3GPP TSG CN Plenary Meeting #13 Beijing, China, 19^{th –}21st September 2001

NP-010445

Source: MCC

Title: REPORT, CN2#19 Meeting Report

Agenda item: 6.2.1

Document for: INFORMATION

Draft CN2#19 Meeting Report, version 1

DRAFT Meeting Report

TSG CN WG2#19 Dresden, Germany

19 – 13 July, 2001

Chairman: Keijo Palviainen (Nokia)

MCC support: Andrijana Jurisic (ETSI)

Host: Mannesmann Mobilfunk GmbH

List of participants:

Output documents

Annex B

Tdoc list (incl. the status)

Annex C

Joint meeting between CN1/2/3/4

Annex D

Documents could be found on the 3GPP-server:

ftp://ftp.3gpp.org/TSG_CN/WG2_camel/Plenary/TSGN2_19_Dresden/Docs

Opening of the meeting and approval of the agenda

Wednesday is joint meeting. Before the joint meeting, Lucent documents have to be handled.

N2-010476: CN2 chairman, Title: Proposed meeting agenda

Discussion: Document deadline should be Wednesday instead of Friday.

Conclusion :approved

2 Allocation of documents to agenda items

N2-010477: CN2 chairman, Title: Alocation of documents to agenda items

Discussion: New LS from SA2 in document 566 is added at the end of the agenda item 4 as well as document 565 which contains LS from ETSI project BRAN. Documents 529,530,657,557,558 and 560 are withdrawn. Documents 546 and 547 has change in title. Document 511 is moved to agenda item 8.2.

Conclusion: noted

3 Reports

N2-010478: MCC, Title: Draft Meeting Report CN2#18, Puerto Rico

Discussion:

Conclusion: approved

N2-010479: MCC, Title: Draft Meeting Report from CN#12

Discussion:

Conclusion: noted

N2-010480: MCC, Title: Draft Meeting report from SA#12

Discussion:

Conclusion: noted

N2-010544: Lucent Technologies, Title: SA1 CAMEL Ad Hoc report

Discussion: The Ad hoc achieved the objective of providing the necessary service requirements to address the charging issues for Call Party Handling. The ad hoc only partially achieved the objective of addressing all the service requirements for CAMEL interworking with IP multimedia session. An issue that needs to be resolved in TSG SA1 is the scope of CAMEL and how far it applies. No additional ad hoc has been planed.

Conclusion:noted

4 Input Liaison Statements

N2-010 481: Joint CN1,2,3,4, Type: LS IN, Title: LS on IM Call Transfer service

Discussion: This LS is sent as copy to CN2 and is result of the joint meeting in Puertorico.

Conclusion: noted

N2-010482: SA3, Type: LS IN, Title: Response to "LS on the IM Call Transfer Service"

Discussion: Not related to CN2, sent only as a copy to CN2.

Conclusion: noted

N2-010483: SA5, Type: LS IN, Title: Reply to "LS on the IM Call Transfer Service"

Discussion: Sent as a copy to CN2.

Conclusion: noted

N2-010484: Joint CN1,2,3,4, Type: LS IN, Title: Response to LS N1-010504 (S2-010798r2)

Discussion:

Conclusion: noted

N2-010485: SA5, Type: LS IN, Title: Reply to N2-010440

Discussion:

Conclusion: noted

N2-010489: GERAN, Type: LS IN, Title: Terminology clarifications

Discussion: This LS asks to avoid terms 2G ans term 3G as well as terms GSM system and UMTS system. Terms

GERAN Iu mode and UTRAN Iu mode should be used. A/Gb mode is the other mode within GERAN.

Conclusion: noted

N2-010561: SA5, Type: LS IN, Title: Reply to N2-010446 "LS on introduction of SMS Reference Number for SMS"

Discussion: This LS is just a message to CN2 that no action will be taken in SA5 if related CRs are not approved. SA5

is aware that related CRs are not approved.

Conclusion: noted

N2-010565: BRAN Project, Type: LS IN, Title: Interworking between HiperLAN II technology and WLAN

Discussion: For which release it belongs to and requirement for SA1 is needed from SA1if this LS is approved by SA

Plenary.

Conclusion: noted

N2-010566: SA2, Type: LS IN, Title: LS on ISC

Discussion:

Conclusion: noted in the joint meeting

N2-010585: SA1, Type: LS IN, Title: Reply to LS "Optimal Routing of a forwarded call"

Discussion: SA1 thank CN2 for their liaison statement asking for clarification on Optimal Routeing for a forwarded call.SA1 prefers same option as CN2, i.e. to allow OR in both IPLMN and VPLMN. CAMEL stage 2 can be changed

now.

Conclusion: noted

N2-010586: SA1, Type: LS IN, Title: "Charging and Information concepts for CAMEL Call Party Handling"

Discussion: During the meeting in Dallas, SA1 came to the similar conclusion as CN2 that the principle of charging on a per Call Leg basis gives the most flexibility. This is especially true for the case for the procedure of CSE control of call duration.

The procedures "Inclusion in charging records of information received from the CSE" and the "Support of additional charging information to the CSE" shall be on a per call leg basis too. SA1 came to the conclusion that a change in the CPH configuration may lead to a change in the maximum call duration period in the case where CSE control over call duration is applied. CSE may overwrite a previously sent tariff switch and associated e-parameters in the VPLMN.

T-Mobil would like to see how this mechanism works and how this is implemented in specification, to avoid possible contradiction in requirements.

SA1 has progressed on this work and CR to 22.078 is produced and is attached to this document.

As the charging principle is on a per Call Leg, Call Leg includes SRF. CSE can be in HPLMN and VPLMN according the stage1. Can CSE change maximum call duration? SCP is sending e-parameters to MSC where they are stored, and MSC sends e-parameters to MS. If the MSC is not allowed to send them to MS, MSC can discard e-values or MSC can

store e-parameters. According to stage 2, MSC will store e-values until the call is answered. The requirement that the MS has to be active to receive e-values (call leg is active), must not be removed.

According to CR, ACR reported only in the end of call period and not if there is a change in CPH configuration. In the SDLs ACR is sent when exported.

Contradiction in specification has to be highlited to SA1? Alcatel would like to wait unti Siemens CR is handled, because this CR could solve this problem. T-Mobil would like to see this CR in CN2.

Conclusion: noted

Work item management & miscellaneous Status of CN2 specifications and drafts

Туре	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	6.9.1	N2	LANTELME, Isabelle
TS	03.78	CAMEL Phase 2; Stage 2	R1998	7.6.1	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	3.9.0	N2	HOMANN, Christian
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	Rel-4	4.1.0	N2	HOMANN, Christian
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	R1999	3.8.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	Rel-4	4.1.0	N2	NOLDUS, Rogier
Draft	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-5	5D.8.2	N2	SUMIO, Myagava
Draft	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase;CAMEL Application Part (CAP) specification	Rel-5	d5.2.0	N2	NOLDUS, Rogier

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 does not need to be declared at the WG meeting but should go to the respective organization. No IPRs were declared.

5.2 Work Item (WI) status review

N2-010562: MCC, Type: Information, Title: Latest version of the Workplan

Discussion: Building Block "Camel applicability to media streams like VoIP" will be deleted under CAMEL4 work item. Under the work item "Provisioning of IP based multimedia services" new BB is added with the name "Support of the CAMEL by the IMS" (start date is set to beginning of this meeting). Progress of the items will be adjusted according to the document document 627 (revised 487).

Conclusion: noted

N2-010487: CN2 Chairman, Title: Comments on the 3GPP work plan (CAMEL4 progress)

Discussion:

Conclusion: revised to 627

N2-010627: CN2 Chairman, Title: Comments on the 3GPP work plan (CAMEL4 progress)

Discussion:

Conclusion: approved

5.3 CAMEL4 CN Work Item Description

N2-010488: CN2 Chairman, Title: Update of CAMEL4 WID in Rel-5 for TSG CN

Discussion: Coments in chapter 4 and 9 are removed and document is revised.

Conclusion:revised to 567

N2-010567: CN2 Chairman, Title: Update of CAMEL4 WID in Rel-5 for TSG CN

Discussion:

Conclusion: approved without presentation

6 CAMEL3, Resolution of outstanding issues for Release 99

6.1 CAMEL3, Miscellaneous

N2-010518: 23.078, R99, Rapporteur, Type: CR 310, Title: Correction of error implementing CR 23.078-194r3

Discussion: This CR corrects an error that occured during implementation of CR 23.078-194r3. Procedure name is changed on the SDL sheet and the title of the figure. This procedure is only called in 23.078.

Conclusion: Revised to 525

N2-010525: 23.078, R99, Rapporteur, Type: CR, CR310r1, Title: Correction of error implementing CR 23.078-194r3

Discussion:

Conclusion :approved

N2-010526: 23.078, Rel-4, Rapporteur, Type: CR, CR311, Title: Correction of error implementing CR 23.078-194r3

Discussion:

Conclusion :approved

N2-010574: 23.078, R99, Nokia, Type: CR, CR319, Title: correction on CAMEL3 InsertSubscriberData

Discussion: According to Nokia the VLR behaves differently in CAMEL phases 1 & 2 compared to CAMEL phase 3. VLR can not know which CAMEL phase the HLR is following. The VLR can not detect the HLR CAMEL phase based on CAMEL capability Handling since the particular subscriber may have CAMEL2 CSI(s) in a R99 HLR. This CR says that R97/R98 HLR does not interwork with R99 MSC/VLR when a CSI is deleted or modified.

New parameter to MAP is added (in Insert SubscriberData) to indicate the modified CSI - to indicate whether the VLR shall replace only the CSIs that the HLR has sent within one MAP dialogue. The R99 (or later) HLR shall send this IE along with the modified CSI(s) only if the VLR has indicated support of CAMEL phase 3 or later. If absent the VLR shall replace the complete set of VLR CAMEL subscription Info, and the HLR shall send the complete set of the VLR CAMEL subscription Info.

Ericsson would like to have clearly specified how the HLR and VLR shall behave dependent on supported CAMEL phases. If the VLR has reported CAMEL phases the clear description of HLR behaviour shall be specified in 23.078.

On the joint meeting it was explained that "The specific elements of VLR CAMEL Subscription information which may be sent are: VLR CAMEL Subscription Information applicable for CAMEL1 and 2, D-CSI, VT-CSI, TDP-Criteria for VT-CSI, SMS-CSI, M-CSI." O-CSI is only a part of VLR CAMEL Subscription Information. Improvement in wording is necessary.

Conclusion: withdrawn on joint meeting

N2-010575: 29.002, R99, Nokia, Type: CR, Title: Correction on CAMEL3 InsertSubscriberData

Discussion:

Conclusion: withdrawn

N2-010551: 29.078, R99, Ericsson, Type: CR,CR 192, Title: Corrections to ASN.1 syntax

Discussion: After syntax check done by Protocol and testing competence center within ETSI, a number of syntax errors are found. CR was postponed to give a delegates more time to study proposed changes. If this CR is approved, the mirror CR will be needed.

Nokia supports CR to 29.078 and it's up to CN4 group whether they will approve the CR to MAP specification.

Some data types that are IMPORT-ed from MAP Modules are not EXPORT-ed in the MAP specification. That requires a separate CR on 29.002. Comments regarding EXPORT should be removed. The cover page indicates that 29.002 is affected specification and as this is not critical, this comment will be deleted. Siemens would like indication per change whether it is correction or approvement. Changes to "bounds" are corrections and only change in data type definitions for "exstensions" is approvement (change of style).

In cover sheet Rel-5 is corrected to R99. For next version of the specification, the same syntax check will be done.

Conclusion: revised to 587

N2-010587: 29.078, R99, Ericsson, Type: CR, CR 192, Title: Corrections to ASN.1 syntax

Conclusion: approved without presentation

N2-010588: 29.078, Rel-4, Ericsson, Type: CR,CR 192, Title: Corrections to ASN.1 syntax

Conclusion: approved without presentation

N2-010589: 29.002, R99, Ericsson, Type: CR (CN4 CR#305), Title: Corrections to ASN.1 syntax

Discussion: On CN plenary the source will be CN4. Mirror CR to Rel-4 will be provided.

Conclusion: noted on CN2 meeting, approved on joint meeting with CN4

6.2 CAMEL3/ATM&ATSI

No contributions received.

6.3 CAMEL3/GPRS

<u>N2-010546</u>: 23.078 R99, Type: CR, CR 314, Alcatel, T-Mobil&Ericsson, Title: Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs

Discussion: Content of this CR was approved on the last working group meeting, but it was controversial and rejected on the plenary in Stockholm. New CR with the same content is submitted to CN2#19. In the future, CRs should be approved by consensus or rejected on the working group meeting.

29.078 specifies that the gprsSSF shall memorise the gsmSCF address that is returned by the gsmSCF. The gprsSSF needs this address for the possible follow-up TC dialogues comprising a common GPRS dialogue. However the gsmSCF itself does not return this address. Neither the TC interface itself does provide this address to its TC user. It is proposed in this CR to include the required information in the Continue GPRS and Connect GPRS IFs.

Siemens submitted the proposal to remove the requirement to memorise gsmSCF address. Siemens proposal (NP-010317 sent directly to plenary) was a kind of maximum compromise to original CR proposed by Alcatel, T-Mobile and Ericsson.

Lucent stated that this is not an essential correction. Lucent and Nokia see that as non-essential correction and rather support Siemens counter proposal.

Alcatel's view is that this CR corrects a fault within specification and this makes the correction "essential". In order to find a compromise, Ericsson proposes to introduce the date from which this solution should be introduced. Lucent will not support this CR even with cut-over date, before other solutions (proposals) are presented and discussed.

Ericsson stated that the only way to solve this problem is to remove the requirement to memorise gsmSCF address and to use GPRS SCI. T-Mobil would like to see only one solution specified in specification.

To make a compromise, two options will be specified without defining which option is prefferred. In GTT has to be possible to support both options (both adresses). New CR will be produced that allowed both options.

New Title: Using gsmSCF Addres of GPRS CSI for establishing TCAP dialogs.

