3GPP TSG CN Plenary Meeting #14   Tdoc NP-010576
Japan, Kyoto, 12th – 14th December 2001

Source: TSG CN WG2

Title: CN2#20 Meeting Report

Agenda item: 6.2.1

Document for: INFORMATION

Meeting Report, version 1

TSG CN WG2#20
Brighton, UK

15 – 19 October, 2001

Chairman: Keijo Palviainen (Nokia)

MCC support: Andrijana Jurisic (ETSI)

Hosts: BT, Vodafone, Lucent Technologies, Hutchison 3G and Orange

List of participants:	Annex A
Output documents	Annex B
Tdoc list (incl. the status)	Annex C
Joint meeting between CN1/2/3/4/5	Annex D

Documents could be found on the 3GPP-server:

ftp://ftp.3gpp.org/TSG_CN/WG2_camel/Plenary/TSGN2_20_Brighton/Docs

1 Opening of the meeting and approval of the agenda

The meeting is opened on Monday 15th at 9:00. CN2 chairman announced that the position of the vice chairman is opened and invited CN2 delegates to apply for this position. The election of the Vice chairman will be held on CN2#20 in Cancun.

ETSI proposed to host a January meeting, but with a delay of 2 weeks starting on 28th of January and ending on 1st of February. CN2 delegates agreed about the new date of the January meeting

N2-010716 : CN2 chairman, Title: Proposed meeting agenda

Discussion : The meeting will start every day at 8:30 and will end on Friday at 12:30.

Conclusion :approved

2 Allocation of documents to agenda items

N2-010717 : CN2 chairman, Title: Allocation of documents to agenda items

Discussion : Document 767 is revised in 795. Documents 711, 747,756,784,785,786,787 are withdrawn.

Conclusion :noted

3 Reports

N2-010718: MCC, Title: Draft Meeting Report from CN2#19, Dresden

Discussion : Dresden Meeting Report was seen by plenary meeting.

Conclusion: noted

N2-010719: MCC, Title: Draft Meeting Report from CAMEL4 adHoc meeting, Sophia Antipolis

Discussion : This report was on CN2 distribution list for comments and it will be sent to next CN Plenary for information.

Conclusion: noted

4 Input Liaison Statements

N2-010720 : SA1, Type: LS IN , Title: IP Based Multimedia Services Framework Report

Discussion :

Conclusion: noted

N2-010721: T2, Type: LS IN, Title: Liaison Statement in Regards to MMS Charging

Discussion : MMS has a need for encompassing both post-paid and pre-paid billing and is suggesting that SA2 and SA5 should define a common charging architecture/solution for these generic requirements. Correlation of the CDRs between the access domain (e.g. GGSN) and the service domain (e.g. MMSE) should be defined by SA5.

Conclusion: noted

N2-010722: SA5, Type: LS IN, Title: Reply to " Liaison Statement in Regards to MMS Charging "

Discussion : SA2-SA5 Drafting meeting was held last week and CN2 expects a LS from that meeting.

Conclusion: noted

N2-010723: SA5, Type: LS IN, Title: Liaison on "Unique GGSN address required for charging purposes"

Discussion : This LS is addressed to CN4 and copy is sent to CN2. S-CDRs and G-CDRs pertaining to one PDP-context must be able to be correlated by a unique identifier. This is required to allow appropriate billing by taking into account all relevant CDRs generated by the involved GSNs.

S-CDR and G-SDR have to have the same charging ID and the unique GGSN address. CN4 is working on this issue and CN2 waits for CN4 action.

Conclusion: noted

N2-010724: SA5, Type: LS IN, Title: LS on "Access Point Name" usage

Discussion : SA5 is concerned about ambiguities of Access Point Name notation and would like to propose to all CN and SA WGs to take any necessary action to ensure that there are no contradictions or potential ambiguities between Technical Specifications under responsibility of the each group and TS 32.215.

CN2 CAP specification refers to 29.060, but it refers to 24.008 in Connect GPRS (in procedure description section). 24.008 refers to 23.003. 29.060 has slightly different encoding and leads us to conclusion that CAP specification does not give clear indication which specification to use as reference.

Alcatel proposes that one working group proposes which encoding to use (working group who is the master of APN encoding). Other groups should follow that.

SGSN (24.008/23.003) makes mapping in GTP format (29.060). CDR format is opened and CN2 could follow the format that is in CDRs.

"To represent the APN NI and OI in the GPRS CDRs, the "dot" notation shall be used." – according to this LS.

Conclusion: noted

N2-010725: SA2, Type: LS IN, Title: Liaison Statement on "Unique GGSN Address"

Discussion : The LS is sent from SA2 to CN4 and copy is sent to CN2 and SA5. SA2 came to the conclusion that for the sake of providing correct service control (CAMEL) and correct charging of the service from R99 on, it is essential to guarantee a unique identification for correlation of all CDRs / service control interactions pertaining to a single PDP context, whatever the event occurring to this PDP context (e.g. SRNS relocation inducing an SGSN change). CN2 needs to check Access Point Name usage and references.

Conclusion: noted

5 Work item management & miscellaneous

Status of CN2 specifications and drafts

Type	Number	Title	Rel	current vers	WG	rapporteur
TS	03.78	CAMEL Phase 1; Stage 2	R1996	5.8.0	N2	LANTELME, Isabelle
TS	03.78	CAMEL Phase 2; Stage 2	R1997	6.9.1	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	3.10.0	N2	HOMANN, Christian
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	Rel-4	4.2.0	N2	HOMANN, Christian
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	R1999	3.9.0	N2	NOLDUS, Rogier
TS	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification	Rel-4	4.2.0	N2	NOLDUS, Rogier
Draft	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2	Rel-5	5D.10.1	N2	SUMIO, Myagava
Draft	29.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase; CAMEL Application Part (CAP) specification	Rel-5	d5.4.0	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

N2-010790 : MCC, Type: Information , Title: Latest version of the Work plan

Discussion : Progress of the items are adjusted according to the work assumption in Dresden meeting. Clean version of the WID that was approved on CN plenary in Beijing is in document NP-010541. New update to the work plan will be done after Cancun meeting.

Conclusion: noted

N2-010796 : CN2 Chairman, Type: Information , Title: Comments on the progress of the CAMEL4 work

Conclusion: withdrawn

6   CAMEL3, Resolution of outstanding issues for Release 99

6.1   CAMEL3, Miscellaneous

N2-010746 : 29.002, R99, Ericsson, Type: CR, Title: Correction to the description of Insert Subscriber Data

Discussion : MAP R99 allows the HLR to send down individual CSIs, in the MAP ISD message, without the VLR overwriting the CSIs in the VLR which are not included in ISD. The current wording of the Insert Subscriber Data is phrased such that the grouping of CSIs in the Insert Subscriber Data can be interpreted as being dependent on the CAMEL Phase included in O-CSI (i.e. the value of "CAMEL Capability Handling"). The grouping of CSIs in the Insert Subscriber Data, for the purpose of the "specific CSI Insertion" feature, shall not be dependent on the CAMEL Phase inside O-CSI.

The present CR proposes an improvement in wording in order to clarify that if the VLR receives a set of CAMEL data, VLR has to use the group of elements received and overwrite existing group of elements without unpacking O-CSI.

Conclusion :noted, used as input to revised Alcatel document 770

N2-010747 : 23.078, R99, Ericsson, Type: CR, CR#326, Title: Clarification on the handlig of Specific CSI Insertion and Specific CSI Withdraw

Discussion :

Conclusion :withdrawn

N2-010770 : 29.002, R99, Alcatel, Type: CR, Title: Clarification of sending CAMEL information in stand alone ISD case

Discussion : When the VLR receives a specific element of VLR CAMEL Subscription Info, it shall overwrite the corresponding specific element of VLR CAMEL Subscription Info (if any) which it has stored for that subscriber.

This CR defines the notation of the specific element of VLR CAMEL Subscription Info. Sentence about the CAMEL capability handling has to be included from Ericsson CR.

Conclusion :revised to 803

N2-010803 : 29.002, R99, Alcatel, Type: CR, Title: Clarification of sending CAMEL information in stand alone ISD case

Discussion :

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

N2-010818 : 29.002, Rel-4, Alcatel, Type: CR, Title: Clarification of sending CAMEL information in stand alone ISD case

Discussion :

Conclusion :endorsed by CN2 without presentation and will be sent to CN4 for approval

N2-010749 : 23.078, R99, Ericsson, Type: CR, CR327, Title: Editorial and technical corrections to section 11

Discussion : The present CR proposes a large number of technical corrections to section 11, "Detailed operation procedures" and some editorial corrections. Subcategory should be "agreed by consensus". The CR is written against version 3.8.0 (before the 3.9.0 was created) but there are not CRs to section 11 between these 2 versions. Vodafone and Siemens would like to see all the technical corrections listed in the cover page. Consequences if not approved have to indicate clearly all consequences if those technical changes are not approved.

Decision is to put every technical change in separate document, so this CR will be revised and splitted in several documents for the next meeting. Siemens, Alcatel and Vodafone do not agree with all the wording changes.

Conclusion :noted

N2-010751: 29.002, R99, Ericsson, Type: CR, Title: CUG- Info is not exported from 29.002

Discussion : Data type definition "CUG-Info" is IMPORT-ed in 3GPP TS 29.078, from module MAP-MS-DataTypes (3GPP TS 29.002). CUG-Info shall be exported from MAP-MS-DataTypes. The meeting proposes the subcategory "agreed by consensus". Rel-4 CR will be sent directly to CN4.

Conclusion :endorsed

N2-010761: 29.078, R99, Nokia, Type: CR,CR 202, Title: Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value

Discussion: The current value of 174 for MAXIMUM-FOR-FCI-BILLING-CHARGING does not allow the gsmSCF to send the maximum of 160 octets free format data to the gprsSSF in the FurnishChargingInformationGPRS operation and does not allow specify new parameters after ellipsis, therefore this CR proposes to add 50 octets for the future expansions. The maximum length is corrected to the value 175+50=225.

Conclusion: approved

N2-010762: 29.078, Rel-4, Nokia, Type: CR,CR 203, Title: Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value

Discussion: This CR is a Rel-4 mirror CR to CR202.

Conclusion: approved

N2-010763: 29.078, R99, Nokia, Type: CR,CR 204, Title: Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value

Discussion: The current value of 69 for MAXIMUM-FOR-SCI-BILLING-CHARGING does not allow the gsmSCF to send all optional data to the gprsSSF in the SendChargingInformationGPRS operation. In this CR, the maximum length is corrected to the value 74+50=124. Conclusion section has to be revised, FCI shall be replaced by SCI and SMS will be removed.

Conclusion: revised to 813

N2-010813: 29.078, R99, Nokia, Type: CR,CR 204r1, Title: Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value

Discussion:

Conclusion: approved without presentation

N2-010764: 29.078, Rel-4, Nokia, Type: CR,CR 205, Title: Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value

Discussion:

Conclusion: revised to 814

N2-010814: 29.078, Rel-4, Nokia, Type: CR,CR 205r1, Title: Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value

Discussion:

Conclusion: approved without presentation

6.2 CAMEL3/ATM&ATSI

N2-010728: 23.078, R99, Lucent Technologies, Type: CR,CR#324, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion: A deletion of a CSI constitutes a change in subscriber data, but the current messages are unable to convey the fact that a CSI for a subscriber has been deleted. It is essential for the HLR to indicate the difference between when a CSI is deactivated and when it is deleted, therefore this CR adds a parameter to the Notify Subscriber Data Change information between the HLR and the gsmSCF. New parameter is "SpecificCSIDeleted" and indicate which CSI has been deleted for a subscriber.

According to Lucent no stage 1 change is required. "AllCAMELSubscriptionDeleted" is introduced to simplify the case when all CSIs are deleted. IE "Specific CSI Deleted List" can contain all CSIs deleted. The rational behind this CR is to indicate to gsmSCF that CSIs are deleted and not deactivated. Alcatel has similar proposal in document N2-010768.

