source	WI	CR	Rev	Cat	Spec	Release	Version	Status
N2-020197	CR	Definition of CAMEL Subscription Information data for IMS	Lucent Technologies	IMS-CAMEL		1	B	23.278	Rel-5	V1.0.0	approved
N2-020198	CR	Disconnect leg operation for gsmSCF initiated call leg	Vodafone	CAMEL4			B	23.078	Rel-5	5dC1	not handled
N2-020199	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4		2	B	23.078	Rel-5	5dC1	approved
N2-020200	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4		2	B	29.002	Rel-5	5.0.0	approved
N2-020201	CR	Enhancements to subscriber information reporting in the PS domain	Vodafone	CAMEL4			C	23.078	Rel-5	5dC1	approved
N2-020202	CR	Alignment of table A.1 with stage 2	Alcatel	CAMEL3			F	22.078	R99	3.8.0	not handled
N2-020203	CR	Alignment of table A.1 with stage 2	Alcatel	CAMEL3			A	22.078	Rel-4	4.4.0	not handled
N2-020204	CR	Enhancements to subscriber information reporting in the PS domain	Vodafone	CAMEL4		1	C	29.002	Rel-5	5.0.0	approved
N2-020205	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone	CAMEL4		1	C	23.078	Rel-5	5dC1	approved
N2-020206	CR	MSISDN to be made available to MSC	Ericsson	CAMEL3	390	1	F	23.078	R99	3.B.0	approved
N2-020207	CR	MSISDN to be made available to MSC	Ericsson	CAMEL3	391	1	A	23.078	Rel-4	4.3.0	approved
N2-020208	CR	MSISDN to be made available to MSC	Ericsson	CAMEL3		1	A	23.078	Rel-5	5.D.C1	approved
N2-020209	CR	Transferring the MS classmark & IMEI to the gsmSCF	Vodafone	CAMEL4		1	C	23.018	Rel-5	5.2.0	endorsed
N2-020210	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		2	C	23.078	Rel-5	5dC1	revised to N2-020220
N2-020211	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		2	C	29.078	Rel-5	5.6.1	postponed
N2-020212	CR	Error handling for sequential TCAP Operation components	Ericsson	CAMEL3	241		A	29.078	Rel-4	4.3.0	approved
N2-020213	CR	Clarification on NP check at DP2	Nokia	CAMEL3	392		A	23.078	Rel-4	4.3.0	approved
N2-020214	CR	Correction to GPRS operation error handling	Ericsson	CAMEL3	234	3	F	29.078	R99	3.10.0	approved
N2-020215	CR	Correction to GPRS operation error handling	Ericsson	CAMEL3	242		A	29.078	Rel-4	4.3.0	approved
N2-020216	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	373	2	F	23.078	R99	3.11.0	approved

N2-020217	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	393		A	23.078	Rel-4	4.3.0	approved
N2-020218	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	232	2	F	29.078	R99	3.10.0	approved
N2-020219	CR	Clarification on national values of the Called Party Number's Nature of Address field	Nokia	CAMEL3	243		A	29.078	Rel-4	4.3.0	approved
N2-020220	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		3	C	23.078	Rel-5	5dC1	revised to N2-020223
N2-020221	CR	Correction on MT SMS SDL	Alcatel SA	CAMEL4		2	F	23.078	Rel-5	5dC1	approved
N2-020222	CR	Collective CAMEL phase 4 CR on TS 29.002	Ericsson	CAMEL4		1	B	29.002	Rel-5	4.5.0	endorsed
N2-020223	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		4	C	23.078	Rel-5	5dC1	approved