Conclusion :rejected, CR will be changed in principle and the CR will be to stage3

<u>N2-010590</u>: 29.078 R99, Type: CR, CR 198, Alcatel, T-Mobil&Ericsson, Title: Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs

Discussion: This CR is the result of the discussion on document 546. In this CR following sollution is propossed:

For the establishment of a new TC dialogue within the context of the current CAMEL relationship, the gprsSSF may apply one of the following mechanisms:

- (1) the gprsSSF shall memorise the gsmSCF address used in the first response message to the InitialDPGPRS and use it to open the new TC dialogue;
- (2) the gprsSSF shall use the gsmSCF address from GPRS-CSI to open the new TC dialogue.

Standard TC functionality shall not be reexplained in 29.078. Double revision marks should be removed.

Conclusion : revised to 602

N2-010602: 29.078 R99, Type: CR, CR 198, T-Mobil&Ericsson , Title: Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs

Discussion: MCC will remove double revision marks offline.

Conclusion: approved

<u>N2-010615</u>: 29.078 Rel-4, Type: CR, CR 199, T-Mobil&Ericsson , Title: Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs

Discussion: Removal of double revision marks needed.

Conclusion: approved

<u>N2-010547</u>: 29.078 R99, Type: CR, CR 191, Alcatel, T-Mobil&Ericsson, Title: Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs

Discussion:

Conclusion : rejected

N2-010569: LS OUT to CN4, Alcatel, Title: DRAFT Liaison Statement on "Unique GGSN Addresses"

This LS will be sent to CN4 to clarify following questions:

Can the GGSN address for control plane change during an Inter SGSN Routeing Area Update Procedure? Are there other procedures during which the GGSN address may change?

If the GGSN address changes does the new GGSN allocate a new charging ID?

If the address changes, does it also mean that the actual GGSN has changed? It may be that the GGSN address changes, but that the charging ID is unique in respect to the single actual GGSN?

The word "session" is changed to "PDP context". Some wording improvements are done and the document is revised.

Conclusion: revised to 576

N2-010576: LS OUT to CN4, Alcatel, Title: DRAFT Liaison Statement on "Unique GGSN Addresses"

Discussion: N4-010931, Joint meeting with CN4

N2: Charging ID leads to control plane and not to user plane, therefore charging ID must be unique and it relates to GGSN address for the control plane.

If there is a change from one IP address to another IP address, the charging ID should stay the same within one PDP context. If charging ID remains the same and the GGSN address changes, what is the mechanism to know that 2 GGSN addresses are the same. Where to get the information about the correlation between 2 GGSN addresses.

CN4: In GTP specification, if we allow load sharing to reconfigure pdp context, the specification should be reconfigured. It will be easier not to allow load sharing. If the load sharing is introduced in GTP spec., CSE shall know the abstract identity of the GGSN address. Mapping of GGSN address and GGSN identity must be available to the CSE.

When the load sharing is introduced with possibility to change dinamicaly, requirement for CSE will be taken into account (using Update PDP Context Procedure, GGSN address will be updated).

CAMEL standard shall to be based on current GTP specification.

CN2: even postpaid CDRs (charging of PDP context) will have problems with different GGSN address.

GGSN address and Unique charging ID will be used for PDP context identification, because prepaid can not rely on postprocessing. This mapping should be on line. Postpaid subscribers can rely on mapping in postprocessing.

CN4: CSE should have access to database which has correlation of GGSN addresses. GTP protocol can transffer them to CSE by the CAP protocol?

No answer to CN2 can not be provided on this meeting. Contribution (modification of GTP) shall be provided first to CN4 with guidance of CN2. CN4 adHoc will work on this issue and provide an answer to CN2 in October. CN4 should provide information to SA5.

CN2: GGSN NE does not change and GGSN address changes: can GGSN address change once at the PDP context or multiple time (load sharing within one GGSN)? CN4 answer: GGSN address can change multiple times.

Conclusion :approved

6.4 MO SMS

N2-010517: R99, Vodafone, Type: DISC, Title: Reference Number for MO-SMS in CAMEL3

Discussion: Siemens opinion is that this is a functional enhancement and tried to find solution without using principle presented in this CR. Siemens stated that if one company has objection, the CR can not be agreed by consensus. Nokia has not strong objections if this causes lot of problems to operators.

Ericsson proposal is to introduce the date from which this solution will work. Nokia's proposal is that we decide on cut over date (next year) after which this should be in R99 spec.

There are 3 possibilities to conclude on this CR: to accept this CR without cutover date, to accept this CR with cutover date or to reject the CR.

Siemens sees that as additional feature, but not as an essential correction and will continuously show the objection on this issue in R99 and Rel-4, but will not show the objection on introduction of SMS reference number for MO-SMS together with the reference number for MT-SMS in Rel-5 in CAMEL Ph4, if the proposal is placed in time.

Conclusion is that MO SMS reference number is not part of CAMEL phase 3. When the contribution is submitted for Rel-5, the issue will be discussed for CAMEL phase 4.

Conclusion: noted

6.5 CAMEL3/Call Related

N2-010527: 23.078, R99, CR#312, Siemens AG, Type: CR, Title: Possible infromation in Initial DP

Discussion: In the case of the TDP Collected_Infor, it is possible that four information elements, Additional Calling Party Number, Original Called Party ID, Redirecting Party ID and Redirection Information, are received from the gsmSCF in CONNECT operation. In this case, these elements shall be sent in the subsequent Initial DP due to the TDP Analysed_Info. This CR change the attributes of mentioned IEs to "C" (conditional) from "-" (not applicable)

Wording needs to be revised for the redirection information. Additional clarification needed.

Conclusion: revised to 568

N2-010568: 23.078, R99, CR#312r1, Siemens AG, Type: CR, Title: Possible infromation in Initial DP

Discussion: Editorial correction: "this IE shall be also sent".

Conclusion: revised to 596

N2-010596: 23.078, R99, CR#312r2, Siemens AG, Type: CR, Title: Possible infromation in Initial DP

Discussion:

Conclusion: approved without presentation

N2-010528: 23.078, Rel-4, CR#313, Siemens AG, Type: CR, Title: Possible infomation in Initial DP

Discussion: Additional CgPN was not marked as conditional.

Conclusion: revised to 597

N2-010597: 23.078, Rel-4, CR#313r1, Siemens AG, Type: CR, Title: Possible infromation in Initial DP

Discussion:

Conclusion: approved without presentation

N2-010529: 29.078, R99, CR#189, Siemens AG, Type: CR, Title: Possible information in Initial DP

Discussion:

Conclusion: withdrawn

N2-010530: 29.078, Rel-4, CR#190, Siemens AG, Type: CR, Title: Possible information in Initial DP

Discussion:

Conclusion: withdrawn

N2-010553: 23.078, R99, Siemens, Type:CR, CR315, Title: Correction of Process Reconnected_MT_Call_VLR

Discussion: Siemens proposes that as in the GMSC, there should be a destination number check also in the VMSC. It has been decided some time ago that the additional check is not needed. We should rely on SCP behaviour and not to include additional checks.

Conclusion: rejected

N2-010554: 23.078, Rel-4, Siemens AG, Type:CR, CR316, Title: Correction of Process Reconnected_MT_Call_VLR

Discussion:

Conclusion: rejected

N2-010555: 23.078, R99, Siemens AG, Type:CR#317, Title: Correction of CUG information handling in SDLs

Discussion: According to Vodafone, this CR is not in line with Stage 1 and SDL needs change, but not the text. Alcatel agrees with Siemens CR and during reading 22.078 section 18.6, delegates agreed that Siemens CR is in line with stage 1.

We can change CUG information only if it is a CAMEL CF, but not if it is a SS CF. In the last sentence exspression "For an MT or VT call which is to be forwarded under CAMEL control" is changed to expression "For an MT or VT call which is subject to CAMEL forwarding".

Conclusion: revised to 577

N2-010577: 23.078, R99, Siemens AG, Type:CR#317r1, Title: Correction of CUG information handling in SDLs

Conclusion: approved without presentation

N2-010556: 23.078, Rel-4, Siemens AG, Type:CR#318, Title: Correction of CUG information handling in SDLs

Discussion:

Conclusion:revised to 578

N2-010578: 23.078, Rel-4, Siemens AG, Type:CR#318, Title: Correction of CUG information handling in SDLs

Discussion:

Conclusion:approved without presentation

<u>N2-010557:</u> 29.078, R99, Siemens AG, CR#193, Title: Collection to the misalignment of the backward service interaction indicator

Discussion:

Conclusion:withdrawn

N2-010558: 29.078, Rel-4, Siemens AG, CR#194, Title: Collection to the misalignment of the backward service interaction indicator

Conclusion: withdrawn

<u>N2-010559</u>: 29.078, R99,CR#195, Siemens AG, Type: CR, Title: Correction of the handling ORLCF for reconnected calls

Discussion: Content must be revised and this CR should be submitted for 23.078 but not to 29.078 as stated in Request sheet. 23.018 needs change as well. New Tdoc number will be allocated.

Conclustion: rejected

N2-010560: 29.078, Rel-4, CR#196, Siemens AG, Type: CR, Title: Correction of the handling ORLCF for reconnected

calls

Discussion: Originator of the CR wants to check R99 changes first and due to this to withdraw this document.

Conclustion: withdrawn

7 CAMEL for Release 4

7.1 General and miscellaneous Rel-4 issues

7.2 CAP over IP

No contributions received.

8 CAMEL4, Release 5

8.1 CAMEL 4 / Stage 1

No contributions received.

8.2 Miscellaneous CAMEL 4 issues

N2-010531: 23.078, Rel-5, Raporteur, Type: TS-INFO, Title: Draft 23.078 V5d.8.2

Discussion: This document will be basis for the next draft version 5d.9.0.

Conclusion: noted

N2-010490: 23.018 Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL phase 4

Discussion: This CR combines change requests to 3GPP TS 23.018 that have been approved in TSG-CN2 under the CAMEL Phase 4 work item. This kind of update is welcomed. CN2 thanks Vodafone for the hard work.

Conclusion: noted

N2-010491: 23.083, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL phase 4

Discussion: This CR combines the CRs to 3GPP TS 23.083 that have been approved in TSG-CN2 under the CAMEL Phase 4 work item. This version introduces the changes to the Process_Call_Waiting procedure, based on those proposed to the same procedure in N2-010234.

Conclusion: noted

N2-010511: 23.078, Rel-5, Alcatel, Type: CR, Title: Missing O-BCSM model transition description

Discussion: As text is missing in the description of the O-BCSM model, this CR provides text for the O-Alerting->Route_Select_Failure transition for the O-BCSM model description.

Conclusion :approved

N2-010542: 23.078, Rel-5, Siemens AG, Type: CR, Title: Inclusion of charging indicator at answer DP

Discussion: This CR proposes to add the charging indicator to the information to be provided to the CSE. In the MSC a charge indicator may be received via one (or more) of the following ISUP messages: (CON, ACM, CPG and/or ANM). The MSC may write a charge indicator in the Call Data Record. For this purpose the MSC evaluates the received charge indicator and write the result into the Call Data Record (either directly like received via ISUP or changed by MSC itself). The CSE does not know the charge indicator stored in the Call Data Record within the MSC and for prepaid subscribers this charging information is essential for the CSE.

IF MSCdetects that call is free of charge it sends the information to SCP. Lucent is concerned about the service rquirement (whether MSC is that one that can detect that a call is free of charge). Can the MSC be charging node? Information is sent to SCP only if Answer DP is armed.

Alcatel proposes different wording to indicate the call is chargable or not. Wording in the parameter description "shall be charged" is not a good working. It is necessary to indicate where this parameter is coming from.

Conclusion: revised to 570

N2-010570: 23.078, Rel-5, Siemens AG, Type: CR, Title: Inclusion of charging indicator at answer DP

Discussion: According to Siemens charging exchange term is not used in mobile networks. Each SSP that receive apply charging, can be charging exchange. Charging record can be generated in exchange B for leg B of the call A-B. Charging indicator is set for all the cases.

CF case: The forwarding node does not convey parameter transparently backwards.

If ACM message comes to MSC, MSC stores it (the parameter is mandatory in ACM message) .

Alcatel has concern about interworking. It has to be checked if this CR is in line with basic interworking document (CN3). More detailed description is needed how this parameter is used .

Conclusion: postponed till next meeting

N2-010543: 29.078, Rel-5, Siemens AG, Type: CR, Title: Inclusion of charging indicator at answer DP

Discussion: This document is postponed untill stage 2 document is handled (next meeting).

Conclusion: postponed

8.3 CAMEL4/Optimal Routing

8.4 Call Party Handling

N2-010492: Vodafone, Type: DISC, Title: CPH Open Issues and decisions

Discussion: After all CPH contributions are handeled, new issues will be aded in revised version of the discussion

document.

Conclusion: revised to 616

N2-010616: Vodafone, Type: DISC, Title: CPH Open Issues and decisions

Discussion: The document will be delivered for e-mail discussion.

Conclusion : noted

N2-010519: Rel-5, C-DOT, Type: disc, Title: Charging Notifications to CSE for a CPH configuration

Discussion: It should be specified what charging applies to calling leg and what to called leg.

CDOT is proposing that Event Notification Charging is on leg basis. In multiple call on behalf of one subscriber, multiple legs will receive charging operations, but one subscriber can pay those charges.

Party to charge is defined by CSE. If the charging is per leg, the leg that should be charged should be identified (calling leg or called leg). The intention of CDOT is to let CSE decide to whom the charges will be charged. In ICA case the charging would be assigned to the called leg. "SCF can ask for charging information either in terms of Total or Components and SSF will report it accordingly." Principles presented in this contribution are agreed. Clarifications will be added. More contributions are expected. Ruth (Vodafone) will record CPH issues.

Conclusion: noted

N2-010514: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of 'Procedure Handle_SCI' for Call Party Handling

Discussion: On Camel adHoc meeting definitions are agreed for called party and called party leg, and the document should be in line with these definitions. "Called Party Leg" is not used consistently.

This CR is to enhance charging in respect to Call Party Handling. It considers a separate tariff switch timer for SCI and enhances the SCI procedure to cover also the case of multiple call legs. Several call legs may be in the alerting state and may answer at some point in time, i.e. the first answer starts in general the charging. For the SCI Tariff Switch timer there are always e-parameters due to the fact that there are independent Tariff Switch Timers for the control of call duration and for the SCP control of e-values. The SCP is always allowed to overwrite the tariff switch and the e-parameters.