Conclusion: revised to 804, subcategory will be marked "essential correction"

N2-010804: 23.078, R99, Lucent Technologies, Type: CR,CR#324r1, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion:

Conclusion: approved

N2-010743: 23.078, Rel-4, Lucent Technologies, Type: CR,CR#325, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion:

Conclusion: revised to 815

N2-010815: 23.078, Rel-4, Lucent Technologies, Type: CR,CR#325, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion:

Conclusion: approved

N2-010768: 23.078, R99, Alcatel SA, Type: CR,CR#336, Title: Clarification on NSCD when data is withdrawn

Discussion: According to this CR withdrawal of the service is meant by an action of the operator and leads to "not provisioned", "not active", "not registered" SS status.

Instead of listing cases what shall be done when supplementary services are withdrawn, a reference to the particular supplementary service specifications can be used (call forwarding, call baring, ..).

According to Lucent, difference between withdrawal and deletion has to be visible. We should use the name of the parameter "Specific CSI deleted list" as Lucent used.

Siemens does not believe that this as essential correction for CSI, because some O-CSI fields are mandatory even if they are deleted (section 4.3.1).

Revised document will contain SS part only, i.e. addition in a description of ODB General Data and ODB HPLMN Specific Data which explains that IE indicate that the set of subscribers features is empty when ODB General Data/ ODB HPLMN Specific Data is removed for the subscriber.

Conclusion: revised to 805

N2-010805: 23.078, R99, Alcatel SA, Type: CR,CR#336r1, Title: Clarification on NSCD when data is withdrawn

Discussion: Subcategory has to be added by MCC before sending the CR to plenary.

Conclusion: approved

N2-010820: 23.078, Rel-4, Alcatel SA, Type: CR,CR#342, Title: Clarification on NSCD when data is withdrawn

Discussion: Subcategory has to be added.

Conclusion: approved without presentation

N2-010729: 29.002, R99, Lucent Technologies, Type: CR,CR#317, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion: Cover page has to include corresponding 23.078 CR number. T-CSI has to be included to the SpecificCSI-Withdraw bit map.

Conclusion: revised to 806

N2-010806: 29.002, R99, Lucent Technologies, Type: CR,CR#317r1, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion:

Conclusion: endorsed, will be sent to CN4 for approval

N2-010816: 29.002, Rel-4, Lucent Technologies, Type: CR,CR#318, Title: Indication of deletion of CSI in Notify Subscriber Data Change

Discussion:

Conclusion: endorsed, will be sent to CN4 for approval

N2-010769: 29.002, R99, Alcatel SA, Type: CR, CR#x, Title: Clarification on NSCD when data is withdrawn

Discussion: This CR adds a new parameter " Specific CSI Withdraw" in the Notify Subscriber Data Change operation to notify the gsmSCF that one or several CSI are erased in the HLR for a given subscriber as well as comment related to erasure of ODB data.

The naming for parameters should be used as used until now in MAP specification. This CR should contain only addition of comments relative to the erasure of ODB from the HLR for a given subscriber. CSI related part will not be included in this CR, but in Lucent contribution.

Conclusion: revised to 807

N2-010807: 29.002, R99, Alcatel SA, Type: CR,CR#x, Title: Clarification on NSCD when data is withdrawn

Discussion: CR number for TS 23.078 has to be included in the cover page.

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

N2-010819: 29.002, Rel-4, Alcatel SA, Type: CR,CR#341, Title: Clarification on NSCD when data is withdrawn

Discussion:

Conclusion: endorsed by CN2 without presentation and will be sent to CN4 for approval

N2-010767: 23.078, R99, Alcatel SA, Type: CR,CR#335, Title: Clarification on ATM

Discussion:

Conclusion: revised to 795

N2-010795: 23.078, R99, Alcatel SA, Type: CR,CR#335r1, Title: Clarification on ATM

Discussion: In the 3GPP TS 23.078 it is specified that a gsmSCF is allowed to erase SS data (as Call barring and call forwarding) when only the SS-code and (optionally) a Basic Service code are present in ATM. As the word "erase" can cause ambiguity, this CR specifies that it is not allowed to a gsmSCF to provision or withdraw Supplementary Services.

Text description is different that one in the SDL. Text description has to be corrected ("provisioned" will be removed from text description of the procedure ATM_Modify_CF_Data) and task box "set CF status" will be enough. "Erase" does not exist for CB, but only SS status changes with ATM. Several Vodafone comments are considered regarding wording and the document will be revised. "SS-Status is set to "Provisioned, Not Registered, Not Active"" is changed to " SS-Status is amended according to the state transition model defined in 3GPP TS 23.082."
Conclusion: revised to 808

N2-010808: 23.078, R99, Alcatel SA, Type: CR,CR#335r2, Title: Clarification on ATM

Discussion: Mirror CR for Rel-4 is in document 842.

Conclusion: approved

N2-010842: 23.078, Rel-4, Alcatel SA, Type: CR,CR#335r2, Title: Clarification on ATM

Discussion:

Conclusion: approved

6.3   CAMEL3/GPRS

N2-010727 : Type: Disc, Lucent Technologies , Title: GPRS open issues

Discussion :

1) GPRS reference number should be sent in the TC continue of the first TC dialogue or can be send in TC continue of each TC dialogue? Lucent has to be clear in documenting that.

Working assumption is that the very first TC-Continue which is response to Initial DP GPRS shall include GPRS reference number. The follow-on TC-Continues within the same TC dialogue shall not be sent according to Alcatel (due to load of the network and possible difference between the first GPRS reference number and subsequent reference number that are sent).

Sending of the first TC-Continue of each subsequent dialogue can be denied, but Nokia and Ericsson prefer to leave this opened what means that sending side is allowed to send it or to omit it in the first TC-Continue of each subsequent TC dialogue. The recipient of the GPRS reference number (TC-Continue) is not mandated to check the correctness of the GPRS reference number , i.e. is not mandated to check whether it has been changed. Contributions are expected for the next meeting.

2) Another issue that the current versions of 23.078 and 29.078 do not provide any guidance on is the cause code sent to a GPRS UE when a gsmSCF initiates a GPRS Session release. The gsmSCF does not provide any cause value (apart from "Unspecified") to the SGSN, but the SGSN needs to supply a cause value to the UE. According to Lucent #7 would be the most appropriate cause code for the SGSN to report to the UE. Nokia uses #7 (GPRS service not allowed)

in Attach/RAU, but #7 (Implicit detach) in Detach DP. PDPc release could be specified as well. Contributions are expected for the next meeting.

3) S2 Related issues :

Issue 3.1 will be left opened and if any of the companies find this as critical, the corresponding CR can be submitted for the next meeting. According to Alcatel figure 74 (to release GGSN before EDP) should be modified. Lucent has the opposite view.

For the issue 3.2, Incorrect CAMEL Procedure calls in Figure 36, related CR is prepared by Lucent.

Conclusion :noted

N2-010742 : 23.060, R99, Type: CR, CRx, Lucent Technologies , Title: CR to 23.060 Correction to CAMEL Procedure Name during RoutingAreaUpdate

Discussion : This document corrects the last GPRS open issue listed in the document 727. Figure 36 in TS 23.060 has been revised such that at the point at which the new-3G SGSN invokes CAMEL Procedures, the label C2 is now replaced with C3 (CAMEL_GPRS_Routeing_Area_Update_Session) and the label C3 is replaced by label C4 (CAMEL_GPRS_Routeing_Area_Update_Context).

Cover page has to be improved and printout problem has to be solved.

Conclusion :revised to 848

N2-010848 : 23.060, R99, Type: CR, CRx, Lucent Technologies , Title: CR to 23.060 Correction to CAMEL Procedure Name during RoutingAreaUpdate

Discussion :

Conclusion : endorsed, source will be marked as CN2 and will be sent to SA2 for approval

N2-010817 : 23.060, Rel-4, Type: CR, CRx, Lucent Technologies , Title: CR to 23.060 Correction to CAMEL Procedure Name during RoutingAreaUpdate

Discussion : This is Rel-4 mirror CR to document 742.

Conclusion :endorsed without presentation, source will be marked as CN2 and will be sent to SA2 for approval

N2-010756 : 23.078, R99, Type: CR, CR 330, Ericsson , Title: SGSN/gprsSSF shall open control relationship after sending IDP

Discussion :

Conclusion :withdrawn

N2-010759: 29.078, R99, Type: CR, CR 207, Nokia, Title: Encoding of the InitialDPGPRS ChargingID parameter
Discussion : The encoding of the ChargingID is not clear specified in stage 3. The procedures refers to the 32.015 where the variable length INTEGER (0..4294967295) is used, but the exact CAP coding uses fixed length OCTET STRING (SIZE(4)).

Due the same kind fixed length coding used in CAP and interface GTP, Nokia proposes to change the reference in CAP procedures from 32.015 to 29.060.

Conclusion : approved

N2-010760: 29.078, Rel-4, Type: CR, CR 208, Nokia, Title: Encoding of the InitialDPGPRS ChargingID parameter
Discussion :

Conclusion : approved

6.4   MO SMS

N2-010775 : 23.078, R99,Siemens AG, Type:CR ,CR#338, Title: Correction of SDL to text extension

Discussion : This CR proposes that if the name of a input signal does not fit into the input signal symbol, the name should be placed in a text extension symbol but not in a comment symbol. This is applied in SDL CAMEL_O_SMS_INIT sheets 1 and 3.

Conclusion : approved

N2-010776 : 23.078, Rel-4, Siemens AG, Type:CR ,CR#339, Title: Correction of SDL to text extension

Discussion :

Conclusion : approved

N2-010793 : 23.078, R99, Ericsson, Type:CR ,CR#340, Title: Introduction of SMS reference number

*Discussion :*Proposal of this CR is: If a Mobile Originated Short Message is subject to CAMEL control, then:

1. The MSC/SGSN shall generate an SMS Reference Number.

2. The MSC/SGSN shall report this Reference Number, together with the MSC Address/SGSN Number, to the SCP.

3. The MSC/SGSN shall place this Reference Number and the MSC Address/SGSN Number in the SMS CDR.

SMS reference number is marked as "mandatory" in this CR for R99 what is not acceptable for Siemens and Nokia. The way forward is : To mark the parameters optional for R99 . In TS 23.078 for Rel-5 the parameter will be marked as "mandatory" and TS 29.078 for R99 and Rel-5 have parameter after elipsis.

Conclusion : revised 825

N2-010825 : 23.078, R99, Ericsson, Type:CR ,CR#340r1, Title: Introduction of SMS reference number

Discussion : The allocation of an SMS Reference Number and the inclusion thereof in the Initial DP SMS IF is optional for R99. SMS Reference Number is marked as "O"(optional) in IE table and additional description is added that the parameter is optional in R99.

In case of concatenated SMSs, MSC can allocate the same SMS reference number. It is not specified whether MSC shall send the same SMS reference number for all concatenated SMSs or it can send a different SMS reference numbers. It is up to implementations how to allocate SMS reference number for concatenated SMSs. For the time being CN2 decided to leave this topic opened in a sense that MSC can decide to send the same or different SMS reference number for concatenated messages. Contributions to clarify this issue are expected.

If the HO is performed between 1st and 2nd concatenated SMSs, it is not clear whether same SMSs reference number should be used for concatenated messages.

 Siemens proposal is to remove the sentence which specifies what MSC possibly does with this new parameter.

Meeting decisions:

*   SDLs comment box will contain only comment "optional" and   "for R99" will be removed everywhere where it is used for these parameter as this is R99 document.Rel-4 CR will be identical as R99 CR. Reference to clause 7.5.2.1.5 is removed.

*   SMS reference number will be marked conditional ("C1")

*   MSC address and SGSN number will be marked conditional ("C2")

Conclusion : revised to 845

N2-010845 : 23.078, R99, Ericsson, Type:CR ,CR#340r2, Title: Introduction of SMS reference number

Discussion :

Conclusion : approved without presentation

N2-010846 : 23.078, Rel-4, Ericsson, Type:CR ,CR#344, Title: Introduction of SMS reference number

Discussion :

Conclusion : approved without presentation

N2-010847 : 23.078, Rel-5, Ericsson, Type:CR ,CR, Title: Introduction of SMS reference number

Discussion : Rel-5 CR for Introduction of SMS reference number was approved in document N2-010694 on CAMEL4 AdHoc meeting in Sophia Antipolis, so this is already included in current draft version.