Procedure description of Apply Charging and Apply Charging report should be studied carefuly. This CR proposes that SCP can replace e-parameters any time independent of history of the call.

Nokia is not happy with this approach and will submitt counter proposal. According to Nokia one Tsw could apply to AoC party, given in SCI or AC. All other legs can have different Tsw in conveyed AC for that leg. The term Tsw is confusing, it relates to AC/ACR.

Ericsson has concern whether this is backward compatible change compared to CAMEL2. Nokia will provide a draft CR before next meeting, during the August. If we send tarriff switch and e-parameter and we have more parcitipans, we have to have possibility to change e-parameters and tarriff switch.

Comments will be taken in to consideration in the revised document for the next meeting.

Conclusion :postponed to next meeting

<u>N2-010515</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Information Flow for Call Party Handling support

Discussion: This CR proposes introduction of the new parameter "Call Leg" that identifies the call party. This IE identifies the call party concerned by the Apply Charging operation. "Call Leg" can identify a Leg towards a SRF.

In 2 party call, if one Call Leg Released due to Tcp Expiry and only one leg is left, if there is CAMEL control relationship, the remaining leg will not be released. Follow on call is possible for the remaining leg. In case of multyparty call, if A party releases, other legs should remain in the call. Service designer can set up timer after which remaining parties will be released.

If there is no CAMEL control relationship for remaining legs, then call is released. If there is announcement playing, and the timer expires for one of the call legs, then this leg is released, but the announcement plays for other legs. The announcement is considered as a leg.

Call Leg parameter is optional and should be used for message routing. PartyToCharge could be renamed. Nokia preference is to use existing parameters and Alcatel would like to introduce new parameter. Call leg indicates to which leg certain operations applies. Ericsson prefers to add new parameter rather than use different meaning of the existing parameter.

CallActive parameter should be leg related.

Vodafone proposes to rename parameter to Leg ID. Alcatel prefers Call leg or Called party leg.

Principles from Vodafone point of view: in CAMEL4 in 2 party call if Tcp timer expires for one leg, decision is to keep the other party and dialoque active.

Alcatel proposes to keep the same behaviour as in CAMEL3. In case of A-B call, if A is released, B will be released. It has to be defined what is the basic A-B call for which CPH will never happen. Backward compatibility has to be kept for multy party call.

Conclusion: The history should be kept whether there was CPH or not.

What should be done in the case when 2 parties are left in the call and Tcp timer expires for one of the legs? This leg should be released, and the second leg should be left if there is CAMEL control relationship (it's on SCF to decide what to do). Vodafone wants to keep other party in the call.

Conclusions:

- In the case of 2 party call, we keep other party in call if there is a CAMEL control relationship and we keep the remaining CAP dialogue. Ruth will record this to Vodafone document.
- Call leg is changed to Leg ID and should be changed to mandatory. Consistency with SDLs has to be checked.
- change: leg active

Conclusion : revised to 583

<u>N2-010583</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Information Flow for Call Party Handling support

Discussion: Vodafone stated that "or party to charged" can not be just deleted from SDL and this needs further study. Alcatel's view is that this should be deleted from SDL and to start further study from this point.

Conclusion : revised to 617

<u>N2-010617</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Information Flow for Call Party Handling support

Discussion:

Conclusion : revised to 624

<u>N2-010624</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Information Flow for Call Party Handling support

Discussion:

Conclusion: Following e-mail approval session, this CR was approved.

<u>N2-010516</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Procedure for Call Party Handling support

Discussion: This contribution has a goal to enhance charging in respect to Call Party Handling.

scf-ID was not in previous contribution.

On page 34, Process CS_gsmSSF (sheet 23), SDL releases only one party and the remaining party is not released. What happens when Tccd expires for a leg: are all released?

On Pg50 in the Procedure Handle_ACR (sheet 1), it will be enough to mention in SDL diagram only CAMEL 4. For information about CAMEL 3, CAMEL 3 spec should be consulted.

Tsw(SCI) should be removed from this CR.

Conclusion : revised to 584

<u>N2-010584</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Procedure for Call Party Handling support

Discussion: revision of 516, 3 changes shall be done on this document:

- cancel the Tsw (SCI) change (compared to Tdoc 516, we'll have a separate timer)
- a wording change to Tsw explanation is needed and
- "call leg active" has to be changed to "leg active".

Conclusion : revised to 618

<u>N2-010618</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Enhancement of Apply Charging Procedure for Call Party Handling support

Discussion:

Conclusion :approved without presentation

N2-010493: 23.078, Rel-5, Vodafone, Type: CR, Title: State transition after Disconnect Leg operation

Discussion: This CR proposes a change that corrects missalignment with core INAP specification. Change is to the SDLs so that after performing a Disconnect Leg operation, the CS_gsmSSF process moves to the state Waiting_For_Instructions. Nokia and Alcatel support the CR.

Conclusion :approved

N2-010494: 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MF call case)

Discussion: In this CR Vodafone defined that when a basic call is answered, if a CAMEL4 control relationship exists, the handling of the legs will be seperated into two MSC processes, specified within 23.078. The SDLs do not cover the scenario where leg2 disconnects and the gsmSCF requests a reconnect. CR introduces corrections to SDL handling for the MF call case.

GsmSSF sends the Int_release_call message to each procedure/process it has connection to.

Conclusion: revised to 598

N2-010598: 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MF call case)

Discussion:

Conclusion: approved without presentation

N2-010495: 23.018, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MF call case)

Discussion: Due to the changes in N2-010494, the Release message is not sent to the originating process in procedures CAMEL_CF_MSC_ALERTING and CAMEL_CF_MSC_ANSWER. Hence, process MT_CF_MSC is remodelled to send the release.

Conclusion: approved

<u>N2-010496</u>: 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MT & VT call case)

Discussion: Interworking with optimal routing is an open issue. Siemens will produce CR on this open issue for the next meeting.

Conclusion:approved

<u>N2-010497</u>: 23.018, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MT & VT call case)

Discussion: This will be part of collective CR

Conclusion :approved

<u>N2-010498</u>: 23.079, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MT & VT call case)

Discussion: This CR will be combined with previously approved CRs to 23.079.

Conclusion :approved

N2-010499: 23.083, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg 2 disconnect (MT & VT call case)

Discussion: Will be incorporated in collective CR to 23.83.

Conclusion: approved

N2-010500: 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect in gsmSSF

Discussion: Process CSA_gsmSSF does not take into account the possibility that a leg (not leg ID 1) can be reconnected on disconnect or unsuccessful call establishment. This CR proposes Changes to Process CS_gsmSSF so that the leg status report message is only sent if a reconnect will not happen and changes to Process CSA_gsmSSF so that the LegIDx_state is set to Set-up on receipt of a Connect message for that leg.

Why multiple CS and one CS are separated in different branches in SDL? Alcatel would leave "Message contains LegID" check box as well for Multiple call segment . Vodafone agrees and will revise the CR.

Conclusion : revised to 599

N2-010599: 23.078, Rel-5, CR r1, Vodafone, Type: CR, Title: Handling of Reconnect in gsmSSF

Discussion:

Conclusion :approved without presentation

N2-010501: 23.018, Rel-5, Vodafone, Type: CR, Title:Use of SRI operation by gsmSCF

Discussion: This CR proposes change to Process SRI_HLR, so that the procedure CAMEL_ICA_HLR is called if the SRI operation came from the gsmSCF. Vodafone may want to change GMSC-address parameter and have a new flag in the SRI (gsmSCF initiated call).

How CAMEL3 HLR will handle gsmSCF initiated call will be listed as new open issue.

The change request for 23.079 is needed because of change of GMSC address.

Conclusion :approved

N2-010619: 23.018, Rel-5, Vodafone, Type: CR, Title:Use of SRI operation by gsmSCF

Discussion: This document was forseen for reviseion of 501, but later concluded that the revision is not needed.

Conclusion: withdrawn

<u>N2-010621</u>: 23.079, Rel-5, Vodafone, Type: CR, Title: Change of name: "GMSC address" to "GMSC or gsmSCF address" in SRI

Discussion: To solve inconsistency in parameter names between MAP and this specification, parameter name "GMSC address" is changed to "GMSC or gsmSCF address" in SRI.

Conclusion: approved

N2-010502: 23.078, Rel-5, Vodafone, Type: CR, Title:Use of SRI operation by gsmSCF

Discussion: When a gsmSCF wants to initiate a call direct to the VPLMN of the served subscriber, it first interrogates the HLR to find the MSRN. This requires additional parameters in the SRI. Process CAMEL_ICA_HLR is now a procedure called by SRI_HLR (in 23.018). The subclauses referring to SRI for ICA have been replaced with SRI. Supress T-CSI should be in the table of IEs of Send Routing Info. If SCP does not suppress CSI, HLR would return CSI to SCP. Procedure CAMEL_ICA_HLR has to be corrected.

Conclusion : revised to 603

N2-010603: 23.078, Rel-5, Vodafone, Type: CR, Title:Use of SRI operation by gsmSCF

Discussion: 23.018 is affected due to GMSCaddress parameter name change (SRI).

Conclusion :approved

N2-010503: 29.002, Rel-5, Vodafone, Type: CR, Title: Use of SRI operation by gsmSCF

Discussion: 21.2/1 Figure number and the title has to be changed. In the new figure there is HLR inquiry in two phases. Only one interrogation to HLR is enough?

Conclusion : revised to 604

N2-010604: 29.002, Rel-5, Vodafone, Type: CR, Title:Use of SRI operation by gsmSCF

Discussion: If the procedure is written in "italic", it's an optional procedure. This document has wrong reference to GSM 03.78 by accident.

Conclusion :approved ,it will be a part of the collective CR

N2-010512: 23.078, Rel-5, Alcatel, Type: CR, Title: Clarification on NC/NP usage in the Information Flow Tables

Discussion: If we allow trigger of N-CSI for an NC call, change in SDL is needed.

Vodafone would like to delete the sentence: "The NC column is applicable if a NC call triggers because of N-CSI." Requirement in stage 1 should be updated first, then this could be introduced in stage2. In editor's note, "NP coulmn in this IF may need further study " should be deleted.

D-CSI applies for NP and can be suppressed on ICA basis. NC has no D-CSI. Rogier don't want to trigger D-CSI/N-CSI in a ICA call .

Conclusion :postponed till next meeting, service requirement open

<u>N2-010513</u>: 23.078, Rel-5, Alcatel, Type: CR, Title: Specification and clarification on NC/NP columns of the Initial DP Information Flow

Discussion: GMSC Address is used only in CF case? GMSC Address is used actually in specific condition. In description of IMSI correction is needed. GMSC address as well as IMSI shall be "S". Subscriber state has to be clarified to which subscriber it is concerned. Ruth opinion is that sending of Subscriber state is not necessary and it doesn't add any new value.

Vodafone opinion is that this CR should wait stage 1 clarification as well as previous. Alcatel thinks that it will be enough to remove relevant NC part and revise the document for this meeting. Revised CR shall cover NP column only.

Conclusion: revised to 605

N2-010605: 23.078, Rel-5, Alcatel, Type: CR, Title: Specification and clarification on NC/NP columns of the Initial DP Information Flow

Discussion: document 605 is modifying only NP column

Conclusion :approved

<u>N2-010504</u>: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of CPH parameters in existing CAP operations

Discussion: ContinueWith Argument may be also used in T-BCSM, operation may result in call forwarding? SCI shall not be modified.

Table 11-1 will be deleted, but "leg2" will be changed to "not leg1" in the original table.

Conclusion : revised to 606

<u>N2-010606</u>: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of CPH parameters in existing CAP operations

Conclusion: approved without presentation

<u>N2-010505</u>: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of DisconnectForwardConnectionWithArgument procedure

Discussion : CPH requires a new operation - DisconnectForwardConnectionWithArgument, so this CR proposes the introduction and description of the DisconnectForwardConnectionWithArgument procedure.

Operation is used also when CS-id is not needed (first paragraph). Last sentence in DisconnectForwardConnectionwithArgument procedure description is deleted (clause 11.a.1).

Conclusion : revised to 607

<u>N2-010607</u>: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of DisconnectForwardConnectionWithArgument procedure

Discussion:

Conclusion :approved without presentation

N2-010506: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of DisconnectLeg procedure

Discussion: This CR introduces description of DisconnectLeg procedure which is required for CPH.

gsmSSF Postconditions, bulet 2 will be revised in wording . gsmSSF Preconditions: shall be on leg basis.

Midd call DP we don't have at "any phase of the call" (Vesa). In bulet 5, last 2 sentences (gsmSSF Postconditions) can be deleted to remove this conflict.

If the DicsonectLeg is sent, just impacted leg is disconnected and other legs should not be interrupted.

Vodafone finds important to include, at least, description of this operation in the draft of CAMEL4 . Note will be added that this is for further study.

Conclusion : revised to 608

N2-010608: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of DisconnectLeg procedure

Discussion:

Conclusion :approved without presentation

N2-010507: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of EntityReleased procedure

Discussion:11.c.1 section can be modified to "The operation EntityReleased is not used if the appropriate DP is armed." and the "CallInformationRequest" can be modified to "CallInformationReport". EntityReleased is reported per call segment (Ruth).

We shall agree on when EntityReleased is used. It can be used to report to SCP which leg is released, to prevent interworking problems.

Second paragraph in general description can be removed. SDL will contain detailed guidance. Other comments to section 11.c.1.1 are considered and the document is revised.

Conclusion : revised to 609

N2-010609: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of EntityReleased procedure

Discussion:

Conclusion :approved without presentation

N2-010508: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of InitiateCallAttempt procedure

Discussion: The CR introduces the description of the InitiateCallAttempt procedure. Wording to paragraph 11.d.1 will be improved to "gsmSSF shall arm EDP-Rs for answer and all the call failure events". Why failure DPs must be EDP-Rs? EDP-N is enough for failure DPs.

Conclusion : revised to 610

N2-010610: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of InitiateCallAttempt procedure

Discussion:

Conclusion :approved without presentation

N2-010509: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of MoveLeg procedure

Discussion: CPH requires a new operation - MoveLeg, this CR introduces a description of MoveLeg procedure.

Bullet number 2 will be removed. Second sentence will be enhanced.

Ericsson: Bullet number 4 doesn't follow ASN1 syntax, it is not clear what is the added value of the sentence.

Conclusion : revised to 622

N2-010622: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of MoveLeg procedure

Discussion:

Conclusion :approved without presentation

N2-010510: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of SplitLeg procedure

Discussion: This CR introduces the description of the SplitLeg procedure. Similar changes than in previous tdoc. Split is not possible while alerting, but legs can be moved in during alerting (to initial CS).

Conclusion : revised to 623

N2-010623: 29.078, Rel-5, Vodafone, Type: CR, Title: Introduction of SplitLeg procedure

Discussion:

Conclusion :approved without presentation

8.6 Provisioning of IP-based multimedia services / CAMEL applicability to media strems like VoIP

<u>N2-010545</u>: 23.218, Rel-5, Lucent Technologies, Type: DISC, Title: Updates to CAMEL related section in TS 23.218

Discussion: This contribution addresses:

- Updates to the functional architecture. As the functional architecture for MO and MT IP multimedia session is identical, the two sections 6.1.2 and 6.1.3 have been combined into a single section.
- Replacement of the ipSSF with the IM-SSF
- Introduction of IP Multimedia Service Control Interface (ISC), previously know as the SIP+ interface, between the IM-SSF and the S-CSCF.

CSCF - IM SSF interface should be described in 23.228. Comments are taken into consideration and revised document will be presented at joint meeting. IM-SSF is not necessarily integrated of CSCF. ISC interface may have to convey CSI to IM-SSF.

Conclusion :revised to 571

<u>N2-010571</u>: 23.218, Rel-5, Lucent Technologies, Type: DISC, Title: Updates to CAMEL related section in TS 23.218

Discussion: Revised in joint meeting and revised version will be handled in CN1.

Conclusion: noted

<u>N2-010550</u>: Rel-5, Lucent Technologies, Type: DISC, Title: revision of the Originating and Terminating Call State Models

Discussion: The current working assumption in SA1 is that all the procedures that apply to MO and MT circuit switched calls may in theory apply to IP multimedia sessions. The proposal in this contribution is update the existing description of the Originating and Terminating IP multimedia Basic Call State Model in 23.218. The following changes are proposed:

- 1. The Originating BCSM has been updated to include the O_Term_Seized (as a consequence the introduction of the O_Alerting point in call) and O_Mid_Call detection points. The DP to SIP methods/errors mapping table has been updated to include the new detection points. This makes it in line with the circuit switched O-BCSM in CAMEL Phase 4.
- 2. The description of the DPs in the O-IM-BCSM has been updated.
- 3. The Terminating BCSM has been updated to include the T_Call_Accepted (as a result the introduction of the T_Alerting point in call) and T_Mid_Call detection points. The DP to SIP methods/errors mapping table has been updated to include the new detection points. This makes it in line with the circuit switched T-BCSM in CAMEL Phase 4.
- 4. In accordance with the recent decisions reflected in 23.228, the CAMEL basic call state models (BCSMs) are to be kept in the IM SSF. The existing text states that the BCSMs are in the S-CSCF and consequently the changes are to reflect that the BCSMs are in the IM-SSF.

The document is handled in joint meeting and revised. CN1 will handle revised version. IM-SSF covers more than regular/traditional SSF, SA2 may not have realized that. IM-SSF incorporates also Call Control Function. Terminology is confusing, so in 23.228 terminology should be corrected in order to indicate IM SSF Call Control Function. "IM CAMEL adaptation function" could be a proper name.

It is still not defined where IM-SSF will be defined. Section 6 (IP Multimedia session handling with a CAP based Service Platform) and section 9 (Mapping between SIP procedures and CAMEL procedures) of TS 23.218 will become CN2 responsibility. CN2 will decide whether new spec under CN2 responsibility is needed (stage 2 and stage3) and CN2 will name the rapporteurs for the mentioned sections or new specifications.

Conclusion: noted by CN2

8.7 CAMEL control over MT SMS

8.8 Inclusion of flexibel tone injection

No contributions received.

8.9 Charging notification to CSE

N2-010520 : 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in the gsmSSF/gsmCCF

Discussion: Charges Access Network refers to A-interface. The term chargesaccessnetwork has been used for charges that are actually determined by the transit. So it has been changed to chargestransitnetwork in this CR. In the description of Charges Specific PLMN and Charges Transit network has to be added at the end of sentence "are to be monitored and reported"

Conclusion : revised to 625

<u>N2-010625</u>: 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in the gsmSSF/gsmCCF

Discussion:

Conclusion :approved without presentation

N2-010521: 29.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC & ENC operations

Discussion: On page 3 ChargesAccess network has to be changed in ChargesTransit network. Unit explanation is needed. One error code is missing for Unknown Leg ID. Description for e-values and units is needed. Ellipsis notation should be added whenever possible. Chapter 10, Section Error handling has to be revised, but later in one of the CRs.

Ericsson has submitted off line comments that will be incorporated in revised version.

Conclusion: revised to 626

N2-010626: 29.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC & ENC operations

Discussion:

Conclusion: Following e-mail approval session, this CR was approved.

N2-010594: Rel-5, C-DOT, Type:CR, Definitions of RNC and ENC operations and theri parameters

Conclusion: postponed

N2-010595: Rel-5, C-DOT, Type: CR, Title: Definitions of RNC and ENC operations in a CPH configuration

Discussion: This edocument is based on document 521.

Conclusion: postponed

8.10 Enhancements of dialled services

<u>N2-010522</u>: 23.018, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion:

Conclusion : revised to 591

<u>N2-010591</u>: 23.018, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion:

Conclusion: postponed

<u>N2-010523</u>: 23.078, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion:

Conclusion : revised to 592

<u>N2-010592</u>: 23.078, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion: It is proposed to make use of a variable CSE_Dialogue_Exists that shall be maintained at the CCF and passed to SSF for the "enhancement of dialledservices" feature. The new variable is needed only for a short tim, related to Connect operation only. Ericsson want to use always existing SSF as in CAMEL3 already

Conclusion :postponed to next meeting

<u>N2-010524</u>: 29.078, Rel-5, C-DOT, Type: CR, Title: Handling of a variable to indicate control/monitoring relationship with CSE at DP3

Discussion:

Conclusion: postponed

<u>N2-010548</u>: 23.078, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3 for mobile forwarded calls

Discussion:

Conclusion: revised to 593

<u>N2-010593</u>: 23.078, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3 for mobile forwarded calls

Discussion:

Conclusion: postponed

N2-010549: 23.078, Rel-5, C-DOT, Type: CR, Title: Changes to allow initiation of a control/monitoring relationship with CSE at DP3 for NP calls

Discussion:

Conclusion: postponed

8.11 Provision of location information of called subscriber

8.12 Notification of GPRS mobility management to CSE

N2-010532: 23.008, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion: As the new feature included in the CAMEL Phase 4, this CR proposes the Mobility management for GPRS subscriber. New CSI is introduced "MG-CSI". Editor's note shall be added about the network initiated detach.

The HLR has to know what CSI is sent to VLR, so MG-CSI is lacking negotiated.

Conclusion : revised to 580

N2-010580: 23.008, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion:

Conclusion:approved without presentation to be incorporated in the collective CR

N2-010533: 23.016, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion:

Conclusion :approved

N2-010534: 23.060, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion: This CR proposes introduction of 2 new procedures: Set_PS_Notification_Type and Notify_PS_gsmSCF in 23.078 after successful routeing area update/attach/detach.

In an inter-SGSN RAU the source SGSN should report PS Detach, otherwise the SCP may believe that the MS is reachable even if the Attach fails in the target SGSN.

One box C3 is introduced but 2 procedures are called. Text for C3 says: procedures <u>Set_PS_Notification_Type and Notify_PS_gsmSCF</u> are called after the successfull GPRS detach. It would be beter to have just one combined CAMEL procedure.

GPRS-SCI inovcation is checked withing CAMEL spec. 23.078, it should be avoided to check CSI in GPRS spec 23.060. Consistent checking of CSI presence should apply (GPRS-CSI/MG-CSI).

Revised document will be distributed till Friday, 20th of July and will be presented in the next CN2 meeting.

Conclusion : revised to 581

N2-010581: 23.060, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion:

Conclusion: This CR will be respresented in the next CN2 meeting and after final approval will be sent to SA2

N2-010535: 23.078, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber (chapter 9)

Discussion: Mobility management triggers should contain also network initiated GPRS detach, not only MS initiated GPRS detach. It is missing from stage 1. This will be added to stage 2 first and editors note will say that stage 1 should be updated accordingly. 23.060 is defining 2 types of Network initiated GPRS detach procedures.

Location Information for GPRS subscriber: the name should be the same as in chapter 7.6.1.2

Last section: Insert Subscriber Data contains CAMEL specific IE for Mobility Management.M-CSI is sent to VLR only and MG-CSI is sent to SGSN only and they are placed in the same table. Ericsson recommends separate sections.

In chapter 9.5.1.1.2, "Description" column should be updated in the table "Information Elements". "MSC/VLR/SGSN" shall be changed to "MSC/VLR or SGSN".

Location information for GPRS subscriber the name should be the same as in chapter 7.6.1.2 . Section 9.1.1 needs rewording.

Numbering change should be done and all the comments on wording should be taken into consideration in new version of the document. Siemens Proposal for Stage 2 will be taken and updated if Ericsson approach of separate MAP operations is selected by CN4. Comment on document 534 to have one combined CAMEL procedure impacts also this CR.

Conclusion : revised to 579

N2-010579: 23.078, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber (chapter 9)

Discussion:

Conclusion :approved without presentation

N2-010536: 23.078, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber (chapter 10)

Discussion: As the new feature included in the CAMEL Phase 4, this CR proposes the Mobility management for GPRS subscriber. The new CSI, namely MG-CSI, should be included in the chapter 10, "Control and interrogation of subscription data".

Conclusion :approved

N2-010537: 29.002, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion: Documents 537 and 552 are competing CRs. Chairman's proposal is to send both CRs to CN4 to decide upon the solution. The LS in document 582 is sent to CN4. Both CRs will be attached to LS as attachments that do not have any approval of CN2. The draft LS will be provided till wednesday, during this meeting.

Table 6.1-1 in 6.1.3.11 neds an update. MM-code table shall be more detailed (separate MSC and SGSN parts).

Conclusion : revised to 620

N2-010620: 29.002, Rel-5, Siemens, Type: CR, Title: Mobility management for GPRS subscriber

Discussion:

Conclusion: approved

N2-010552: 29.002, Rel-5, Ericsson, Type: CR, Title: Mobility management event notification subscription

information

Discussion: Postponed until CN2 received CN4 comments.

Conclusion: withdrawn

N2-010582: LSOUT, Rel-5, CN2, Title: DRAFT Liaison Statement on MAP Messages for GPRS

MobilityManagement event notifications.

Discussion: TSG CN WG2 asks CN4 for the advice whether the GPRS Mobility Management notification from SGSN to gsmSCF shall be a new, dedicated MAP Operation or shall the GPRS Mobility Management notification from SGSN to gsmSCF be an enhancement of the current NoteMM-Event MAP Operation?

Advice from CN4 to CN2 is to use existing one MAP messages for GPRS Mobility Management event notifications.

Conclusion :approved

8.13 CAMEL4/ ODB in HLR-SCP interface

N2-010540: 23.078, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion: To include ODB data in ATM, the following changes are proposed. New procedure ATM_Modify_ODB_Data added, new information element ODB data added.

Alcatel: references are missing. ODB data must be in HLR, but what happens to CF and CB? Cann these services be provisioned? ODB is network operator data, not the service that subscriber can change.

Is ODB provision possible by the SCP? The SCP should be able to send ODB even if there wasn't any befor, but validation procedure is needed to check whether SCP is allowed to change ODB data - to check that SCP and HLR belong to the same domain, network operator.

Alcatel: If subscriber has already ODB in HLR, what does it mean that SCP is able to modify of ODB data? Modify means that SCP can overwrite the existing data in HLR (set the data). Does the SCP overwrite only partial data and sends only appended data? What HLR should do? An instruction (activate/deactivate) is needed also for ODB. Sumio will think about this.

Ericsson: Change in wording in ODB HPLMN Specific Data description. Description will be deleted and reference to the the spec will be given.

Is the subscriber status ODB specific? Subscriber status defines whether ODB is valid (section 2.8 in 23.008). Comments will be processed offline and new revised document will be submitted.

Conclusion : revised to 572

N2-010572: 23.078, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion: Siemens would like to reconsider this CR.

Conclusion :postponed for the next meeting

N2-010541: 29.002, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion: ODB-DATA is mandatory and should be optional. If the SCP want to change one of ODB category, it has to know all the other categories and must send all the ODB data. T-Mobil thinks that for the time beeing it is not possible to change only one ODB category.

Siemens: ODB change is done after AnyTimeInterogation, after getting status of all ODB data, to prevent overwriting (deactivating) some existing data (ODB category).

Conclusion: Revised to 573

N2-010573: 29.002, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Conclusion: postponed till next meeting (Siemens wants to reconsider).

8.14 CAMEL4/ Location Information during ongoing call

N2-010538: 23.078, Rel-5, Siemens, Type: CR, Title: Providing the location information during ongoing call

Discussion: While the CS call is ongoing no further location information is reported actively towards the network. This is felt as being inconvenient and forms limitations to certain application. To improve the current situation, it is proposed to invent a new function. This functionality shall report the location in case the subscriber change the location during ongoing CS call. Another reason to do so, just observed recently from the service continuity discussion within 3GPP, is the provision of services when a subscriber changes from a 2G network to a 3G network and back. To try the best approach offering the same set of services, the fact of "changing location" should be brought to the CAMEL Service Environments attention. The CR propose an additional service procedure to cope with "change of location" situations for CS calls.

EDP-R is deleted. Siemens will submitt CR to delete EDP-R in stage 1 to next S1 meeting. Entry events are added, implicit disarmed table is revised and ERB for O_Change_of_Position, MF added.

On page 17, last 2 tables could be merged (tables for DP). EDP-N could be in the actions section in the state model description. A general rule states that EDP-N is disarmed if met (Section 4.2.1.1 of 23.078).

Location information: the reference should be 4.6.1.8 instead 4.6.1.7.

Does the change of service area understand handover? Siemens used the term "change of position". 25.413, chapter 8.19 LocationReportingControl specifies which indications are received.