Conclusion : withdrawn

N2-010794 : 29.078, R99, Ericsson, Type:CR ,CR#209, Title: Introduction of SMS reference number

Discussion :

Conclusion : revised to 826

N2-010826: 29.078, R99, Ericsson, Type:CR ,CR#209r1, Title: Introduction of SMS reference number

Discussion :

Conclusion : approved

N2-010849: 29.078, Rel-4, Ericsson, Type:CR ,CR#210, Title: Introduction of SMS reference number

Discussion :

Conclusion : approved without presentation

6.5   CAMEL3/Call Related

N2-010701 : 23.018, R99, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion : Message name was changed in this CR and has to be changed back.

 ORLCF shall not be attempted if the call has already been answered once. Hence, no changes are required in the GMSC. The variable "Call answered" has been introduced in the process ICH_MSC, this variable is set to "True" before the process enters either the Wait_For_Clear or the Wait_For_Forward_Clear state. When a Send Info For Reconnected Call ack is received, the ORLCF procedure is called if Call answered = False, otherwise ORLCF is not invoked.

MSC can either support this functionality or return an error. Vodafone would like to clarify do we want to allow optimal routing in the active phase of call? Nokia prefers to have ORLCF also in the active phase of the call (controll of the call back in the HPLMN rather than in VPLMN). Alcatel believes that normally optimal routing should be allowed in the setup phase, not in the active phase of the call.

VMSC does not always know whether the terminating side (GMSC T-BCSM) has received an answer or not (GMSC O-BCSM may send it).

Assumptions:

- VMSC does not send RCH after ISUP answer has been sent.

- GMSC will generate "OR not supported" if GMSC T-BCSM is active phase of the call.

Conclusion: revised to 809

N2-010809 : 23.018, R99, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion : The change that relates to GMSC CF RCH handling will be rejected in revised version.

Conclusion: revised to 821

<u>**N2-010821**</u> : 23.018, R99, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

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

<u>**N2-010703**</u> : 23.018, Rel-4, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: revised to 822

<u>**N2-010822**</u>: 23.018, Rel-4, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: endorsed by CN2 without presentation

<u>**N2-010705**</u> : 23.018, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: revised to 823

<u>**N2-010823**</u> : 23.018, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: endorsed without presentation

<u>**N2-010702**</u> : 23.078, R99, Vodafone, Type: CR,CR#322 Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: revised to 810

<u>**N2-010810**</u> : 23.078, R99, Vodafone, Type: CR,CR#322r1, Title: Handling of Reconnect on the MSC-VLR Interface

Discussion : The name of the document is changed from the document N2-010702..

Conclusion: approved

<u>**N2-010704**</u> : 23.078, Rel-4, Vodafone, Type: CR,CR#323, Title: Handling of Reconnect on Leg2 Disconnect

Discussion :

Conclusion: revised to 843

<u>**N2-010843**</u> : 23.078, Rel-4, Vodafone, Type: CR,CR#323r1, Title: Handling of Reconnect on the MSC-VLR Interface

Discussion :

Conclusion: approved without presentation

<u>**N2-010706**</u> : 23.078, Rel-5, Vodafone, Type: CR, Title: Handling of Reconnect on Leg2 Disconnect

Discussion : This document contains SDL changes and content of the CR is different than CRs to previous releases. This CR modifies VMSC so that it never tries ORLCF after answer (changes to CAMEL_ICH_LEG1_MSC and CAMEL_ICH_RECONNECT_MSC to remove the ORLCF functionality). CAMEL_ICH_RECONNECT_MSC is only called for reconnect at Leg2 disconnect.

Conclusion: approved

<u>**N2-010754**</u> : 23.078, R99, CR#328, Alcatel SA, Type: CR, Title: Clarification of the CUG data used in IDP

Discussion : For an MT or VT call which is to be routed to the terminating subscriber, the latest available CUG data (extracted from the incoming ISUP IAM) shall be sent to the gsmSCF in the Initial DP, but the gsmSCF shall not have the ability to change the CUG information for the call.

If the CUG data which had been obtained in the ISUP IAM or from the VLR or from the HLR has been modified by the previous Connect or Continue With Argument IF, this modified data shall be used.

According to Vodafone approval in the wording has to be done.

If the HLR does not send any CUG information, that means (23.018) not to proceed with a CUG call.

Conclusion: revised to 824

<u>N2-010824</u> : 23.078, R99, CR#328r1, Alcatel SA, Type: CR, Title: Clarification of the CUG data used in IDP

Discussion :.

Conclusion: approved

<u>N2-010755</u> : 23.078, Rel-4, CR#329, Alcatel SA, Type: CR, Title: Clarification of the CUG data used in IDP

Discussion :

Conclusion: revised to 853

<u>N2-010853</u> : 23.078, Rel-5, CR#329r1, Alcatel SA, Type: CR, Title: Clarification of the CUG data used in IDP

Discussion :

Conclusion: approved without presentation

<u>N2-010757</u> : 23.078, R99, CR#331, Nokia, Type: CR, Title: TDP3 triggering criterion in MO case

Discussion : For MO calls, triggering at DP Analysed_Info shall be based on the called party number received over the access network or the Destination Routing Address in the Connect operation from the SCF during a Mobile Originating CAMEL Service.

Subcategory should be "essential correction". SCF should be replaced by gsmSCF.

Conclusion: revised to 827

<u>N2-010827</u> : 23.078, R99, CR#331r1, Nokia, Type: CR, Title: TDP3 triggering criterion in MO case

Discussion :

Conclusion: approved without presentation

<u>N2-010758</u> : 23.078, Rel-4, CR#332, Nokia, Type: CR, Title: TDP3 triggering criterion in MO case

Discussion : This is a Rel-4 mirror CR to CR#331.

Conclusion: revised to 828

<u>N2-010828</u> : 23.078, Rel-4, CR#332r1, Nokia, Type: CR, Title: TDP3 triggering criterion in MO case

*Discussion :*As a mirror CR, subcategory is not needed.

Conclusion: approved without presentation

<u>N2-010766:</u> 29.078, R99, CR#206, Alcatel Sa, Type: CR, Title: Precision abour default values for ServiceInteractionIndicatorsTwo parameters

Discussion : The intention of this CR is to align stage 3 with stage 2. Network defaults are CAP specific. Alcatel has difficulties in understanding of "network default", so the CR adds a comment to the ASN1 definitions to fix the treatment when call parameters are absent and removes the notion of "network default".

Some services require also subscription, regardless what SCP instructs. SCP service can change parameters only to more restrictive direction. This is not clearly specified.

Conclusion: revised to 829

<u>N2-010829:</u> 29.078, R99, CR#206r1, Alcatel SA, Type: CR, Title: Precision abour default values for ServiceInteractionIndicatorsTwo parameters

Discussion : CR removes values that are not allowed to be used by SCP. That was not done in table A.4.

Table A.4 has to be revised. SCP is allowed to change values in more restrictive direction. Alcatel believes that this is not stated anywhere. In revised document parameter values will not be removed, but it will clarified that SCP can

change values to more restrictive only. It is already defined when certain parameters are used. "network default" should mean that if such a parameter is neither received from ISUP neither from CAP, the default is to accept the supplementary service

If the call parameters are absent from Connect or ContinueWithArgument, CAMEL service does not affect supplementary service treatment.

CR for the stage 2 will be presented in CN2#21.

Conclusion: revised to 844

N2-010844: 29.078, R99, CR#206r2, Alcatel SA, Type: CR, Title: Precision abour default values for ServiceInteractionIndicatorsTwo parameters

Discussion :

Conclusion: approved

N2-010854: 29.078, Rel-4, CR#211, Alcatel SA, Type: CR, Title: Precision abour default values for ServiceInteractionIndicatorsTwo parameters

Discussion : This is Rel-4 mirror CR to CR#206r2.

Conclusion: approved without presentation

N2-010773 : 23.078, R99, CR#334, Siemens AG, Type: CR, Title: Inclusion of D-CSI in arming/disarming mechanism

Discussion : This CR proposes to ad D-CSI in the appropriate position so that the same arming/disarming mechanism for D-CSI is done as other CSI.

Conclusion: approved

N2-010774 : 23.078, Rel-4, CR#337, Siemens AG, Type: CR, Title: Inclusion of D-CSI in arming/disarming mechanism

Discussion : This is a Rel-4 mirror CR to CR#334.

Conclusion : approved

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7 CAMEL for Release 4

7.1 General and miscellaneous Rel-4 issues

7.2 CAP over IP

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8 CAMEL4, Release 5

8.1 CAMEL 4 / Stage 1

8.2 Miscellaneous CAMEL 4 issues

N2-010777: 23.078, Rel-5, Rapporteur, Type: TS-INFO, Title: Draft 23.078 V5d.10.1

Discussion : This document will be basis for the next draft version . All R99 approved CRs will be incorporated automatically in the next draft version. Editors of collective CRs should provide CRs directly to next CN4 meeting.

Conclusion: approved

N2-010778: 23.016, Rel-5, Siemens AG , Type: CR, Title: Collective CR on 23.016

Discussion : The document is Collective CR on 23.016 and the content was noted by CN2 (N2-010645) on CAMEL4 AdHoc meeting in August. If TS 23.016 of higher version is available before CN4#11, this CR will be updated.

Conclusion: approved

N2-010697: 23.018, Rel-5, Vodafone , Type: CR, Title: Introduction of CAMEL Phase 4

Discussion : This collective CR was not based on the latest version and will be updated for the next meeting.

Conclusion: approved

N2-010698: 23.079, Rel-5, Vodafone, Type: CR, Title: Introduction of CAMEL phase 4

Discussion :

Conclusion : approved

N2-010699 : 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. The content was presented on CAMEL4 AdHoc meeting.

Conclusion: approved

N2-010752 : 23.008, Rel-5, Alcatel SA, Type: CR , Title: Collective CR against 23.008

Discussion :

Conclusion: approved

N2-010753 : 23.008, Rel-5, Alcatel SA, Type: CR , Title: Negotiated CAMEL capability handling

Discussion : Camel Capability Handling parameter defines the version of the CAP that will be used.

Conclusion: approved

N2-010765 : 29.078, Rel-5, Nokia, Type: CR, Title: Remove of the CS and SMS related encapsulated asn.1 types

Discussion: Alcatel is not in favour to approve this CR due to possible backward compatibility problem. Nokia does not see any backward compatibility problem introducing this change. The CR is removing the CS and SMS related encapsulated asn.1 types with the reason that encapsulated asn.1 types requires manual length calculations during specification work and are therefore many times subjects of errors.

Ericsson supports Nokia's proposal. Siemens has no comments.

Conclusion :rejected

N2-010788 : 23.078, Rel-5, Siemens AG, Type: CR, Title: Route not permitted IE in ERB in the case of MF

Discussion: If MT CAMEL service modifies the number received by the GMSC, the GMSC will check the number against the optimal routing criteria. If the call is to be forwarded at the GMSC and a MO CAMEL service applies, the GMSC checks the number which results from the CAMEL service against the optimal routing criteria. If the check does not satisfy the optimal routing criteria, the GMSC will route the call to a GMSC of PLMN of the B subscriber and will terminate the relationship between gsmSSF and gsmSCF. Currently gsmSCF is not able to know that the abandon was due to the subscriber's behaviour or due to rules of basic optimal routing. This CR adds IE "Route not permitted" which indicates that the further call set up will not take place in this GMSC due to the rules of basic optimal routeing

Ericsson asked Siemens to explain why the CAMEL relation between gsmSSF and gsmSCF will be terminated if the check does not satisfy the optimal routing criteria and the GMSC routes the call to a GMSC belonging to the PLMN of the B- subscriber. SCP dialogue is closed but the call is routed to GMSC in the case of this abandon event.

Siemens will include a picture of that case in the description of the change. Wording change and change of parameter type from conditional to other type which describes a specific condition should be in revised version of the document. "Route not permitted" should not be marked as "S" instead of "C"

Conclusion :revised to 855

N2-010855 : 23.078, Rel-5, Siemens AG, Type: CR, Title: Route not permitted IE in ERB in the case of MF

Discussion: The picture is showing VMSC, but the description of the parameter "Route not permitted" is related to GMSC.