Location Reporting will be sent to RNC and will be part2 of SDLs. SDLs will be provided later. The open item are Information Elements. Editors note "needs further study" shall be introduced,.

Conclusion: revised version will be sent to next meeting

N2-010539: 29.078, Rel-5, Siemens, Type: CR, Title: Providing the location information during ongoing call

Discussion:

Conclusion :postponed till next meeting

8.15 CAMEL4/GPRS AnyTimeInterrogation

N2-010563: 23.078, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion:

Conclusion :postponed

N2-010564: 29.002, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion:

Conclusion :postponed

9 Maintenance of earlier CAMEL phases

9.1 CAMEL phase 1

No contributions received.

9.2 CAMEL phase 2

<u>N2-010600</u>: 03.78, R97, Siemens, Type: CR, CR#A163, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion: The description for the Send Charging Information does not provide the description for the further processing if the subscriber is not provisioned with the AoC service or the network does not support this service.

Siemens proposal is to add a sentence to indicate that the processing shall be silently terminated: "If the subscriber is not provisioned with the GSM Advice or Charge supplementary service or the VPLMN does not support this service, the processing in the MSC shall be silently terminated" (stage 2).

Understanding of this sentence by most of the delegates is that "silently terminated" means "released".

Vodafone understands that this is not proposal to release the call, but only not to send e-values if the subscriber is not provisioned with AoC. The wording should be improved.

Siemens understanding is that stage 1 does not give indication what the action should be if the subscriber is not provisioned with AoC. The proposal is to silently discard the SCI, but discarding is not the correct wording, as MSC may use e-parameters for CDRs. SDLs seem to support the CR.

In stage 1 and in stage 2 of AoC it is not clearly stated what happens in this situation, but it is the similar case as the one when the MS is not able to process e-values sent. Stage 2 of AoC says that if the MS doesn't support Aoc, it doesn't send the acknowledgement. Ruth: The MSC should have some kind of timer and to know what todo if timer exspires and MSC didn't receive any acknowledgement.

The wording is not the best. AoC service is nice to have feature and if subscriber is not provisioned with this service, the critical can be that MSC sends error and SCP interprets this error in a way to release the call, so the conclusion is: 1. "If MSUB is not provisioned with AoC or if the MS does not support it, e-parameters are not sent to MS."

2. Error must not be sent be SCP.

Conclusion : revised to 601

<u>N2-010601</u>: 03.78, R97, Siemens, Type: CR, CR#A163r1, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion :If the subscriber is not provisioned with the GSM Advice of Charge supplementary service or the VPLMN does not support this service, then no e-parameters shall be sent to the MS and no error shall be sent back to the gsmSCF - "due to this fact" (added by Rogier).

Conclusion: revised to 611

<u>N2-010611</u>: 03.78, R97, Siemens, Type: CR, CR#A163r2, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion: During the e-mail approval process, Ericsson voiced objections against these change request and mirror CRs for R98, R99 and Rel-4. The reasons for objections are:

- 1. Too late technical change for CAMEL phase 2,
- 2. The change proposed in this CR is less straight forward than the text proposes. It is not clear what shall be done with a tariff switch in SendChargingInformation, as well if the SCI is sent for a subscriber that does not have AoC SS, then it is still possible that an error needs to be returned to the SCP. That could be due to a violation of the rules as defined for Procedure Handle_SCI. The current proposed text in the CR may be interpreted that when SCI is sent for a subscriber that does not have AoC, the SSF will never send an Error.

According to Ericsson, a proper solution should be devised and introduction of solution can be considered for CAMEL Phase 3. For CAMEL Phase 2, a warning may be included. Ericsson will submit their proposal to this issue. *Conclusion: Following e-mail approval session, this CR was rejected.*

<u>N2-010612:</u> 03.078, R98, Siemens, Type:CR, CR#A164, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Conclusion: Following e-mail approval session, this CR was rejected.

<u>N2-010613</u>: 23.078, R99, Siemens, Type:CR, CR #320, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Conclusion: Following e-mail approval session, this CR was rejected.

<u>N2-010614:</u> 23.078, Rel-4, Type: CR, CR#321, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Conclusion: Following e-mail approval session, this CR was rejected.

10 Review of dates and hosts for future meetings

N2-010486: CN2 Chairman, Title: CN2 year 2002 meeting calendar

Discussion: CAMEL4 adHoc will be held in Sptember 11th -13th. 50% of the time is forseen for IMS and the rest will be CAMEL4 open issues. If the meeting can not be organised by Ericsson in Amsterdam, then ETSI will host the meeting in Sophia Antipolis. Document deadline is preceding Wednseday (12:00 CET for Tdoc numbers requests and 23:59 CET for sending the contributions).

Review of the N2 meeting schedule for 2001

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPCN2-#20	WG	15 - 19 Oct 2001	Brighton	UK
CAMEL4 AdHoc	AdHoc	11 - 13 Sep 2001	TBD	TBD
3GPPCN2-#21	WG	26 - 30 Nov 2001	Cancun	Mexico

11 Closing of the meeting (15:30 Friday)

Contributions which could not be finalized in this meeting are postponed for the next meeting. 6 CRs have to be sent for e-mail approval.

Following deadlines are agreed for all the documents:

Deadline for delivery of all the document that are to be sent for e-mal approval: Tuesday 17th of July, 23:59 CET

Deadline for rejection of documents sent for e-mail approval: Monday 23rd of July 12:00 CET.

Deadline for Tdoc numbers requests for October meeting: 10th October by 12:00 CET

Deadline for sending out documents for October meeting: 10th October by 23:59 CET

The chairman thanked the host for well arranged meeting facilities, the participants for contributions and discussions as well as for the MCC support.

Annex A	Participants list		
Member of 3GPP (ETSI)			
Mr. Sunil Arora	C-DOT	3GPPMEMBER (ETSI)	IN +91-11-4678974 sunil@cdotd.ernet.in
Mr. Nigel. H Berry	Lucent Technologies N. S. UK	3GPPMEMBER (ETSI)	GB +44 1793 88 3245 nhberry@lucent.com
Mr. Xin Chen	Lucent Technologies N. S. UK	3GPPMEMBER (ETSI)	GB +441793883137 xchen2@lucent.com
Mr. Sharma Dhiraj	C-DOT	3GPPMEMBER (ETSI)	IN +91-11-4677525 shivali@cdotd.ernet.in
Mr. Michel Grech	Lucent Technologies N. S. UK	3GPPMEMBER (ETSI)	GB +44 1793 736 110 grech@lucent.com
Miss Shivali Gupta	C-DOT	3GPPMEMBER (ETSI)	IN +91-11-4678974 shivali@cdotd.ernet.in
Mr. Steffen Habermann	Deutsche Telekom MobilNet	3GPPMEMBER (ETSI)	DE +49 228 936 3324 steffen.habermann@t-mobil.de
Ms. Ruth Hewson	VODAFONE Group Plc	3GPPMEMBER (ETSI)	GB +44 1635 673 148 ruth.hewson@vf.vodafone.co.uk
Ms. Jane D Humphrey	MARCONI COMMUNICATIONS	3GPPMEMBER (ETSI)	GB +44 1202 853757 jane.humphrey@marconi.com
Mr. Dietmar Kohnenmergen	E-PLUS Mobilfunk	3GPPMEMBER (ETSI)	DE +49 211 448 2946 dietmar.kohnenmergen@eplus.de
Mrs. Isabelle Lantelme	ALCATEL S.A.	3GPPMEMBER (ETSI)	FR +33 1 30 77 01 33 isabelle.lantelme@alcatel.fr
Mr. Sumio Miyagawa	SIEMENS AG	3GPPMEMBER (ETSI)	AT +43 51707 21381 sumio.miyagawa@siemens.at
Mr. Rogier Noldus	ERICSSON L.M.	3GPPMEMBER (ETSI)	NL +31 161 249 400 rogier.noldus@eln.ericsson.se
Mr. Keijo Palviainen	NOKIA Corporation	3GPPMEMBER (ETSI)	FI +358 9 511 69669 keijo.palviainen@nokia.com
Mr.Christian Homann	Alcatel S.A.	3GPPMEMBER (ETSI)	DE +49 711 821 45632 c.homann@alcatel.de
Mr. Vesa Tiainen	NOKIA Corporation	3GPPMEMBER (ETSI)	FI +358 95116 9712 vesa.tiainen@nokia.com
Dr. Georg Wegmann	Deutsche Telekom MobilNet	3GPPMEMBER (ETSI)	DE +49 228 936 3468 georg.wegmann@t-mobil.de
Member of 3GPP (T1)			
Mr. Stephen Hayes	Ericsson Inc.	3GPPMEMBER (T1)	US +1 972 583 5773 stephen.hayes@ericsson.com
Organisation partner represe	entative (ETSI)		
Mrs. Andrijana Jurisic	Mobile Competence Center		HR +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	Туре	Spec	CR#	Rev	Version	Conclusion	Source
N2-010587	CAMEL3	R99	Corrections to ASN.1 syntax	CR	29.078	192	1	3.8.0	approved	Ericsson
N2-010588	CAMEL3	Rel-4	Corrections to ASN.1 syntax	CR	29.078	197		4.1.0	approved	Ericsson
N2-010602	CAMEL3	R99	Using gsmSCF address from GPRS-CSI for re- establishing TC dialogues		29.078	198	1	3.8.0	approved	T-Mobil, Ericsson
N2-010615	CAMEL3	Rel-4	Using gsmSCF address from GPRS-CSI for re- establishing TC dialogues		29.078	199		4.1.0	approved	T-Mobil, Ericsson
N2-010525	CAMEL3	R99	Correction of error implementing CR 23.078-194r3	CR	23.078	310	1	3.9.0	approved	Rapporteur
N2-010526	CAMEL3	Rel-4	Correction of error implementing CR 23.078-194r3	CR	23.078	311		4.1.0	approved	Rapporteur
N2-010596	CAMEL3	R99	Possible information in Initial DP	CR	23.078	312	2	3.9.0		Siemens AG
N2-010597	CAMEL3	Rel-4	Possible information in Initial DP	CR	23.078	313	1	4.1.0		Siemens AG
N2-010577	CAMEL3	R99	Correction of CUG information handling	CR	23.078	317	1	3.9.0		Siemens AG
N2-010578	CAMEL3	Rel-4	Correction of CUG information handling	CR	23.078	318		4.1.0		Siemens AG

Documents for e-mail approval and status after the deadline for approval/rejection, 23rd of July, 12:00 CET

TDoc#	WI	Rel	Cat	Title	Туре	Spec	CR#	Rev	Version	Conclusion after the deadline for e-mail approval	Source
N2-010611	CAMEL2	R97	F	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	CR	03.78	A163	2	6.9.1	rejected	Siemens AG
N2-010612	CAMEL2	R98	A	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	CR	03.78	A164		7.6.0	rejected	Siemens AG
N2-010613	CAMEL3	R99		Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	CR	23.078	320		3.9.0	rejected	Siemens AG
N2-010614	CAMEL3	Rel-	A	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	CR	23.078	321		4.1.0	rejected	Siemens AG
N2-010624	CAMEL4	Rel-	F	Enhancement of Apply Charging Information Flow for Call Party Handling support	CR	23.078		2	5D.8.1	approved	Alcatel
N2-010626	CAMEL4	Rel-	В	Definitions of RNC & ENC operations and their parameters	CR	29.078		1	5d.2.0	approved	CDOT

Documents for e-mail discussion

TDoc#	Type	Title	Source	WI	Conclusion
	Discussion document	CPH: Open Issues	Vodafone		opened (e-mail discussion)

Approved Output Liaison Statements

TDoc#	Type	Title	Source	То	CC	Conclusion
N2-010576		Draft Liaison statement on "Unique GGSN Addresses"	CN2		SA2, SA5	approved
N2-010582		Draft Liaison statement on MAP messages for GPRS Mobility Management event notifications	CN2	CN4		approved

Other documents approved by CN2

TDoc#	Type	Title	Source	WI	Rel	Conclusion
N2-010567		Update of CAMEL4 WID in Rel-5 for TSG CN		CAMEL4	Rel-5	approved
N2-010627	Work		CN2 chairman	CAMEL4	Rel-5	approved

Approved and endorced Change Requests for CAMEL Phase 4

TDoc#	WI	Rel	Cat	Title	Type	Spec	Rev	Version	Conclusion	Source
N2- 010493	CAMEL4	Rel-5	F	State transition after Disconnect Leg operation	CR	23.078		5D.8.2	approved	Vodafone Group Plc.
N2- 010495	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MF call case)	CR	23.018		4.2.0*	approved	Vodafone Group Plc.
N2- 010496	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	CR	23.078		5D.8.2	approved	Vodafone Group Plc.
N2- 010497	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	CR	23.018		4.2.0*	approved	Vodafone Group Plc.
N2- 010498	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	CR	23.079		4.0.0	approved	Vodafone Group Plc.
N2- 010499	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	CR	23.083		4.2.0*	approved	Vodafone Group Plc.
N2- 010501	CAMEL4	Rel-5	С	Use of SRI operation by gsmSCF	CR	23.018		4.2.0*	approved	Vodafone Group Plc.
N2- 010511	CAMEL4	Rel-5	F	Missing O-BCSM model transition description	CR	23.078		5D.8.1	approved	Alcatel
N2- 010533	CAMEL4	Rel-5	В	Mobility management for GPRS subscriber	CR	23.016		4.0.0	approved	Siemens AG
N2- 010536	CAMEL4	Rel-5	В	Mobility management for GPRS subscriber in chapter 10		23.078		5d.7.0	approved	Siemens AG
N2- 010579	CAMEL4	Rel-5	В	Mobility management for GPRS subscriber	CR	23.078		5d.8.0	approved	Siemens AG
N2- 010580	CAMEL4	Rel-5	В	Mobility management for GPRS subscriber	CR	23.008		3.5.0	approved	Siemens AG
N2- 010598	CAMEL4	Rel-5	F	Handling of Reconnect on Leg 2 disconnect (MF call case)	CR	23.078	1	5D.8.2	approved	Vodafone Group Plc.
N2- 010599	CAMEL4	Rel-5	F	Handling of Reconnect in gsmSSF	CR	23.078	1	5D.8.2	approved	Vodafone Group Plc.