It is not clear what the following sentence means : "The gsmSCF shall only terminate the relationship with the gsmSSF, without other operation as FCI."

Conclusion :revised to next meeting

<u>**N2-010789**</u> : 23.078, Rel-5, Siemens AG, Type: CR, Title: Route not permitted IE in ERB in the case of MF

Discussion:

Conclusion :postponed to next meeting

8.3   CAMEL4/Optimal Routing

8.4   Call Party Handling

<u>**N2-010700**</u> : Vodafone, Type: DISC, Title: CPH Open Issues and decisions

Discussion : The document lists CPH Open Issues and decisions taken since the last meeting.

 Comments:

 Item 6: FCI is a SCP item. Storing of FCI is MSC/SSP issue.

 Item 7: If a two party call is in the alerting phase and a new leg (created by ICA) is moved in, what happens if the original called party does not answer? Can we join the original calling party and the party created by ICA?This can be solved by sending a Connect with a B# which generates ISUP answer. Then the BCSM moves to active phase.

One BCSM exists until call is answered. When the call is answered, BCSM is splitted into two BCSMs (2 legs BCSMs).

Conclusion : revised to 836

<u>**N2-010836**</u> : Vodafone, Type: DISC, Title: CPH Open Issues and decisions

Discussion : Decisions per open item:

Item 1: Vodafone proposal from the first open issue has been accepted and will be added to decisions. For NC calls, default call handling should be release. For NP calls, default call handling should be whatever the CSI initiating the dialogue indicates (if dialogue was created due to NC, default call handling should be release). It is not implemented yet.

Item 6: No decision yet.

Item 9: For the VT call, if the first party to answer is not the served subscriber, e-parameters cannot be sent down to the served subscriber. We can not solve this and a health warning may be needed. This item will be moved to decisions.

Item 16: Monitoring/controlling relationship exist per CS

Item 17: Connect is allowed to reconnect the call and Connect is applicable in all cases as for CAMEL3. Nokia favours moving all legs to DP. We move this point to decisions but wording has to be improved to make it clear that this is the pure CPH case only.

Point 19: contributions are expected.

Point 20: NP case needs DisconnectLeg operation in some cases. Contribution will be presented on the next meeting.

Conclusion : revised to 857

<u>**N2-010836**</u> : Vodafone, Type: DISC, Title: CPH Open Issues and decisions

Conclusion : will be distributed on 23rd of October by e-mail

N2-010708 : 23.078, Rel-5,Vodafone, Type: CR, Title: Parameters in SRI from gsmSCF

Discussion : This CR includes additional parameters in the Send Routing Info sent from gsmSCF to HLR. Additional parameters are: Interrogation Type, Pre-paging Supported, Supported CAMEL Phases and Suppress T-CSI. The responses from the HLR (Send Routeing Info ack and Send Routeing Info negative response) are the same as those to a GMSC.

Pre paging is decided by VLR associated NE in visited network. This parameter is to indicate that MSC supports long operation timer. Description of the parameter "Prepaging supported" has to be corrected.

Currently 23.078 defines only parameters that are included as CAMEL specific. All previously existing parameters are defined in 23.018. In 23.078 only differences to 23.018 are listed.

Do we want to send to GMSC the supported CAMEL phases of the visitor VLR? The HLR will always return the supported CAMEL phases of the VLR to GMSC and SCP.

Conclusion :revised to 837

N2-010837 : 23.078, Rel-5,Vodafone, Type: CR, Title: Parameters in SRI from gsmSCF

Discussion : VMSC address shall be present in SendRoutingInfo ack (TS 23.079), if the optimal routing is supported. If the VMSC returns its address, HLR should use it to route the call - this should be in basic call handling, but it's not specified. It should be included in CAMEL spec. MSC address should be a mandatory parameter on stage 2 level.

Decisions:

- Suppression of announcement may be feasible. It will be marked "optional"
- Supported CAMEL phases will be marked optional.
- Complete list of parameters in Send Routing Info will be included not only CAMEL specific parameters.
- VMSC address should be mandatory parameter on stage 2 level.

Conclusion :revised to 856

N2-010856 : 23.078, Rel-5,Vodafone, Type: CR, Title: Parameters in SRI from gsmSCF

Discussion :

Conclusion :approved without presentation

 N2-010712 : 23.078, Rel-5, Alcatel , Type: CR, Title: Enhancement of 'Procedure Handle_SCI' for Call Party Handling

Discussion : SCI procedure is enhanced to cover also the case of multiple call legs.Handling of the SCI in the gsmSCF is defined for primary dialog and for secondary dialog. The terms "primary dialogue" and "secondary dialogue" are used rather than to indicate the DP at which it occurs. In the table "err" should be replaced by "error". In note 6 "and Apply charging" shall be deleted, because it does not apply here.

In case of two gsmSSF how the second gsmSSF has knowledge what has been stored in first gsmSSF? This is part of CDOT contribution which is not yet approved. If secondary CAP DP3 dialogue is CAPv3, there may be a problem.

Conclusion :revised to 838

N2-010838: 23.078, Rel-5, Alcatel , Type: CR, Title: Enhancement of 'Procedure Handle_SCI' for Call Party Handling

Discussion

Conclusion :approved without the presentation

N2-010713 : 29.078, Rel-5, Alcatel , Type: CR, Title: Enhancement of 'Procedure Handle_SCI' for Call Party Handling

Discussion : In section 11.30.1.1 the term "active call leg" is not clear.

It is not clear what "at least" means in the following sentence: "The second list in the Choice shall only be sent if there is at least an active call leg, or a Temporary Connection or a connection to an gsmSRF"

"CSE control of call duration" should be "CSE controll of call leg duration"?

There is a separate TarrifSwitchInterval for ApplyCharging and TarriffSwitchInterval for SendChargingInformation.

Conclusion :revised to 839

<u>N2-010839</u> : 29.078, Rel-5, Alcatel , Type: CR, Title: Enhancement of 'Procedure Handle_SCI' for Call Party Handling

Discussion :

Conclusion :approved without presentation

<u>N2-010714</u> : 29.078, Rel-5, Alcatel , Type: CR, Title: SrfCallSegment and tariff switch timers for Apply Charging and Apply Charging Report

Discussion : A new parameter "AChChargingAddress" is introduced with a choice to apply to LegID or srfCallSegment. Echo mechanism is applied to PartyToCharge and ApplyCharging. Maximum length has to be included in ASN1.

Why is default value Leg1? This is not good for MT calls. If the default is initial call segment, how to mark it? Initial Call Segment is Initiall Call Segment ID number 1 .

"When the ApplyCharging operation is received then charging starts immediately" is taken from CAMELphase 3.

SrfCallSegment is indicated by Call segment ID. Srf Call Segment is not meant as Srf Leg, but the call segment.

On page 6 in parameter "callActive", "call" is replaced by "connection". Connection refers to the leg connection. As apply charging is done per party it is important to know the party. This wording will be changed. Nokia's proposal is to change "srfCallSsegment" to "srfConnection" (call segment data type remains the same). Ericsson proposal is to associate a Srf with a leg, but "srfConnection" will be used.

Srf is always in the call segment and is connected to configuration (incoming leg, 4 outgoing legs and one srf connection).

Conclusion :revised to 840

<u>N2-010840</u> : 29.078, Rel-5, Alcatel , Type: CR, Title: SrfCallSegment and tariff switch timers for Apply Charging and Apply Charging Report

Discussion :

Conclusion :approved without presentation

<u>N2-010715</u> : 23.078, Rel-5, Alcatel , Type: CR, Title: CWA considering multiple legs

*Discussion :*Question box "current DP is O_Disconnect of T_Disconnect" is because those can be reported in ordered way, not in the same time. "Continue" has to be in the same order as EDP-R has occurred.

According to Vodafone, it is easier to understand Question box "message received due to certain event" with associated list of DPs, than asking whether current DP is O_Disconnect of T_Disconnect.

In the SDL when there is a question box, question can be placed associated to certain BCSM. It's difficult to know what operation is received for which DP. We should compare the CWA-leg versus BCSM state/EDP.

Continue case can be separated from ContinueWith Argument. Decision boxes would be easier. ContinueWith Argument is needed to convey the leg ID in CAMEL4. In CAMEL 3 CWA does not cause FCI storage already, CWA is not allowed , but only Continue case.

In CPH open questions it will be included that implicit disarming rules have to be revised.

Conclusion :revised to 841

<u>N2-010841</u> : 23.078, Rel-5, Alcatel , Type: CR, Title: CWA considering multiple legs

Discussion :

Conclusion : approved

8.5   CAMEL4/DTMF Mid-call DP

N2-010707 : 22.078, Rel-5,Vodafone, Type: CR, Title: Ability to arm Mid Call DP for the duration of a call

Discussion : Some services using the Mid-Call event may require the event to be armed for the duration of the call regardless of how many times the event is encountered. When arming the Mid-Call event, the CSE can instruct the VPLMN to automatically re-arm the Mid-Call event whenever it is encountered.

The wording has to be changed in order to use active form.

Conclusion :revised to 830

N2-010830 : 22.078, Rel-5,Vodafone, Type: CR, Title: Ability to arm Mid Call DP for the duration of a call

Discussion : MCC will ask for Tdoc and CR number for SA1 meeting.

Conclusion :endorsed without presentation, will be sent to SA1 as source CN2

N2-010709 : 22.078, Rel-5,Vodafone, Type: CR, Title: Use of start digit string as only criteria in Mid Call DP

Discussion : Some CAMEL services require the Mid Call DP to be triggered using only the start digit string. This CR includes in Procedures for MO and MF calls and in Procedures for MT calls the statement that the minimum and maximum number of digits to be collected includes the digit(s) used to indicate the start and end of the input.

Conclusion :endorsed, source will be CN2, will be sent to SA1 by MCC Tdoc and CR#

N2-010710 : 23.078, Rel-5,Vodafone, Type: CR, Title: Use of start digit string as only criteria in Mid Call DP

Discussion :

Conclusion :approved

N2-010711 : 29.078, Rel-5,Vodafone, Type: CR, Title: Use of start digit string as only criteria in Mid Call DP

Discussion :

Conclusion :withdrawn

8.6   CAMEL4/IMS

N2-010730 : 23.078, Rel-5, Lucent Technologies , Type: CR, Title: Proposal for 23.078 Part 2 for IMS/CAMEL interworking.

*Discussion :*This document is Lucent proposal for new TS or TS 23.078 Part II which will cover CAMEL-IM CN Interworking. A volunteer to act as rapporteur of the new document is required.

The present document specifies the stage 2 description for the CAMEL feature which provides the mechanisms to support services of for the IP Multimedia Core Network (IM CN) Subsystem. The SDLs in this specification illustrate how CAMEL modifies the normal multimedia call. They do not show all the details of multimedia handling in all the modes that support CAMEL.

IM-SSF is not a good name and change of the name is possible. IM-SSF box should encapsulate imcnSSF process. Process imcnSSF will be slightly different from gsmSSF.

MCC will check the procedure related to creation of 2 parts of specification. CN2 and CN1 have to agree about this approach.

Conclusion :revised to 834

N2-010834 : 23.078, Rel-5, Lucent Technologies , Type: CR, Title: Proposal for 23.078 Part 2 for IMS/CAMEL interworking.

Discussion : Mid Call DP will not be removed from the BCSM, but the real need for it has to be considered. It has been decided earlier to use CAMEL3 SDLs, but BCSM is CAMEL4. MCC will confirm the new specification number 23.278. New specification will be presented for information in December.

Conclusion :noted

<u>**N2-010731**</u> : 23.218, Rel-5, Lucent Technologies , Type: CR, Title: CR to 23.218: Addition of CAMEL Procedures

*Discussion :*This document proposes CAMEL procedures in section 11 of 23.218. The approach proposed in this document is to identify points in call processing in the IM-SSF that require CAMEL invocation.

Alcatel would like to see the message flow more generic in order to be applicable also to CF case.

In figures, IM-SSF could be replaced by OSA gateway. Alcatel would like to have more generic approach not only in CAMEL section. OSA will not use procedure names.

Conclusion : revised to 835

<u>**N2-010835**</u> : 23.218, Rel-5, Lucent Technologies , Type: CR, Title: CR to 23.218: Addition of CAMEL Procedures

Discussion : Some parts is moved to CAMEL specifications and minor changes are added compared to previous version.

Conclusion : noted

8.7   CAMEL control over MT SMS

8.8   Inclusion of flexible tone injection

<u>**N2-010732**</u> : 23.078, Rel-5, Logica, Type: CR, Title: Tones support for CAMEL phase 4

Discussion : Logica believes that it would be useful to be able to play warning tones on demand, for any purpose, depended on the service requirement. One service requirement is to play tone to call parties that join or leave the CPH configuration. The CR proposes to extend the Play Announcement operation so that the local tone generator can be used when roaming.

Vodafone supports this contribution and would like to see this applicable for the whole call segment, not only to the served subscriber, so that all legs coming in and out of the CPH configuration can be warned. Introducing a new operation makes it easier to apply it in CPH.

Ericsson supports a principle. PlayAnnouncement is associated mainly with SRF. By using Play Announcement and adding a new parameter , SSF has to open Play announcement operation to check whether new operation exists. It introduces lot of complexity. It would be easier to introduce dedicated operation for this purpose than to use Play Announcement. User interaction is quite complex.

Logica supports introduction of sepparate operation in CAP to play the tone. Choice for playing of the tone should be leg id or call segment?

Nokia supports introduction of sepparate operation in CAP without user interaction. Nokia: Call segment can be in UserInteraction state and after ConnectToRecource we can receive this new operation. Ericsson believes that introduction of dependency to ConnectToRecource is not needed.

Warning tone can be played in home network as well by establish temporary connection. Using ConnectToRecource needs lot of coordination between operators to agree about the announcements (and tones).

If this is a part of user interaction, we are talking about the pre-recorded warning tone. Some opinions are that this warning tone shall be playable on request by the SCP and shall be playable to served party only. If it is intension to play the warning tone to all the parties, it is separate issue.

According to Alcatel if we are playing a tone to a call segment we have to think about the possible technical solution.

Ericsson suggestion is first to :

-    Define the requirements (CPH and warning tone for prepaid subscriber when the credit is low, to single party without breaking of connection)

-    determine technical implementation.

-    Determine to which parties it has to be played, to a single leg or to entire call segment?

-    Decide does the new operation has to be preceded by ConnectToRecourse?

New requirements:

- SCP should be able to play a tone spontaneous to a call segment without the user interaction

- to a single party

If service requirement is to play a tone to a served subscriber and not to entire call segment when (prepaid) subscriber's credit is low, before Apply charging has expired, then Lucent is in favour to play tones to served subscriber.

Stage 1 v5.4.0 says : "In the active phase of the call leg and in the mid-call procedure it shall be possible for the CSE to play tones and/or announcements to any held party or the group as specified in clauses 5, 6 and 8. It shall be possible to play tones efficiently using local tone generators."

Logica conclusion: tones will be played for call segments, new operation will be introduced, it will be acknowledgement response when the tone playing is completed, it will be allowed in active phase (at DP). According to Logica, there is no requirement which says that it is not allowed to interrupt a speech path for very short time with purpose to play the tone.

Lucent: Is it appropriate in case of prepaid user to play tones for other parties who are not concerned ?

Ericsson: The mechanism to inject a tone to one party must me available in the MSC. Should we make a restriction to DP only? Playing of warning tone interferes with ongoing charging mechanism. Maybe this should be specified as requirement that there is no impact on ongoing charging.

Conclusions:

- It is decided to use new operation

- ConnectToRecource is not needed

- Stage 1 CPH requirement: to be able to play tone per call segment.

- The requirement to get an acknowledgement of the tone complete should apply to playing tone to a single leg (to move the leg back in) and also to playing tone to the entire Call Segment.

- If one party is in alerting phase and second party is in active phase, we do not talk about the active call but we have to specify " The tone can be played spontaneously if at least one party in the call segment is in the active phase."

Conclusion :revised to 852

<u>N2-010852</u> : 23.078, Rel-5, Logica, Type: CR, Title: Tones support for CAMEL phase 4

Discussion : The tone will be played to call segments and there will be a response when actual tone is completed.

Ericsson would not like to approve this CR for Rel-5 for the time being.. Ericsson supports playing of a tone to a served party without interrupting of a speech connection (charging operation is sent and thus ongoing charging stopped). CPH operations shall result in Charging operations to be sent to SCP. For the time being it is not possible for SCP to instruct to play a tone and to continue with ongoing charging.

Nokia comments : Tone definition is different from ApplyCharging operations (definition of burst lists table). Only Warning period is not applicable to this case. The table from ApplyCharging should be used in Tone definition except the warning period. Logica: Burst list has warning period defined in 29.078. Burst has separate definition.

Ericsson: What happens if in Waiting for instruction state something else happens (if tone playing is interrupted, EDP during the new state). Vodafone suggestion is to save other inputs (SDL) and handle them later.

Using gsmSSF tone generators should be changed to MSC tone generator, as gsmSSF does not have tone generators.

Conclusion : revised for the next meeting

 <u>N2-010733</u>: 29078, Rel-5, Logica, Type: CR, Title: Tones support for CAMEL phase 4

Discussion :

Conclusion : postponed to next meeting

8.9   Charging notification to CSE

<u>N2-010744</u> : 23.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration

Discussion :

Conclusion :withdrawn

<u>N2-010745</u> : 29.078, Rel-5, C-DOT, Type: CR, Title: Handling of RNC and ENC operations in a CPH configuration
Discussion :

Conclusion : **withdrawn**

<u>N2-010779</u> : 23.078, Rel-5, Siemens AG, Type: CR, Title: ACR with ENC

Discussion :

Conclusion: postponed to next meeting

8.10   Enhancements of dialled services

<u>N2-010734</u> : Rel-5, C-DOT, Type: DISC, Title: Discussion paper for enhancement of dialled services support
*Discussion :*Bullet 3: If there are O-CSI and D-CSI , it was thought that the same SSF dialogue was used.

Handling in DP3 is determined on existence of an dialogue in DP2. In DP3 separate SSF is invoked, SCP knows whether to allow continuing of the process dependent on existence of the dialogue in DP2.

Vodafone: It has to be clarified how the proposal will work in backward compatible manner.

 Do we want to have two types of SSF and which operations are allowed?

Alcatel is in favour to keep the principle of having one subtype of SSF and not to use one for DP2 and another for DP3. It is still same type of SSF (same SDLs are used). Alcatel is maybe in favour of this approach and Ericsson is not in favour of that kind of approach.

Vodafone prefers using different instances for D-CSI/N-CSI than O-CSI. Nokia supports Vodafone opinion since there may be cross phase problems if different CSIs have different CAMEL phase.

Conclusion: noted

<u>N2-010735</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 :withdrawn

 <u>N2-010736</u> : 23.078, Rel-5, C-DOT, Type: CR, Title: Changes in gsmCCF for MO calls to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion :

Conclusion :withdrawn

<u>N2-010737</u> : 23.078, Rel-5, C-DOT, Type: CR, Title: Changes in gsmCCF for MF calls to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion :

 Conclusion :withdrawn

 <u>N2-010738</u> : 23.078, Rel-5, C-DOT, Type: CR, Title: Changes in gsmCCF for NP calls to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion :

Conclusion: withdrawn

N2-010739 : 23.078, Rel-5, C-DOT, Type: CR, Title: Changes in gsmSSF to allow initiation of a control/monitoring relationship with CSE at DP3

Discussion :

Conclusion :withdrawn

 N2-010740: 29.078, Rel-5, C-DOT, Type: CR, Title: Modifications in Connect operation to support control/monitoring relationship with CSE at DP3 for MF calls

Discussion :

Conclusion :withdrawn

 N2-010741 : 29.078, Rel-5, C-DOT, Type: CR, Title: Introduction of a variable in InitialDP operation to indicate control/monitoring relationship with CSE at DP3

Discussion :

Conclusion : withdrawn

8.11   Provision of location information of called subscriber

8.12   Notification of GPRS mobility management to CSE

N2-010783 : 22.078, Rel-5, Siemens, Type: CR, Title: Additional event to mobility management for GPRS subscriber
*Discussion :*Network initiated GPRS detach is introduced as additional event to mobility management for GPRS subscriber, but the example will be removed. Ericsson proposal is to group one set of events for CS and one set of events for PS for easier readability. Siemens will include grouping of events in revised version of the CR.

Conclusion :revised to 831

N2-010831 : 22.078, Rel-5, Siemens, Type: CR, Title: Additional event to mobility management for GPRS subscriber
Discussion:.

Conclusion: endorsed by CN2 without presentation, source is Siemens

N2-010784 : 23.078, Rel-5, Siemens, Type: CR, Title: Revision of Mobility Management for GPRS subscriber
Discussion :

Conclusion :withdrawn

 N2-010785 : 23.0060, Rel-5, Siemens, Type: CR, Title: Mobility Management for GPRS subscriber

Discussion :

Conclusion: withdrawn

8.13   CAMEL4/ ODB in HLR-SCP interface

N2-010780 : 23.008, Rel-5, Siemens, Type: CR, Title: Type indication change to ODB data

*Discussion :*If the type of the parameter is changed from "P" to "T" than it has to be done for all the supplementary services. TS 23.078 covers only network services. Meeting believes that it is not necessary to change a type of the parameter. Leaving it as it is, makes it consistent with CSI.

Conclusion :rejected

N2-010781 : 23.078, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion : This CR was presented on the last meeting. To include ODB data in ATM, new procedure ATM_Modify_ODB_Data is added and new information element ODB data is introduced. Only one ODB category can be active at the time. Is it possible to activate new one and simultaneously deactivate an old one? Siemens is happy to

revise the document and to take into consideration Vodafone's comment. Parameter name and (re)setstring do not match.

Conclusion: revised for the next meeting

 N2-010782 : 29.002, Rel-5, Siemens, Type: CR, Title: Inclusion of ODB data in ATM

Discussion : This CR was presented on the last meeting. Siemens wanted to reconsider it once again. Currently, there is no mechanism to control the operator determined barring data by the service platform. A very time critical network operation may require the mechanism that the CSE (gsmSCF) directly instruct the HLR to bar the call or remove the barring online. New procedure ATM_Modify_ODB_Data added and new information element ODB data added.

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 is of an opinion that for the time being 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 for the next meeting

8.14 CAMEL4/ Location Information during ongoing call

N2-010786 : 22.078, Rel-5, Siemens, Type: CR, Title: Providing the location information during ongoing call

Discussion :

Conclusion :withdrawn

N2-010787 : 29.078, Rel-5, Siemens, Type: CR, Title: Providing the location information during ongoing call

Discussion : This CR was postponed on the last meeting.

Conclusion : withdrawn

8.15 CAMEL4/GPRS AnyTimeInterrogation

N2-010791 : 23.078, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion : The base version used for this CR is 5d.8.2 since the CR was available from Dresden meeting. AnyTimeInterrogation is enhanced to support PS domain interrogation. Procedures for PSI towards SGSN are introduced. The interface for provision of subscriber location and subscriber state, between HLR and SGSN, is used. SGSN stores location and subscriber state information for each subscriber and upon request this information is provided to the HLR. Interface for the provision of subscriber location and state, between HLR and MSC/VLR, is described in 3GPP TS 23.018.

In Any Time Interrogation Request, information element "Domain" is introduced to indicate for which domain the subscriber info is requested (circuit switched domain or packet switched domain). PS Domain Subscriber State is included in Any Time Interrogation ack, as well as Routing Area ID and SGSN number for Location information which is defined in TS 23.018.

Is the location number available in SGSN? Location number is considered as numeric description of geographic location of the subscriber. According to 23.060 and 23.008 Subscriber state information is already stored in SGSN. Clear understanding of subscriber state is needed. If subscriber state is marked as "C", it should be used if available. Alcatel is opinion that it should be requested.

CN2 will inform SA1 that CN2 is working on Any Time Interrogation according to stage 1, and SA1 should be tasked to clarify requirements. T-Mobil will draft LS OUT to SA1. Location information for PS is an requirement and shall be possible to interrogate.