N2- 010603	CAMEL4	Rel-5	C	Use of SRI operation by gsmSCF	CR	23.078	1.	5D.8.2	approved	Vodafone Group Plc.
N2- 010604	CAMEL4	Rel-5	C	Use of SRI operation by gsmSCF	CR	29.002	1	4.3.0	approved	Vodafone Group Plc.
N2- 010605	CAMEL4	Rel-5	F	Specification and clarification on NC/NP columns of the Initial DP Information Flow	CR	23.078	1.	5D.8.1	approved	Alcatel
N2- 010606	CAMEL4	Rel-5	В	Introduction of CPH parameters in existing CAP operations	CR	29.078	1	d5.2.0	approved	Vodafone Group Plc.
N2- 010607	CAMEL4	Rel-5	В	Introduction of DisconnectForwardConnectionWithArgument procedure	CR	29.078	1	d5.2.0	approved	Vodafone Group Plc.
N2- 010608	CAMEL4	Rel-5	В	Introduction of DisconnectLeg procedure	CR	29.078	1	d5.2.0	approved	Vodafone Group Plc.
N2- 010609	CAMEL4	Rel-5	В	Introduction of EntityReleased procedure	CR	29.078	1	d5.2.0	approved	Vodafone Group Plc.
N2- 010610	CAMEL4	Rel-5	В	Introduction of InitiateCallAttempt procedure	CR	29.078	1	d5.2.0	approved	Vodafone Group Plc.
N2- 010618	CAMEL4	Rel-5	F	Enhancement of Apply Charging Procedure for Call Party Handling	CR	23.078	2	5d.8.1	approved	Alcatel
N2- 010620	CAMEL4	Rel-5	В	Mobility management for GPRS subscriber	CR	29.002		4.3.0	approved	Siemens AG
N2- 010621	CAMEL4	Rel-5	D	Change of name: "GMSC address" to "GMSC or gsmSCF address" in SRI	CR	23.079		4.0.0	approved	Vodafone
N2- 010622	CAMEL4	Rel-5	В	Introduction of MoveLeg procedure	CR	29.078	1	d5.2.0	approved	Vodafone
N2- 010623	CAMEL4	Rel-5	В	Introduction of SplitLeg procedure	CR	29.078		d5.2.0	approved	Vodafone Group Plc.
N2- 010624	CAMEL4	Rel-5	F	Enhancement of Apply Charging Information Flow for Call Party Handling support	CR	23.078	2	5D.8.1	approved	Alcatel
N2- 010625	CAMEL4	Rel-5	D	Handling of RNC and ENC operations in the gsmSSF/gsmCCF	CR	23.078		5d.8.1	approved	CDOT
N2- 010626	CAMEL4	Rel-5	В	Definitions of RNC & ENC operations and their parameters	CR	29.078	1	5d.2.0	approved	CDOT

Annex C List of Documents

TDoc#	Туре	Title	Source	WI	CR#	Rev	Cat	Spec	Rel	Ver	Conclusio n
N2- 010476	AGEN DA	Agenda	CN2 chairman								approved
N2- 010477	AGEN DA	Allocation of documents to agenda items	CN2 chairman								noted
N2- 010478	Report	Draft Meeting report from CN2#18	MCC								approved
N2- 010479	Report	Draft Meeting Report from CN#12	MCC								noted
N2- 010480	Report	Draft Meeting Report from SA#11	MCC								noted
N2- 010481	LS IN	LS on the IM Call Transfer service	Joint CN1,2,3,4								noted
N2- 010482	LS IN	Response to "LS on the IM Call Transfer Service"	SA3								noted
N2- 010483	LS IN	Reply to "LS on the IM Call Transfer Service"	SA5								noted
N2- 010484	LS IN	Response to LS N1-010504 (S2-010798r2)	Joint CN1,2,3,4								noted
N2- 010485	LS IN	Reply to N2-010440	SA5								noted
N2- 010486	Calen dar	CN2 year 2002 meeting calendar	CN2 chairman								noted
N2- 010487	Work Plan	Comments on the 3GPP work plan (CAMEL4 progress)	CN2 chairman								revised to 627
N2- 010488		Update of CAMEL4 WID in Rel-5 for TSG CN	CN2 chairman								revised to 567
N2- 010489	LS IN	Terminology clarifications	GERAN								noted
N2- 010490	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc.	CAME L4		5	В	23.018	Rel-	4.2.0	noted
N2- 010491	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc.	CAME L4		1	В	23.083	Rel-	4.2.0	noted
N2- 010492	DISC	CPH: Open Issues and Decisions	Vodafone Group Plc.	CAME L4							revised to
N2- 010493	CR	State transition after Disconnect Leg operation	Vodafone Group	CAME L4			F	23.078	Rel-	5D.8.2	approved

			Plc.						
N2- 010494	CR	Handling of Reconnect on Leg 2 disconnect (MF call case)	Vodafone Group Plc.	CAME L4	F	23.078	Rel-	5D.8.2	revised to
N2- 010495	CR	Handling of Reconnect on Leg 2 disconnect (MF call case)	Vodafone Group Plc.	CAME L4	F	23.018	Rel-	4.2.0*	approved
N2- 010496	CR	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	Vodafone Group Plc.	CAME L4	F	23.078	Rel-	5D.8.2	approved
N2- 010497	CR	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	Vodafone Group Plc.	CAME L4	F	23.018	Rel-	4.2.0*	approved
N2- 010498	CR	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	Vodafone Group Plc.	CAME L4	F	23.079	Rel-	4.0.0	approved
N2- 010499	CR	Handling of Reconnect on Leg 2 disconnect (MT & VT call case)	Vodafone Group Plc.	CAME L4	F	23.083	Rel-	4.2.0*	approved
N2- 010500	CR	Handling of Reconnect in gsmSSF	Vodafone Group Plc.	CAME L4	F	23.078	Rel-	5D.8.2	revised to
N2- 010501	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4	C	23.018	Rel-	4.2.0*	approved
N2- 010502	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4	C	23.078	Rel-	5D.8.2	revised to
N2- 010503	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4	C	29.002	Rel-	4.3.0	revised to 604
N2- 010504	CR	Introduction of CPH parameters in existing CAP operations	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	revised to 606
N2- 010505	CR	Introduction of DisconnectForwardConnectionWithArgum ent procedure	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	revised to 607
N2- 010506	CR	Introduction of DisconnectLeg procedure	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	revised to 608
N2- 010507	CR	Introduction of EntityReleased procedure	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	revised to
N2- 010508	CR	Introduction of InitiateCallAttempt procedure	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	revised to 610

N2- 010509	CR	Introduction of MoveLeg procedure	Vodafone Group Plc.	CAME L4		В	29.078	Rel-	d5.2.0	revised to 622
N2- 010510	CR	Introduction of SplitLeg procedure	Vodafone Group Plc.	CAME L4		В	29.078	Rel-	d5.2.0	revised to 623
N2- 010511	CR	Missing O-BCSM model transition description	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	approved
N2- 010512	CR	Clarification on NC/NP usage in the Information Flow Tables.	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	postponed
N2- 010513	CR	Specification and clarification on NC/NP columns of the Initial DP Information Flow	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	revised to 605
N2- 010514	CR	Enhancement of 'Procedure Handle_SCI' for Call Party Handling	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	postponed
N2- 010515	CR	Enhancement of Apply Charging Information Flow for Call Party Handling support	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	revised to 583
N2- 010516	CR	Enhancement of Apply Charging Procedure for Call Party Handling support	Alcatel	CAME L4		F	23.078	Rel-	5D.8.1	revised to 584
N2- 010517	DISC	Reference Number for MO-SMS in CAMEL 3 R99	Vodafone	CAME L3						noted
N2- 010518	CR	Correction of error implementing CR 23.078-194r3	Rapporteu r	CAME L3	310	F	23.078	R99		revised to 525
N2- 010519	DISC	Discussion paper for Charging Notifications to CSE for a CPH configuration	CDOT	CAME L4		В		Rel-		noted
N2- 010520	CR	Handling of RNC and ENC operations in the gsmSSF/gsmCCF	CDOT	CAME L4		В	23.078		V5D8.	revised to 625
N2- 010521	CR	Handling of RNC and ENC operations	CDOT	CAME L4		В	29.078	Rel-		revised to 626
N2- 010522	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAME L4		C	23.018	Rel-		revised to
N2- 010523	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAME L4		C	23.078	Rel-	V5D8.	revised to 592
N2- 010524	CR	Handling of a variable to indicate control/monitoring relationship with a CSE at DP3	CDOT	CAME L4		C	29.078	Rel-		postponed
N2- 010525	CR	Correction of error implementing CR 23.078-194r3	Rapporteu r	CAME L3	310	1F	23.078	R99	3.9.0	approved
N2- 010526	CR	Correction of error implementing CR 23.078-194r3	Rapporteu r	CAME L3	311	A	23.078	Rel-	4.1.0	approved
N2-	CR	Possible information in Initial DP	Siemens	CAME	312	F	23.078	R99	3.9.0	revised to

010527			AG	L3						568
N2- 010528	CR	Possible information in Initial DP	Siemens AG	CAME L3	313	A	23.078	Rel-	4.1.0	revised to 597
N2- 010529	CR	Possible information in Initial DP	Siemens AG	CAME L3	189	F	29.078	R99	3.8.0	withdraw n
N2- 010530	CR	Possible information in Initial DP	Siemens AG	CAME L3	190	A	29.078	Rel-	4.1.0	withdraw n
N2- 010531	TS/IN FO	Draft 23.078 V5d.8.2		CAME L4				Rel-		noted
N2- 010532	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4			23.008	Rel-		revised to 580
N2- 010533	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4		В	23.016	Rel-	4.0.0	approved
N2- 010534	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4		В	23.060	Rel-	4.0.0	revised to 581
N2- 010535	CR	Mobility management for GPRS subscriber (chapter 9)	Siemens AG	CAME L4			23.078	Rel-		revised to 579
N2- 010536	CR	Mobility management for GPRS subscriber in chapter 10	Siemens AG	CAME L4		В	23.078	Rel-	5d.7.0	approved
N2- 010537	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4		В	29.002	Rel-	4.3.0	revised to 620
N2- 010538	CR	Providing the location information during ongoing call	Siemens AG	CAME L4		В	23.078	Rel-	5d.7.0	revised and postponed to next meeting
N2- 010539	CR	Providing the location information during ongoing call	Siemens AG	CAME L4		В	29.078	Rel-	x.5.0	postponed
N2- 010540	CR	Inclusion of ODB data in ATM	Siemens AG	CAME L4		В	23.078	Rel-	5d.8.2	revised to 572
N2- 010541	CR	Inclusion of ODB data in ATM	Siemens AG	CAME L4		В	29.002	Rel-		revised to 573
N2- 010542	CR	Inclusion of charging indicator at answer DP	Siemens AG	CAME L4		C	23.078	Rel-	5d.8.2	revised to 570
N2- 010543	CR	Inclusion of charging indicator at answer DP	Siemens AG	CAME L4		С	29.078	Rel-	5d.2.0	postponed
N2- 010544	INFO	SA1 CAMEL Ad Hoc report	Lucent Technolo gies							noted
N2- 010545	DISC	Updates to CAMEL related section in TS 23.218	Lucent Technolo gies	CAME L4		F	23.218	rel 5	0.5.0	revised to 571

N2- 010546	CD		Ericsson	CAME L3	314	F	22.079	Boo	2.0.0	maio ata d
010546	CR	BCSM model transition description Indication of gsmSCF Address in Continue GPRS and Connect GPRS IFs Indication of	Alcatel Alcatel,	L3	314	Г	23.078	K99	3.9.0	rejected
N2- 010547	CR	gsmSCF Address in Continue GPRS and Connect GPRS IFs Missing O-BCSM model transition description	T-Mobil, Ericsson Alcatel	CAME L3	191	F	29.078	R99	3.8.0	rejected
N2- 010548	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3 for mobile forwarded calls	CDOT	CAME L4		C	23.078	Rel-	V5D8.	revised to 593
N2- 010549	CR	Changes to allow initiation of a control/monitoring relationship with CSE at DP3 for NP calls	CDOT	CAME L4		C	23.078	Rel-	V5D8.	postponed
N2- 010550	DISC	Revision of the Originating and Terminating Call State Models	Lucent Technolo gies	CAME L4		F	23.218	Rel 5	0.5.0	noted
N2- 010551	CR	Corrections to ASN.1 syntax	Ericsson	CAME L3	192	F	29.078	R99	3.8.0	revised to 587
N2- 010552	CR	Introduction of GPRS Mobility Management event notification subscription information	Ericsson	CAME L4		В	29.002	Rel-	4.3.0	withdraw n
N2- 010553	CR	Correction of Process Reconnected_MT_Call_VLR	Siemens AG	CAME L3	315	F	23.078	R99	3.9.0	rejected
N2- 010554	CR	Correction of Process Reconnected_MT_Call_VLR	Siemens AG	CAME L3	316	A	23.078	Rel-	4.1.0	rejected
N2- 010555	CR	Correction of CUG information handling in SDLs	Siemens AG	CAME L3	317	F	23.078	R99	3.9.0	revised to 577
N2- 010556	CR	Correction of CUG information handling in SDLs	Siemens AG	CAME L3	318	A	23.078	Rel-	4.1.0	revised to 578
N2- 010557	CR	Collection to the misalignment of the backward service interaction indicator	Siemens AG	CAME L3	193	F	29.078	R99	3.8.0	withdraw n
N2- 010558	CR	Collection to the misalignment of the backward service interaction indicator	Siemens AG	CAME L3	194	A	29.078	Rel-		withdraw n
N2- 010559	CR	Correction of the handling ORLCF for reconnected calls	Siemens AG	CAME L3	195	F	29.078	R99	3.8.0	rejected
N2- 010560	CR	Correction of the handling ORLCF for reconnected calls	Siemens AG	CAME L3	196	A	29.078	Rel-		withdraw n
N2- 010561	LS IN	Reply to N2-010446 "Liaison Statement on introduction of SMS Reference Number for SMS"								noted
N2- 010562	Work Plan	Latest version of the work plan	MCC							noted