Checking of the domain has to be done before of checking whether MS is reachable, since the "reachable" is for each domain separately. "Domain" has to be replaced by "requested domain" in parameter name and in SDLs. "CAMEL_T_CSI_HLR" procedure may be impacted (SRI uses the same procedure). "PSI_SGSN" SDL does not handle the case if nothing is requested.

Conclusion :revised to 833

N2-010833 : 23.078, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion :   In Location information IE, in Any Time Interrogation ack (HLR –gsmSCF), should be specified that this parameter shall be present if it was initially requested by the gsmSCF.

According to Ericsson "state" vs. "status" is used inconsistently. Ericsson proposal is to use the term "subscriber state" consistently. Term "subscriber" or "MS" should be used consistently. On page 18 in description "CAMEL connected" state, editorial correction is needed.

Conclusion : revised to 858

N2-010858 : 23.078, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion :

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

 N2-010792 : 29.002, Rel-5, T-Mobil, Type: CR, Title: ATI/PSI Enhancement for PS Domain

Discussion :   This is a proposal to change MAP spec based on the first change proposal f ATI/PSI Enhancement for PS Domain to stage 2 of CAMEL spec. The document has to be updated according to agreed changes in approved CR to TS 23.078 (N2-010858).

In AnyTimeInterrogationArg the tag number for the Domain will be marked "x", as this is CN4 issue.

In CAMEL1&2 we import Location information from MAP. In CAMEL4 for ATI we have to have consistent definitions in CAP and MAP. Location information GPRS is defined in CAP and is not introduced in MAP. This issue is opened.

Conclusion : revised to next meeting

N2-010832 : T-Mobil, Type:LS OUT, Title: [DRAFT] Liaison Statement on Definition of Subscriber Status information for GPRS in CAMEL Phase 4

Discussion :   This LS is a message to SA1 that CN2 currently defines the mechanisms required for the enhancement of the CAMEL Any Time Interrogation operation to support location information for GPRS as specified in CR 22.078. Existing definition of subscriber state that can be requested is optimised for circuit switched domain purposes and is therefore not suitable for description of the subscriber state in the packet switched domain.

TSG CN WG2 will base their work on the assumption that the HLR will return, if requested, subscriber state information based on the MM states stored in the SGSN for each GPRS subscriber. These states could be described as follows: - detached, the MS is not connected to the network,

- idle, the MS is attached to the network, but no signalling connection exists and

- connected, the MS is attached to the network and a signalling connection exists.

SA1 is asked to verify whether this definition. T-Mobil could prepare a CR to 22.078 to propose definitions mentioned in the LS and this CR will be attached to the LS. SA1 will be asked to specify if there are more stage 1 requirements to be defined. CR to stage 1 has to contain impacts on the specifications under responsibility of other CN groups.

Conclusion :revised to 850

N2-010850 : T-Mobil, Type:LS OUT, Title:DRAFT Liaison Statement on Definition of Subscriber
Status information for GPRS in CAMEL Phase 4
Discussion :

Conclusion : approved, will be sent to SA1

N2-010851 : 22.078, Rel-5, T-Mobil, Type:CR, Title: Introduction of subscriber status information in PS domain
Discussion :   In the definition of subscriber status , dependency of the domain it is requested for is introduced. Subscriber status is only used in context of Any Time Interrogation.

Conclusion :endorsed by CN2, source will be CN2

9　　　Maintenance of earlier CAMEL phases

9.1　　　CAMEL phase 1

9.2　　　CAMEL phase 2

N2-010726 : 03.78, CAMEL2, R98, Alcatel, Type: CR, CR#A165, Title: Re-insertion of missing CLI box into CAMEL Release 1998

Discussion : This CR reintroduces the procedure call box back into 03.78, which was existing in this spec before, but somehow it is not present in R98 specification any more. This was the only difference between TS 03.78R97 and R98 SDLs. This box is still included in higher releases.

Conclusion : approved, will be a separate package in the plenary

N2-010748: 03.78, R97, Ericsson, Type: CR, CR#A166, Title: Correction to implementation of CR 03.78-A141r1

Discussion : CR 03.78-A141r1, contained in N2-99C59, was presented at 3GPP TSG-N2 #07 in Abiko, Japan and has been approved by SMG#30. That CR has, however, not been implemented correctly in the specification. The present CR proposes to include the said approved CR in GSM TS 03.78. This CR is purely for R97 implementation. If the CR is approved, mirror CR will be created.

Conclusion : approved

N2-010797: 03.78, R98, Ericsson, Type: CR,CR#**A168** Title: Correction to implementation of CR 03.78-A141r1

Discussion :

Conclusion : approved without presentation

N2-010750 : 02.78, R97, Alcatel, Type: CR, Title: Calling Party Number can not be modified by CSE

Discussion : GSM TS 02.78 specifies that the CSE may modify the Calling Party's Number as part of the call handling. This is not correct. The CSE is not allowed to modify the Calling Party's Number. This principle applies to all CAMEL Phases. This CR relates to R97 and proposes correction to sections 5.4 and 6.4 , removal of indication that the CSE may modify the Calling Party's Number.
Conclusion : endorsed, the CR shall be sent to SA1 by MCC, source will beCN2

N2-010798 : 02.78, R98, Alcatel, Type: CR, Title: Calling Party Number can not be modified by CSE

Discussion: CR is not needed for R99 onwards

Conclusion : endorsed, the CR shall be sent to SA1 by MCC, source will beCN2

N2-010771 : 03.78, R97, CAMEL2, Siemens, Type: CR, CR#A167, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion: This issue was presented on the last meeting in document N2-010611.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 VPLMN does not support this service.

In CAMEL2 (R97 and R98) Siemens proposes to add a warning note to indicate there would be various interpretation. Second paragraph of the "reason for change should be removed".

Alcatel: SCP implementers should be aware not to send e-parameters to subscriber who is not provisioned with AoC.

One proposal is to list possible implementations or just to remove the last sentence of summary of change and note 2 which refers to further releases. Note 2 and the last sentence of summary of change will be removed.

Conclusion: revised to 799

N2-010799 : 03.78, R97, CAMEL2, Siemens, Type: CR, CR#A167r1, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion:

 Conclusion: approved

N2-010800 : 03.78, R98, CAMEL2, Siemens, Type: CR, CR#A169, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion: This CR is identical as CR for 97, only difference is in cover page.
Conclusion: approved without presentation

N2-010772 : 23.078, R99, CAMEL3, Siemens, Type: CR, CR#333, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service (previously N2-010613)

Discussion: Proposal of this CR is that, 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 due to this event shall be sent back to the gsmSCF.

SSF will send this message to MSC, because the SSF may not know whether MSC supports the service. According to Nokia, e-parameters can still be used for CDRs. E-parameters should be ignored (silently discarded) by MSC, but not sent to MS and no error is sent due to that fact. Summary of change has to be rephrased slightly in order to change the word "event" to "fact". Rogier Noldus will draft LSOUT to SA5 asking how this shall be seen in CDRs.

Conclusion: revised to 802

N2-010802 : 23.078, R99, CAMEL3, Siemens, Type: CR, CR#333r1, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service (previously N2-010613)

Discussion: The wording of the change is following: **"**If the subscriber is not provisioned with the GSM Advice of Charge supplementary service or if the VPLMN does not support this service, then no e-parameters shall be sent to the MS and no error due to this fact shall be sent back to the gsmSCF."

Category should be F, essential corrections. First paragraph in the summary of change and "in the later phases" in second paragraph have to be deleted.

Conclusion: revised to 811

N2-010811 : 23.078, R99, CAMEL3, Siemens, Type: CR, CR#333r2, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion:

Conclusion: approved without presentation

N2-010812 : 23.078, Rel-4, CAMEL3, Siemens, Type: CR, CR#341, Title: Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service

Discussion:

Conclusion: approved without presentation

 N2-010801 : CN2, Type: LSOUT, Title: Handling of e-parameters provided by the SCP

Discussion: CN2 asks SA5 to provide answers on following questions for the next CN2 meeting:

Shall the bit "onlineCharging" of the "LevelOfCAMELService" parameter in the CDR be set, if the SCP sends e-parameters to the MSC/gsmSSF, but the MSC/gsmSSF does not send these e-parameters to the MS, due to fact that subscriber is not provisioned with Advice of Charge SS service or MSC/gsmSSF does not support Advice of Charge SS service?

May the gsmSSF in above described scenario discard the e-parameters, or is there any reason for the MSC/gsmSSF to retain these parameters?

Conclusion: approved

10　Review of dates and hosts for future meetings

CN2 meeting in January 2002 is moved to 28th January. This will be the last CN2 meeting before the Plenary in March. The time for AdHoc still remains earlier in January.

CN working groups collocated meeting in July 2002 will be most probably hosted by Nokia in Finland and meeting in May 2002 most probably in Germany (Achen), hosted by Ericsson.

Review of the N2 meeting schedule for 2001

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPCN2-#21	WG	26 - 30 Nov 2001	Cancun	Mexico

11　Closing of the meeting (12:30 Friday)

Action points:

- Delegates are encouraged to check Access Point Name usage and references.

- MCC to confirm new TS number 23.278 which will cover IMS/CAMEL Interworking.

- New TS has to be presented in December plenary for information as version 1.0.0 (should be 50% completed) and in March plenary for approval as version 2.0.0 (should be 80% completed). After approval new TS will become version 5.0.0.

- In March plenary collective CN4 CRs will be presented for approval.

- CAMEL4 work has progressed well and the Work plan is to be updated after the next meeting in November.

The chairman thanked delegates for their contributions and active participation in the meeting, hosts for organisation of the meeting and MCC for the support. The meeting was closed on Friday, 12:30.

Annex A   Attendees list

Name	Organization represented	Status, partner	Phone	Fax	e-mail
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Annex B   Output Documents

Approved Change Requests for CAMEL Phase 2

TDoc #	WI	Rel	Title	Type	Spec	CR #	Rev	Version	Conclusion	Source
N2-010726	CAMEL2	R98	Re-insertion of missing CLI box into CAMEL Release 1998	CR	03.78	A165		7.6.1	approved	Alcatel
N2-010748	CAMEL2	R97	Correction to implementation of CR 03.78-A141r1	CR	03.78	A166		6.9.1	approved	Ericsson
N2-010799	CAMEL2	R97	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010611)	CR	03.78	A167	1	6.9.1	approved	Siemens AG
N2-010797	CAMEL2	R98	Correction to implementation of CR 03.78-A141r1	CR	03.78	A168		7.6.1	approved	Ericsson
N2-010800	CAMEL2	R98	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously 611)	CR	03.78	A169		7.6.1	approved	Siemens AG

Approved Change Requests for CAMEL Phase 3

TDoc #	WI	Rel	Title	Type	Spec	CR #	Rev	Version	Conclusion	Source
N2-010810	CAMEL3	R99	Handling of Reconnect on the MSC-VLR Interface	CR	23.078	322	1	3.A.0	approved	Vodafone Group Plc.
N2-010843	CAMEL3	Rel-4	Handling of Reconnect on the MSC-VLR Interface	CR	23.078	323	1	4.2.0	approved	Vodafone Group Plc.
N2-010804	CAMEL3	R99	Indication of deletion of CSI in Notify Subscriber Data Change	CR	23.078	324	1	3.A.0	approved	Lucent Technologies
N2-010815	CAMEL3	Rel-4	Indication of deletion of CSI in Notify Subscriber Data Change	CR	23.078	325	1	4.2.0	approved	Lucent Technologies
N2-010824	CAMEL3	R99	Clarification of the CUG data used in IDP	CR	23.078	328	1	3.A.0	approved	Alcatel SA
N2-010853	CAMEL3	Rel-4	Clarification of the CUG data used in IDP	CR	23.078	329	1	4.2.0	approved	Alcatel SA
N2-010827	CAMEL3	R99	TDP3 triggerin criterion in MO case	CR	23.078	331	1	3.A.0	approved	Nokia
N2-010828	CAMEL3	REL-4	TDP3 triggerin criterion in MO case	CR	23.078	332	1	4.2.0	approved	Nokia
N2-010811	CAMEL3	R99	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010613)	CR	23.078	333	2	3.A.0	approved	Siemens AG
N2-010773	CAMEL3	R99	Inclusion of D-CSI in arming/disarming mechanism	CR	23.078	334		3.10.0	approved	Siemens AG
N2-010808	CAMEL3	R99	Clarification on ATM	CR	23.078	335	2	3.A.0	approved	Alcatel SA

N2-010805	CAMEL3	R99	Clarification on NSCD when data is withdrawn	CR	23.078	336	1	3.A.0	approved	Alcatel SA
N2-010774	CAMEL3	Rel-4	Inclusion of D-CSI in arming/disarming mechanism	CR	23.078	337		4.2.0	approved	Siemens AG
N2-010775	CAMEL3	R99	Correction of SDL to text extention	CR	23.078	338		3.10.0	approved	Siemens AG
N2-010776	CAMEL3	Rel-4	Correction of SDL to text extention	CR	23.078	339		4.2.0	approved	Siemens AG
N2-010845	CAMEL3	R99	Introduction of SMS Reference Number	CR	23.078	340	2	3.A.0	approved	Ericsson
N2-010812	CAMEL3	Rel-4	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service.	CR	23.078	341		4.2.0	approved	Siemens AG
N2-010820	CAMEL3	Rel-4	Clarification on NSCD when data is withdrawn	CR	23.078	342		4.2.0	approved	Alcatel SA
N2-010842	CAMEL3	Rel-4	Clarification on ATM	CR	23.078	343		4.2.0	approved	Alcatel SA
N2-010846	CAMEL3	Rel-4	Introduction of SMS Reference Number	CR	23.078	344		4.2.0	approved	Ericsson
N2-010761	CAMEL3	R99	Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value	CR	29.078	202		3.9.0	approved	Nokia
N2-010762	CAMEL3	REL-4	Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value	CR	29.078	203		4.2.0	approved	Nokia
N2-010813	CAMEL3	R99	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	CR	29.078	204	1	3.9.0	approved	Nokia
N2-010814	CAMEL3	REL-4	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	CR	29.078	205	1	4.2.0	approved	Nokia
N2-010844	CAMEL3	R99	Precision about default values for ServiceInteractionIndicatorsTwo parameters	CR	29.078	206	2	3.9.0	approved	Alcatel
N2-010759	CAMEL3	R99	Encoding of the InitialDPGPRS ChargingID parameter	CR	29.078	207		3.9.0	approved	Nokia
N2-010760	CAMEL3	REL-4	Encoding of the InitialDPGPRS ChargingID parameter	CR	29.078	208		4.2.0	approved	Nokia
N2-010826	CAMEL3	R99	Introduction of SMS Reference Number	CR	29.078	209	1	3.9.0	approved	Ericsson
N2-010849	CAMEL3	Rel-4	Introduction of SMS Reference Number	CR	29.078	210		4.2.0	approved	Ericsson
N2-010854	CAMEL3	Rel-4	Precision about default values for ServiceInteractionIndicatorsTwo parameters	CR	29.078	211		4.2.0	approved	Alcatel SA

Endorsed Change Requests for CAMEL Phase 2

TDoc #	WI	Rel	Title	Type	Spec	CR	Rev	Versio	Conclusio	Source
N2-010798	CAMEL2	R98	Calling Party Number can not be modified by CSE	CR	02.78			7.1.0	endorsed	Ericsson
N2-010750	CAMEL2	R97	Calling Party Number can not be modified by CSE	CR	02.78			6.5.0	endorsed	Ericsson

Endorsed Change Requests for CAMEL Phase 3

TDoc #	WI	Rel	Title	Type	Spec	CR	Rev	Versio	Conclusio	Source
N2-010823	CAMEL3	Rel-5	Handling of Reconnect on Leg2 Disconnect	CR	23.018			5.1.0	endorsed	Vodafone Group Plc.
N2-010822	CAMEL3	Rel-4	Handling of Reconnect on Leg2 Disconnect	CR	23.018			4.4.0	endorsed	Vodafone Group Plc.
N2-010821	CAMEL3	R99	Handling of Reconnect on Leg2 Disconnect	CR	23.018		1	3.9.0	endorsed	Vodafone Group Plc.
N2-010817	CAMEL3	Rel-4	Correction to CAMEL Procedure Names during RoutingAreaUpdate	INFO	23.060			4.2.0	endorsed	Lucent Technologies
N2-010848	CAMEL3	Rel 99	Correction to CAMEL Procedure Names during RoutingAreaUpdate	CR	23.060			3.9.0	endorsed	Lucent Technologies
N2-010819	CAMEL3	Rel-4	Clarification on NSCD when data is withdrawn	CR	29.002			4.5.0	endorsed	Alcatel SA
N2-010818	CAMEL3	Rel-4	Clarification of sending CAMEL information in stand alone ISD case	CR	29.002			4.5.0	endorsed	Alcatel SA
N2-010807	CAMEL3	R99	Clarification on NSCD when data is withdrawn	CR	29.002			3.A.0	endorsed	Alcatel SA
N2-010806	CAMEL3	R99	Indication of deletion of CSI in Notify Subscriber Data Change	CR	29.002		1	3.9.0	endorsed	Lucent Technologies
N2-010803	CAMEL3	R99	Clarification of sending CAMEL information in stand alone ISD case	CR	29.002			3.A.0	endorsed	Alcatel SA
N2-010751	CAMEL3	R99	CUG-Info is not exported from 29.002	CR	29.002			3.A.0	endorsed	Ericsson
N2-010816	CAMEL3	Rel-4	Indication of deletion of CSI in Notify Subscriber Data Change		29.002	318	1	4.5.0	endorsed	Lucent Technologies

Approved Output Liaison Statements

TDoc #	Type	Title	Source	To	Conclusion

N2-010850	LS OUT		Liaison Statement on Definition of Subscriber Status information for GPRS in CAMEL Phase 4	CN2	SA1	approved
N2-010801	LS OUT		Handling of e-parameters provided by the SCP	CN2	SA5	approved

Approved and endorsed Change Requests for CAMEL Phase 4

TDoc #	WI	Rel	Title	Type	Spec	Rev	Version	Conclusion	Source
N2-010831	CAMEL4	Rel-5	Additional event to mobility management for GPRS subscriber	CR	22.078	1	5.4.0	endorsed	Siemens AG
N2-010709	CAMEL4	Rel-5	Use of start digit string as only criteria in Mid Call DP	CR	22.078	0	5.4.0	endorsed	Vodafone Group Plc.
N2-010851	CAMEL4	Rel-5	Introduction of subscriber status information in PS domain	CR	22.078		5.4.0	endorsed	T-Mobil
N2-010830	CAMEL4	Rel-5	Ability to arm Mid Call DP for the duration of a call	CR	22.078	1	5.4.0	endorsed	CN2
N2-010753	CAMEL4	Rel-5	Negotiated CAMEL capability handling	CR	23.008		4.2.0	approved	Alcatel SA
N2-010752	CAMEL4	Rel-5	Collective CR against 23.008	CR	23.008		4.2.0	approved	Alcatel SA
N2-010778	CAMEL4	Rel-5	Collective CR on 23.016	CR	23.016		4.0.0	approved	Siemens AG
N2-010697	CAMEL4	Rel-5	Introduction of CAMEL Phase 4	CR	23.018	6	5.0.0	approved	Vodafone Group Plc.
N2-010838	CAMEL4	Rel-5	Enhancement of 'Procedure Handle_SCI' for Call Party Handling	CR	23.078	2	5DA1	approved	Alcatel
N2-010841	CAMEL4	Rel-5	CWA considering multiple legs.	CR	23.078	1	5DA1	approved	Alcatel
N2-010858	CAMEL4	Rel-5	ATI/PSI Enhancement for PS Domain	CR	23.078	1	5DA1	approved	T-Mobil
N2-010710	CAMEL4	Rel-5	Use of start digit string as only criteria in Mid Call DP	CR	23.078	0	5DA1	approved	Vodafone Group Plc.
N2-010706	CAMEL4	Rel-5	Handling of Reconnect on Leg2 Disconnect	CR	23.078	0	5DA1	approved	Vodafone Group Plc.
N2-010856	CAMEL4	Rel-5	Parameters in SRI from gsmSCF	CR	23.078	2	5DA1	approved	Vodafone Group Plc.
N2-010698	CAMEL4	Rel-5	Introduction of CAMEL Phase 4	CR	23.079	1	4.0.0	approved	Vodafone Group Plc,
N2-010699	CAMEL4	Rel-5	Introduction of CAMEL Phase 4	CR	23.083	2	4.2.0	approved	Vodafone Group Plc.
N2-010840	CAMEL4	Rel-5	SrfCallSegment and tariff switch timers for Apply Charging and Apply Charging Report	CR	29.078	2	d540	approved	Alcatel
N2-010839	CAMEL4	Rel-5	Enhancement of the SendChargingInformation procedure for Call Party Handling	CR	29.078	2	d540	approved	Alcatel

Annex C List of Documents

TDoc #	Agenda Item	Type	Title	Source	WI	CR #	Rev	Cat	Spec	Rel	Version	Conclusion
N2-010697	8.2	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc.	CAMEL4		6	B	23.018	Rel-5	5.0.0	approved
N2-010698	8.2	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc,	CAMEL4		1	B	23.079	Rel-5	4.0.0	approved
N2-010699	8.2	CR	Introduction of CAMEL Phase 4	Vodafone Group Plc.	CAMEL4		2	B	23.083	Rel-5	4.2.0	approved
N2-010700	8.4	DISC	CPH : Open Issues and Decisions	Vodafone Group Plc.	CAMEL4							revised to 857
N2-010701	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3		0	F	23.018	R99	3.9.0	revised to 809
N2-010702	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3	322	0	F	23.078	R99	3.A.0	revised to 810
N2-010703	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3		0	A	23.018	Rel-4	4.4.0	revised to 822
N2-010704	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3	323	0	A	23.078	Rel-4	4.2.0	revised to 843
N2-010705	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3		0	A	23.018	Rel-5	5.1.0	revised to 823
N2-010706	8.4	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL4		0	C	23.078	Rel-5	5DA1	approved
N2-010707	8.5	CR	Ability to arm Mid Call DP for the duration of a call	Vodafone Group Plc.	CAMEL4		0	C	22.078	Rel-5	5.4.0	revised to 830
N2-010708	8.4	CR	Parameters in SRI from gsmSCF	Vodafone Group Plc.	CAMEL4		0	F	23.078	Rel-5	5DA1	revised to 837
N2-010709	8.5	CR	Use of start digit string as only criteria in Mid Call DP	Vodafone Group Plc.	CAMEL4		0	C	22.078	Rel-5	5.4.0	endorsed
N2-010710	8.5	CR	Use of start digit string as only criteria in Mid Call DP	Vodafone Group Plc.	CAMEL4		0	C	23.078	Rel-5	5DA1	approved
N2-010711	8.5	CR	Use of start digit string as only criteria in Mid Call DP	Vodafone Group Plc.	CAMEL4		0	C	29.078	Rel-5	d540	withdrawn
N2-010712	8.4	CR	Enhancement of 'Procedure Handle_SCI' for Call Party Handling	Alcatel	CAMEL4		1	F	23.078	Rel-5	5DA1	revised to 838
N2-010713	8.4	CR	Enhancement of the SendChargingInformation procedure for Call Party Handling	Alcatel	CAMEL4		1	F	29.078	Rel-5	d540	revised to 839