N2- 010563	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAME L4		В	23.078	Rel-		postponed
N2- 010564	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAME L4		В	29.002	Rel- 5	4.4.0	postponed
N2- 010565	LS IN	Interworking between HiperLAN II technology and WLAN	BRAN Project							noted
N2- 010566	LS IN	LS on ISC	SA2							noted
N2- 010567	WID	Update of CAMEL4 WID in Rel-5 for TSG CN	CN2 chairman	CAME L4						approved
N2- 010568	CR	Possible information in Initial DP	Siemens AG	CAME L3	312	1F	23.078	R99	3.9.0	revised to 596
N2- 010569	LSOU T	DRAFT Liaison Statement on "Unique GGSN Addresses"	CN2							revised to 576
N2- 010570	CR	Inclusion of charging indicator at answer DP	Siemens AG	CAME L4		С	23.078	Rel-	5d.8.2	postponed
N2- 010571	DISC	Updates to CAMEL related section in TS 23.218	Lucent Technolo gies	CAME L4			23.218	rel 5	0.5.0	noted
N2- 010572	CR	Inclusion of ODB data in ATM	Siemens AG	CAME L4			23.078	Rel-		postponed
N2- 010573	CR	Inclusion of ODB data in ATM	Siemens AG	CAME L4			29.002	Rel-		postponed
N2- 010574	CR	Correction on CAMEL3 InsertSubscriberData	Nokia	CAME L3	319	F	23.078	R99		withdraw n
N2- 010575	CR	Correction on CAMEL3 InsertSubscriberData	Nokia	CAME L3		F	29.002	R99		withdraw n
N2- 010576		DRAFT Liaison Statement on "Unique GGSN Addresses"	CN2							approved
N2- 010577	CR	Correction of CUG information handling	Siemens AG	CAME L3	317	1F	23.078	R99	3.9.0	approved
N2- 010578	CR	Correction of CUG information handling	Siemens AG	CAME L3	318	1A	23.078	Rel-	4.1.0	approved
N2- 010579	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4		В	23.078	Rel-	5d.8.0	approved
N2- 010580	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4		В	23.008	Rel-	3.5.0	approved
N2- 010581	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4			23.060	Rel-		postponed
N2- 010582	LSOU T	DRAFT Liaison Statement on MAP Messages for GPRS Mobility Management event notifications.	CN2							approved
N2- 010583	CR	Enhancement of Apply Charging Information Flow for Call Party Handling	Alcatel	CAME L4		1F	23.078	Rel-	5D.8.1	revised to 617

		support								
N2- 010584	CR	Enhancement of Apply Charging Procedure for Call Party Handling support	Alcatel	CAME L4		1F	23.078	Rel-	5D.8.1	revised to
N2- 010585	LSIN	Reply to LS "Optimal Routing of a forwarded call"	SA1							noted
N2- 010586	LSIN	Charging and Information concepts for CAMEL Call Party Handling	SA1							noted
N2- 010587	CR	Corrections to ASN.1 syntax	Ericsson	CAME L3	192	1F	29.078	R99	3.8.0	approved
N2- 010588	CR	Corrections to ASN.1 syntax	Ericsson	CAME L3	197	A	29.078	Rel-	4.1.0	approved
N2- 010589	CR	Addition of data type definitions to EXPORT statements for the usage in CAP	Ericsson	CAME L3		F	29.002	R99	3.9.0	noted
N2- 010590	CR	Using gsmSCF address from GPRS-CSI for re-establishing TC dialogues	T-Mobil, Alcatel, Ericsson	CAME L3	198	F	29.078	R99	3.8.0	revised to 602
N2- 010591	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAME L4		C	23.018	Rel-		postponed
N2- 010592	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAME L4		C	23.078	Rel-	V5D8.	postponed
N2- 010593	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3 for mobile forwarded calls	CDOT	CAME L4		C	23.078	Rel-	V5D8.	postponed
N2- 010594	CR	Handling of RNC/ENC operations in a CPH configuration.	CDOT	CAME L4		В	23.078	Rel-	V5D8.	postponed
N2- 010595	CR	Definitions of RNC & ENC operations and their parameters.	CDOT	CAME L4		В	29.078	Rel-	V5D8.	postponed
N2- 010596	CR	Possible information in Initial DP	Siemens AG	CAME L3	312	2F	23.078	R99	3.9.0	approved
N2- 010597	CR	Possible information in Initial DP	Siemens AG	CAME L3	313	1A	23.078	Rel-	4.1.0	approved
N2- 010598	CR	Handling of Reconnect on Leg 2 disconnect (MF call case)	Vodafone Group Plc.	CAME L4		1F	23.078	Rel-	5D.8.2	approved
N2- 010599	CR	Handling of Reconnect in gsmSSF	Vodafone Group Plc.	CAME L4		1F	23.078	Rel-	5D.8.2	approved
N2- 010600	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L2	A163	F	03.78	R97	6.9.1	revised to 601

N2- 010601	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L2	A163	1F	03.78	R97	6.9.1	revised to
N2- 010602	CR	Using gsmSCF address from GPRS-CSI for re-establishing TC dialogues		CAME L3	198	1F	29.078	R99	3.8.0	approved
N2- 010603	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4		1C	23.078	Rel-	5D.8.2	approved
N2- 010604	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4		1C	29.002	Rel-	4.3.0	approved
N2- 010605	CR	Specification and clarification on NC/NP columns of the Initial DP Information Flow	Alcatel	CAME L4		1F	23.078	Rel-	5D.8.1	approved
N2- 010606	CR	Introduction of CPH parameters in existing CAP operations	Vodafone Group Plc.	CAME L4		1B	29.078	Rel-	d5.2.0	approved
N2- 010607	CR	Introduction of DisconnectForwardConnectionWithArgum ent procedure	Vodafone Group Plc.	CAME L4		1B	29.078	Rel-	d5.2.0	approved
N2- 010608	CR	Introduction of DisconnectLeg procedure	Vodafone Group Plc.	CAME L4		1B	29.078	Rel-	d5.2.0	approved
N2- 010609	CR	Introduction of EntityReleased procedure	Vodafone Group Plc.	CAME L4		1B	29.078	Rel-	d5.2.0	approved
N2- 010610	CR	Introduction of InitiateCallAttempt procedure	Vodafone Group Plc.	CAME L4		1B	29.078	Rel-	d5.2.0	approved
N2- 010611	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L2	A163	2F	03.78	R97	6.9.1	rejected
N2- 010612	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L2	A164	A	03.78	R98	7.6.0	rejected
N2- 010613	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L3	320	F	23.078	R99	3.9.0	rejected
N2- 010614	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	Siemens AG	CAME L3	321	A	23.078	Rel-	4.1.0	rejected
N2- 010615	CR	Using gsmSCF address from GPRS-CSI for re-establishing TC dialogues		CAME L3	199	A	29.078	Rel-	4.1.0	approved
N2- 010616	DISC	CPH: Open Issues and Decisions	Vodafone Group Plc.	CAME L4						noted (e- mail discussion

N2- 010617	CR	Enhancement of Apply Charging Information Flow for Call Party Handling support	Alcatel	CAME L4	2F	23.078	Rel-	5D.8.1	revised to 624
N2- 010618	CR	Enhancement of Apply Charging Procedure for Call Party Handling	Alcatel	CAME L4	2F	23.078	Rel-	5d.8.1	approved
N2- 010619	CR	Use of SRI operation by gsmSCF	Vodafone Group Plc.	CAME L4	C	23.018	Rel-	4.2.0*	withdraw n
N2- 010620	CR	Mobility management for GPRS subscriber	Siemens AG	CAME L4	В	29.002	Rel-	4.3.0	approved
N2- 010621	CR	Change of name: "GMSC address" to "GMSC or gsmSCF address" in SRI	Vodafone	CAME L4	D	23.079	Rel-	4.0.0	approved
N2- 010622	CR	Introduction of MoveLeg procedure	Vodafone	CAME L4	1B	29.078	Rel-	d5.2.0	approved
N2- 010623	CR	Introduction of SplitLeg procedure	Vodafone Group Plc.	CAME L4	В	29.078	Rel-	d5.2.0	approved
N2- 010624	CR	Enhancement of Apply Charging Information Flow for Call Party Handling support	Alcatel	CAME L4	2F	23.078	Rel-	5D.8.1	approved
N2- 010625	CR	Handling of RNC and ENC operations in the gsmSSF/gsmCCF	CDOT	CAME L4	D	23.078	Rel-	5d.8.1	approved
N2- 010626	CR	Definitions of RNC & ENC operations and their parameters	CDOT	CAME L4	1B	29.078	Rel-	5d.2.0	approved
N2- 010627	Work plan	Progress of CAMEL work, changes to Work plan status	CN2 chairman						approved

Annex D Joint meeting between CN1/2/3/4 (Part of CN1 report)

Release 5

23.218 issues for joint CN WG session (Wednesday, 10th July 2001 at 11:00)

N1-010930: 23.218v050, Lucent T., Type: CR, Title: CR to 23.218: Filter Criteria mode in IMS

Conclusion: Withdrawn, revised to 1013

N1-011013: 23.218v050, Lucent T., Type: CR, Title: CR to 23.218: Filter Criteria mode in IMS

Discussion: Revised from 930. In the IMS, the service related filter criteria could be divided into initial set of filter criteria and subsequent set of filter criteria. There could be three different implementation modes or schemes for these criteria with respect to the residency of the service related data as follows:

- 1. All service related data is stored in the service platforms. The S-CSCF only has the service platform addresses for each subscriber/user.
- 2. The same as the above case except for the S-CSCF that in addition to the service platform addresses, it also contains the initial set of filtering criteria for each subscriber and related to each service platform.

3. In this case, the initial and subsequent sets of filter criteria are separately stored in the S-CSCF and the service platform, respectively. Subsequent filter criteria are transported to S-CSCF when service logic is invoked.

An editorial in mode 1 was pointed out and deletion or rewording is needed. Internal logic in AS was not wanted to be seen from S-CSCF, only as blck boxes. Sh interface is not intended for downloading of filter criteria, but just shown for the architecture. Different public Ids might have different services and different AS. Subsequent triggering is removed as the initial triggers are re-evaluated by S-CSCF at every return from the AS.

Agreed the proposal that the initial service filtering criteria should be available (downloaded) to S-CSCF, and is taken as working assumption. This triggering of AS from S-CSCF is alternative 2 in the document.

Is section 5 here is modified according to another contribution from Lucent to this meeting? No, the proper doc will be presented according to the decision on this document later on. Section 5 is agreed.

Conclusion: Agreed on alternative 2 and on section 5

N1-010931: 23.218v050, Lucent T., Type: CR, Title: CR to 23.218: Initial filter criteria in IMS

Conclusion: Withdrawn, revised to 1014

N1-011014: 23.218v050, Lucent T., Type: CR, Title: CR to 23.218: Initial filter criteria in IMS

Discussion: Revised from 931.

Conclusion: Withdrawn

N1-010936: 23.218v050, Ericsson, Type: DISCUSSION, Title: Filter Criteria for ISC Interface

Conclusion: Withdrawn

N1-010981: 23.218v051, Motorola, Type: CR, Title: 23.218 v051 IP Multimedia (IM) Session Handling; IP

Multimedia (IM) call model

Discussion: Implemented according to earlier decisions in CN1#17.

Conclusion: Noted

N1-010982: 23.218v051, Motorola, Type: CR, Title: Removal of I-CSCF and P-CSCF from Section 5 of 23.218

Discussion: The current version of TS 23.218 includes the specification of functional requirements of Proxy-CSCF, Interogating-CSCF and Serving-CSCF for IP Multimedia sessions. Should 23.218 focus on the Interactions between the S-CSCF and Application Servers (IM_SSF, OSA SCS and SIP Application Servers) and the Mappings and Call Models contained in these entities, and not contain the functional requirements for Proxy-CSCF, Interogating-CSCF for basic call/session handling?

At CN1#17 N1-010761 proposed to modify the scope of 23.218 and remove section 5 in order to effect this change. It was the opinion of the meeting that this was too broad a change, so this contribution is a revised version which does not modify the scope of the document but removes the I-CSCF and P-CSCF subsections from section 5.

Conclusion: Agreed

N1-010983: 23.218v051, Motorola, Type: CR, Title: Modifications to layout of 23.218 based on revised SA2 architecture for Service Control and selection of SIP for the ISC interface protocol

Discussion: The basic layout of TS 23.218 was determined at the end of last year when the Stage 2 architecture regarding the provision of services and service control for IMS was unclear. Since then SA2 has clarified this issue and has completed a detailed architecture for the provision of services for the IMS and selected SIP as the protocol between the S-CSCF and the Application Servers. This means that the structure of 23.218 needs reorganisation.

It is proposed that 23.218 be modified along the lines of section 2.2 in this CR and the architecture diagram and models endorsed by SA2 in section 2.1 in this CR be included in 23.218 as a starting point. A LS is proposed drafted to inform CN2 and CN5 officially of these decisions.

The 23.218 was proposed to be aligned with the SA2 architecture decisions.

CAMEL and OSA aspects that needs to be incorporated into CN2 and CN5 specifications respectively, should be handled in own TSs or as enhancements to existing TSs. This depends on the outcome of 23.218 spec decisions on the

issue and the working groups own decision. Joint meeting with CN5 also would be beneficial, but it seems not possible this year (nor the intended October meeting). One (interim) alternative is to decide shared responsibility of the TS 23.218,- section 6 and 9 with CN2, while section 8 is with CN5. The CR numbering belongs to N1 when 23.218 becomes a TS under change control. Other view is to have splitted documents for each group to handle, since it is cleaner. Splitting is agreed to be the long term solution, but if and when is up to CN2 and CN5.

The rapporteur of 23.218 needs one co-rapporteur from CN2 and one from CN5 to handle the respective shared sections. Liaisons to CN2 is not needed since they are present and CN5 will be informed by Jane. CN1 can work on 23.218 on its own, but certain contributions will still need to be handled in joint sessions between Core Network groups.

Conclusion: Agreed

 $\underline{\textbf{N1-010986}}: 23.218 v 050 \;, \;\; \text{Lucent T., Type: CR , Title: CR to } 23.218 : Information Flows for IMS Service Examples: Call Forwarding Scenarios}$

Conclusion: Withdrawn, revised to 1015

 $\underline{\text{N1-011015}}$: 23.218v?, Lucent T., Type: CR, Title: CR to 23.218: Information Flows for IMS Service Examples: Call Forwarding Scenarios

Discussion: Revised from 986.

Conclusion: Not treated due to lack of time

N1-010987: 23.218v?, Lucent T., Type: CR, Title: CR to 23.218: Pre-paid Service Control Examples

Conclusion: Withdrawn, revised to 1016

N1-011016: 23.218v?, Lucent T., Type: CR, Title: CR to 23.218: Pre-paid Service Control Examples

Discussion: Revised from 987.

Conclusion: Not treated due to lack of time

N1-010988: 23.218v050, Lucent T., Type: CR, Title: Updates to CAMEL sections in 23.218

Conclusion: Withdrawn, revised to 1026

N1-011026: 23.218v050, Lucent T., Type: CR, Title: Updates to CAMEL sections in 23.218

Discussion: Revised from 988. IM-SSF is the term to be used. MAP is not decided to be used between HSS (which is not the same as HLR) and gsmSCF, and therefore proposed to be removed. The top figure miss the rev. mark for deletion. More editorials to be handled. The HSS-CSCF (Cx interface protocol) is based on Diameter.

Conclusion: Revised to 1044

<u>N1-011044</u>: 23.218v050, Lucent T., Type: CR, Title: Updates to CAMEL sections in 23.218

Discussion: No joint session organized to handle this, but dealt with in the N1 part of this meeting.

Conclusion: Agreed

 $\underline{\textbf{N1-010989}}: 23.218\text{v}050 \;, \;\; \text{Lucent T., Type: CR , Title: CR to } 23.218\text{: Additional changes to initial filter criteria based on } \text{N1-010930}$

Conclusion: Withdrawn, revised to 1017

 $\underline{\textbf{N1-011017}}: 23.218v050 \;, \quad \text{Lucent T., Type: CR , Title: CR to } 23.218: \; \text{Additional changes to initial filter criteria based on } N1-010930$

Discussion : Revised from 989. N1-011013 shows three filter criteria implementation modes in IMS and the option 2 was proposed and agreed as the implementation mode in 23.218. In option 2, the initial filter criteria sits in the S-CSCF, once a SIP message matches the initial filter criteria at the S-CSCF, the S-CSCF will proxy the SIP message to corresponding service platform entity across ISC interface. The protocol on ISC interface is SIP. Because SIP is used in this interface, in order to perform service control, the entity (IMSSF, OSA SCS or SIP AS) need to have the knowledge about the session transaction which means that the SIP messages which matches initial filter criteria have to be the

session initiation or registration requests. In other words, the points of interest for the service platform in a SIP transaction are SIP requests.

Replace references to SIP+ (since it is a dead name) with ISC. Modification of the initial filter criteria to add things like REFER and REGISTER and also generalising the triggers in classes (4xx, 5xx etc.)? The REFER message was said to be already in 23.218. Bottom of the page needs the () removed.

Conclusion: Revised to 1043

 $\underline{\text{N1-011043}}$: 23.218v050 , Lucent T., Type: CR , Title: CR to 23.218: Additional changes to initial filter criteria based on N1-010930

Discussion: No joint session organized to handle this, but dealt with in the N1 part of this meeting.

Conclusion: Agreed

 $\underline{\textbf{N1-010990}}: 23.218v050 \;, \;\; \text{Lucent T., Type: CR , Title: CR to } 23.218: \; \text{Revision of the originating and terminating call state models on } \\ \textbf{N1-010930}$

Conclusion: Withdrawn, revised to 1027

N1-011027: 23.218v050 , Lucent T., Type: CR , Title: CR to 23.218: Revision of the originating and terminating call state modelson N1-010930

Discussion: Revised from 990. There is ongoing work in TSG SA1 to identify which aspects of CAMEL apply in IMS. The current working assumption in SA1 is that all the procedures that apply to MO and MT circuit switched calls may in theory apply to IP multimedia sessions. (S1-010692). The proposal in this contribution is to update the existing description of the Originating and Terminating IP multimedia Basic Call State Model in 23.218.

Some terminology confusion around IM SSF was discussed, but it is so far also used similarly in 23.228. Section numbers shall not be deleted.

Conclusion: Revised to 1045

 $\underline{\textbf{N1-011045}}: 23.218 v050 \; , \; \; \text{Lucent T., Type: CR , Title: CR to } 23.218: \; \text{Revision of the originating and terminating call state modelson N1-010930}$

Discussion: No joint session organized to handle this, but dealt with in the N1 part of this meeting.

Conclusion: Agreed

N1-010997: Siemens, Type: DISCUSSION, Title: S-CSCF Rolemapping

Discussion: During the last CN1 meetings a discussion about the SIP Role of an S-CSCF came up. This is needed to describe the SIP behaviour of the S-CSCF within the IMS. 24.229 currently states that a S-CSCF can act as a SIP Proxy or as an UA. This contribution analyses the current situation and open issues on the S-CSCF SIP role and gives some proposals on how to go on with this issue.

24.228 assumptions are the valid ones, but some recent changes on 24.229 needs change if those assumptions shall be kept. With introduction of ASs not only the BYE message seems to impacted. ISC now beeing a SIP protocol would allow S-CSCF to look like a Proxy. B2BUA definition is 2 legs tied together with an application and with different IDs in and out. Many open issues were raised on this contribution, eg do we have subsessions that constitute one e-2-e session?

Conclusion: Noted

N1-011003: Ericsson, Type: DISCUSSION, Title: Addressing B2BUA in a SIP network

Discussion: This contribution addresses the question on whether the S-CSCF needs to behave as a back-to-back user agent (B2BUA). This contribution describes the needs on the B2BUA at the S-CSCF if it were to be a RFC2543 compliant UAS. It is shown that this would result in breakdown in SIP network transparency, thereby violating RFC2543.

Some discussion took place, but it again focused on B2BUA or not.

Conclusion: Not treated due to lack of time

N1-011004: Ericsson, Type: DISCUSSION, Title: Network Controlled Session Disconnection

Discussion: This contribution describes scenarios where the network determines that a call in the process of being setup, or already set-up, needs to be disconnected. It addresses the issue that network-centric control of SIP sessions are necessary to provide network-centric services and describes methods by which this can be achieved without the use of a B2BUA.

Some discussion took place. Based on the ISC interface now evolving from SIP, it might be better to make 3rd party call control. It was not wanted that 23.218 became another 24.228 with enormous amount of pages.

Conclusion: Not treated due to lack of time

N1-011005: Ericsson, Type: DISCUSSION, Title: Network Controlled Session Setup, Modification

Discussion: This contribution shows how SIP messaging, using the end-to-end model as described in RFC 2543, can be used to provide a network initiated session set-up and modification.

Another discussion around B2BUA or not, seen from the difference between the SIP architecture and the 3GPP architecture. From S-CSCF, SIP is decided towards AS, but towards MRF it is FFS.

Conclusion: Noted

N1-011006: Ericsson, Type: DISCUSSION, Title: Network Controlled Addition/Removal of legs

Conclusion: Not treated due to lack of time

N1-011008: S2-011685, Type: LS IN, Title: LS on ISC

Discussion: Forwarded from agenda item 3. The terminologi was agreed on,- SA2 have endorsed the term ISC for IMS Service Control interface. Furthermore they have decided that the protocol to be run at this interface will be SIP. At the moment no extensions to SIP are known but if some are needed that will be stage 3 work as usual.

Conclusion: Noted

N1-011018: Siemens, Type: DISCUSSION, Title: Filter Criteria and Service Points of Interests

Conclusion: Not treated due to lack of time

24.228 issues for joint CN WG session (11th of July 2001 at 16:00)

N1-010941: 24.228v110 , AT&T Wireless, Type: CR, Title: Missing QoS Interaction in 24.228 Procedures

Discussion: This contribution identifies some missing QoS interactions in session set up procedures in TS24.228. Those QoS interactions are defined in TS23.228. The rapporteur of 24.228 volountered to implement this change to the next draft version.

Conclusion: Agreed

<u>N1-010944</u>: 24.228v110, Motorola, Type: INFORMATION, Title: 24.228v110 "Signalling flows for the IP multimedia call controlbased on SIP and SDP"

Discussion: The last version of the draft 24.228.

Conclusion: Noted

 $\frac{\textbf{N1-010976}}{010890}: S3-010292, Type: LS~IN~, Title: Response~to~Liaison~Statement~on~the~IM~Call~Transfer~Service~N1-010890~(S3-010249)$

Discussion: Linked LS in N1-010979. S3 has security issues related to this issue, and are looking also for comments from other bodies and will return on this when the work is done.

Conclusion: Noted

N1-010979: S5-010324, Type: LS IN, Title: Reply to N1-010890 "Liaison Statement on the IM Call Transfer service"

Discussion: SA5 acknowledge the LS from N1 and promise to look at the details from charging viewpoint in their next regular meeting 16-20 July 2001.

Conclusion: Noted

<u>N1-010985</u>: 24.228v110 , Lucent T., Type: DISCUSSION , Title: Document Structure for the Cx Interface Protocol Standards

Discussion: The document structure should mirror as closely as possible that which has been agreed in CN1 for the IMS specifications. If the scope of the new Cx documents in CN4 is chosen correctly this will avoid confusion and ensure consistent working arrangement across CN1 and CN4 for the documents under their control. The discussion on this topic has already proceeded further in CN4 and there is a new proposal in tdoc N1-011042.

Conclusion: Noted

N1-010993: 24.228v110 , Lucent T., Type: CR , Title: CR to 24.228: Proposal for Media Gating Timing at MGW for Early Media

Discussion: Media gating at the MGW is currently shown to take place after answer by the called party. This does not allow for early media to be sent to the calling party. Early media may be necessary for network provided tones or announcements. So, there at least needs to be one-way media flow to the calling party earlier in the sequence. Also, since gating at GGSN already happens under control of the P-CSCF/PCF, there is not a need to do gating at the MGW. If the media is blocked on any part of the path, then that is sufficient to prevent transmission of media between endpoints (either one-way or two-way). The proposed change is to eliminate the media gating function of the MGW by enabling the media at the same time the resources are allocated at the MGW. The system will rely solely on the GGSN gating instead.

It was commented that this will not work if a PSTN to IMS call is re-directed to the PSTN. If P-CSCF or PCF is not involved the removal of gating from MGW will result in no gating at all. And tones could eg. be provided by the MGCF.

Conclusion: Rejected

N1-010994: 24.228v110 , Lucent T., Type: CR, Title: CR to 24.228: Removal of the T-SGW

Discussion: This contribution proposes removing the T-SGW from 24.228, in line with changes agreed within 23.002. The rapporteur of 24.228 volountered to implement this change to the next draft version.

Conclusion: Agreed

N1-010999: 24.228v110 , Lucent T., Type: CR , Title: Proposal on the work split of "End-to-end QoS Stage 3" among CN and RAN working groups

Discussion: Seen a revised version of this document (N3-010318) in the QoS joint session last Tuesday night, were the document was agreed to be revised further by CN3. This tdoc is distributed for information in N1-011053.

Conclusion: Noted

N1-011007: 24.228v110 , InterDigital Communication, Type: CR , Title: Handling of Unsupported media types in SDP

Conclusion: Not treated since it was not made available for distribution in time before nor during the meeting.

 $\underline{\textbf{N1-011010}}: S2\text{-}011696 \ (S2\text{-}011677 \ in \ the \ doc \ itself), Type: LS \ IN \ , Title: LS \ on \ Future \ proof \ specification \ of \ the \ Gointerface$

Discussion: Forwarded from agenda item 3. From SA2 To CN3 with CC to CN1. The joint meetings opinion on possible open interface between P-CSCF and PCF in the future was sought. It was expressed that separate boxes should then be shown, and preferably for all flows. Only one incoming and one outgoing flow for originating and terminating seems to be the compromise. Hopefully SA2 should do the same in 23.228, but it is not likely. Do we need flows for Go as well ? SA2 needs to be informed about the needed split between P-CSCF and PCF in 24.228, and that N1 could not agree on wether stage 2 is impacted or not.

It has been decided in SA2 that in Release 5 there will be no standardised open interface between the PCF (Policy Control Function) and the P-CSCF. However, introducing such an interface in later releases should not be prevented.

Conclusion: LS OUT in 1046 by Sunil

N1-011012: 24.228v110 , Lucent T., Type: CR , Title: CR to 24.228: Quality of Service Authorization in IM CN subsystem

Discussion : In 24.228-session initiation flows, there is a box called "QoS Authorization" sitting in one of the tasks of P-CSCF for both originating and terminating sides. There is a functional entity within the P-CSCF called PCF (Policy Control Function), which functions as a Policy Decision Point for the service-based local policy control. Once QoS Authorization procedure is triggered, the P-CSCF initiates a policy setup in PCF for the session and generates an Authorization-Token, which is sent to PCF with related user profile. The PCF shall authorize the required QoS resources for the session and install the IP bearer level policy based on information from the P-CSCF. This contribution attempts to separate the function of PCF from the P-CSCF and show QoS authorization in more detail.

Should SA2 have contributions on 23.228 and 23.207 to handle stage 2 first to show a split functionality (after Release 5)? This is related to an earlier assumption in this meeting that stage 2 was not impacted by a possible future split between P-CSCF and PCF. The whole functionality in the box for authorization of resources were questioned to which extent it is covered by this contribution. The split was expressed to be of architectural nature, changing the asumptions for the LS OUT in 1046 and the LS from S2 in 1010.

Conclusion: Rejected

<u>N1-011042</u>: 24.228v110, Ericsson/Motorola, Nokia, Siemens., Type: DISCUSSION, Title: Cx Documentation Approach

Discussion: This document addresses the scope and content of the different documents to be developed by CN4 and submitted to 3GPP and IETF approval. It also addresses documents developed outside CN4, but having a possible impact on CN4 documentation. The list of addressed and referred to documents is to be found in section 1.2.

Relation to 24.228 is not explained, but the plan is to be consistent with it. Cx information flows will be input to 24.228. Also mapping SIP to DIAMETER parameters on the Cx interface should be provided for 24.228 (but also 24.229 was mentioned as possible target). This are to be provided by CN4 experts.

Conclusion: Endorced

<u>N1-011053</u>: N3 (tdoc N3-010326), Title: Proposal on the work split of "End-to-end QoS Stage 3" among CN working groups.

Discussion: This is an agreed document in CN3 provided for information only.

Conclusion: Noted