N2-010714	8.4	CR	SrfCallSegment and tariff switch timers for Apply Charging and Apply Charging Report	Alcatel	CAMEL4		1	F	29.078	Rel-5	d540	revised to 840
N2-010715	8.4	CR	CWA considering multiple legs.	Alcatel	CAMEL4			F	23.078	Rel-5	5DA1	revised to 841
N2-010716	1	Agenda	Agenda	CN2 Chairman								approved
N2-010717	2	Agenda	Allocation of documents to agenda items	CN2 Chairman								noted
N2-010718	3.1	Treport	CN2#19 Meeting Report	MCC								noted
N2-010719	3.2	Report	CN2 CAMEL4 AdHoc Meeting Report	MCC								noted
N2-010720	4	LS IN	IP Based Multimedia Services Framework Report	SA1								noted
N2-010721	4	LS IN	Liaison Statement in Regards to MMS Charging	T2								noted
N2-010722	4	LS IN	Reply to "Liaison Statement in Regards to MMS Charging"	SA5								noted
N2-010723	4	LS IN	Liaison on "Unique GGSN address required for charging purposes"	SA5								noted
N2-010724	4	LS IN	LS on "Access Point Name" usage	SA5								noted
N2-010725	4	LS IN	Liaison Statement on "Unique GGSN Addresses"	SA2								noted
N2-010726	9.2	CR	Re-insertion of missing CLI box into CAMEL Release 1998	Alcatel	CAMEL2	A165		F	03.78	R98	7.6.1	approved
N2-010727	6.3	DISC	GPRS Open Issues	Lucent Technologies	CAMEL3							noted
N2-010728	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3	324		F	23.078	R99	3.A.0	revised to 804
N2-010729	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3			F	29.002	R99	3.9.0	revised to 806
N2-010730	8.6	TS	Propopsal for 23.078 Part II for IMS/CAMEL interworking	Lucent Technologies	CAMEL4					Rel-5		revised to 834
N2-010731	8.6	CR	CR to 23.218 : Addition of CAMEL Procedures	Lucent Technologies	CAMEL4				23.218	Rel-5	0.6.0	revised to 835
N2-010732	8	CR	Tones support for Camel Phase 4	Logica	CAMEL4				23.078	Rel-5	5DA1	revised to 852

N2-010733	8	CR	Tones support for Camel Phase 4	Logica	CAMEL4					29.078	Rel-5	d530	postponed to next meeting
N2-010734	8.10	DISC	Discussion paper for enhancement of dialled services support	CDOT	CAMEL4		B				Rel-5		noted
N2-010735	8.10	CR	Changes to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	23.018		Rel-5			withdrawn
N2-010736	8.10	CR	Changes in gsmCCF for MO calls to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	23.078	Rel-5	5DA1	withdrawn
N2-010737	8.10	CR	Changes in gsmCCF for MF calls to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	23.078	Rel-5	5DA1	withdrawn
N2-010738	8.10	CR	Changes in gsmCCF for NP calls to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	23.078	Rel-5	5DA1	withdrawn
N2-010739	8.10	CR	Changes in gsmSSF to allow initiaition of a control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	23.078	Rel-5	5DA1	withdrawn
N2-010740	8.10	CR	Modifications in Connect operation to support control/monitoring relationship with CSE at DP3 for MF calls	CDOT	CAMEL4		C	29.078	Rel-5	d540	withdrawn
N2-010741	8.10	CR	Introduction of a variable in InitialDP operation to indicate control/monitoring relationship with CSE at DP3	CDOT	CAMEL4		C	29.078	Rel-5	d540	withdrawn
N2-010742	6.3	INFO	Correction to CAMEL Procedure Names during RoutingAreaUpdate	Lucent Technologies	CAMEL3		F	23.060	Rel 99	3.9.0	revised to 848
N2-010743	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3	325	A	23.078	Rel-4	4.2.0	revised to 815
N2-010744	8.9	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		C	23.078	Rel-5	5DA1	withdrawn
N2-010745	8.9	CR	Handling of RNC and ENC operations in a CPH configuration	CDOT	CAMEL4		C	29.078	Rel-5	d540	withdrawn
N2-010746	6.1	CR	Correction to the description of Insert Subscriber Data	Ericsson	CAMEL3		F	29.002	R99	3.A.0	noted
N2-010747	6.1	CR	Clarification on the handlig of Specific CSI Insertion and Specific CSI Withdraw.	Ericsson	CAMEL3	326	F	23.078	R99	3.A.0	withdrawn

N2-010748	9.2	CR	Correction to implementation of CR 03.78-A141r1	Ericsson	CAMEL2	A166		F	03.78	R97	6.9.1	approved
N2-010749	6.1	CR	Editorial and technical corrections to section 11	Ericsson	CAMEL3	327		F	23.078	R99	3.A.0	noted
N2-010750	9.2	CR	Calling Party Number can not be modified by CSE	Ericsson	CAMEL2			F	02.78	R97	6.5.0	endorsed
N2-010751	6.1	CR	CUG-Info is not exported from 29.002	Ericsson	CAMEL3			F	29.002	R99	3.A.0	endorsed
N2-010752	8.2	CR	Collective CR against 23.008	Alcatel SA	CAMEL4			C	23.008	Rel-5	4.2.0	approved
N2-010753	8.2	CR	Negotiated CAMEL capability handling	Alcatel SA	CAMEL4			C	23.008	Rel-5	4.2.0	approved
N2-010754	6.5	CR	Clarification of the CUG data used in IDP	Alcatel SA	CAMEL3	328		F	23.078	R99	3.A.0	revised to 824
N2-010755	7.1	CR	Clarification of the CUG data used in IDP	Alcatel SA	CAMEL3	329		F	23.078	Rel-4	4.2.0	revised to 853
N2-010756	6.3	CR	SGSN/gprsSSF shall open control relationship after sending IDP	Ericsson	CAMEL3	330		F	23.078	R99	3.A.0	withdrawn
N2-010757	6.5	CR	TDP3 triggerin criterion in MO case	Nokia	CAMEL3	331		F	23.078	R99	3.A.0	revised to 827
N2-010758	7.1	CR	TDP3 triggerin criterion in MO case	Nokia	CAMEL3	332		A	23.078	REL-4	4.2.0	revised to 828
N2-010759	6.3	CR	Encoding of the InitialDPGPRS ChargingID parameter	Nokia	CAMEL3	207		F	29.078	R99	3.9.0	approved
N2-010760	7.1	CR	Encoding of the InitialDPGPRS ChargingID parameter	Nokia	CAMEL3	208		A	29.078	REL-4	4.2.0	approved
N2-010761	6.1	CR	Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value	Nokia	CAMEL3	202		F	29.078	R99	3.9.0	approved
N2-010762	7.1	CR	Correction of the MAXIMUM-FOR-FCI-BILLING-CHARGING value	Nokia	CAMEL3	203		A	29.078	REL-4	4.2.0	approved
N2-010763	6.1	CR	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	Nokia	CAMEL3	204		F	29.078	R99	3.9.0	revised to 813
N2-010764	7.1	CR	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	Nokia	CAMEL3	205		A	29.078	REL-4	4.2.0	revised to 814
N2-010765	8.2	CR	Remove of the CS and SMS related encapsulated asn.1 types	Nokia	CAMEL4			C	29.078	REL-5	d540	rejected
N2-010766	6.5	CR	Precision abour default values for ServiceInteractionIndicatorsTwo parameters	Alcatel SA	CAMEL3	206		F	29.078	R99	3.9.0	revised to 829

N2-010767	6.2	CR	Clarification on ATM	Alcatel SA	CAMEL3	335		F	23.078	R99	3.A.0	revised to 795
N2-010768	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3	336		F	23.078	R99	3.A.0	revised to 805
N2-010769	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3			F	29.002	R99	3.A.0	revised to 807
N2-010770	6.1	CR	Clarification of sending CAMEL information in stand alone ISD case	Alcatel SA	CAMEL3			F	29.002	R99	3.A.0	revised to 803
N2-010771	9.2	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010611)	Siemens AG	CAMEL2	A167		F	03.78	R97	6.9.1	revised to 799
N2-010772	9.2	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010613)	Siemens AG	CAMEL2	333		A	23.078	R99	3.10.0	revised to 802
N2-010773	6.5	CR	Inclusion of D-CSI in arming/disarming mechanism	Siemens AG	CAMEL3	334		F	23.078	R99	3.10.0	approved
N2-010774	6.5	CR	Inclusion of D-CSI in arming/disarming mechanism	Siemens AG	CAMEL3	337		A	23.078	Rel-4	4.2.0	approved
N2-010775	6.4	CR	Correction of SDL to text extention	Siemens AG	CAMEL3	338		F	23.078	R99	3.10.0	approved
N2-010776	6.4	CR	Correction of SDL to text extention	Siemens AG	CAMEL3	339		A	23.078	Rel-4	4.2.0	approved
N2-010777	8.2	TS/INFO	Draft 23.078 V5D.10.1	Rapporteur	CAMEL4				23.078	Rel-5	5DA1	approved
N2-010778	8.2	CR	Collective CR on 23.016	Siemens AG	CAMEL4			B	23.016	Rel-5	4.0.0	approved
N2-010779	8.9	CR	ACR with ENC	Siemens AG	CAMEL4				23.078	Rel-5	5DA1	postponed to next meeting
N2-010780	8.13	CR	Type indication change to ODB data	Siemens AG	CAMEL4				23.008	Rel-5	4.1.0	rejected
N2-010781	8.13	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4			B	23.078	Rel-5	5DA1	revised to next meeting
N2-010782	8.13	CR	Inclusion of ODB data in ATM	Siemens AG	CAMEL4			B	29.002	Rel-5	4.4.0	revised to next meeting
N2-010783	8.12	CR	Additional event to mobility management for GPRS subscriber	Siemens AG	CAMEL4			B	22.078	Rel-5	5.4.0	revised to 831

N2-010784	8.12	CR	Revision of Mobility Management for GPRS subscriber	Siemens AG	CAMEL4				23.078	Rel-5	5DA1	withdrawn
N2-010785	8.12	CR	Mobility Management for GPRS subscriber	Siemens AG	CAMEL4				23.060	Rel-5		withdrawn
N2-010786	8.14	CR	Providing the location information during ongoing call	Siemens AG	CAMEL4				22.078	Rel-5	5.4.0	withdrawn
N2-010787	8.14	CR	Providing the location information during ongoing call	Siemens AG	CAMEL4				29.078	Rel-5	d540	withdrawn
N2-010788	8.2	CR	Route not permitted IE in ERB in the case of MF	Siemens AG	CAMEL4			F	23.078	Rel-5	5DA1	revised to 855
N2-010789	8.2	CR	Additional IE in ERB in the case of MF	Siemens AG	CAMEL4			F	29.078	Rel-5	d530	postponed to next meeting
N2-010790	5.2	CR	Latest version of the Work plan	MCC								noted
N2-010791	8.15	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAMEL4			B	23.078	Rel-5	5D82	revised to 833
N2-010792	8.15	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAMEL4			B	29.002	Rel-5	4.4.0	revised to next meeting
N2-010793	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	340		F	23.078	R99	3.10.0	revised to 825
N2-010794	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	209	1	F	29.078	R99	3.9.0	revised to 826
N2-010795	6.2	CR	Clarification on ATM	Alcatel SA	CAMEL3	335	1	F	23.078	R99	3.A.0	revised to 808
N2-010796	5.2	WP	Progress of the CAMEL work	CN2 Chairman								withdrawn
N2-010797	9.2	CR	Correction to implementation of CR 03.78-A141r1	Ericsson	CAMEL2	A168		A	03.78	R98	7.6.1	approved
N2-010798	9.2	CR	Calling Party Number can not be modified by CSE	Ericsson	CAMEL2			A	02.78	R98	7.1.0	endorsed
N2-010799	9.2	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010611)	Siemens AG	CAMEL2	A167	1	F	03.78	R97	6.9.1	approved
N2-010800		CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously 611)	Siemens AG	CAMEL2	A169		A	03.78	R98	7.6.1	approved
N2-010801		LS OUT	Handling of e-parameters provided by the SCP	CN2								approved

N2-010802	9.2	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010613)	Siemens AG	CAMEL2	333	1	A	23.078	R99	3.A.0	revised to 811
N2-010803	6.1	CR	Clarification of sending CAMEL information in stand alone ISD case	Alcatel SA	CAMEL3			F	29.002	R99	3.A.0	endorsed
N2-010804	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3	324	1	F	23.078	R99	3.A.0	approved
N2-010805	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3	336	1	F	23.078	R99	3.A.0	approved
N2-010806	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3		1	F	29.002	R99	3.9.0	endorsed
N2-010807	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3			F	29.002	R99	3.A.0	endorsed
N2-010808	6.2	CR	Clarification on ATM	Alcatel SA	CAMEL3	335	2	F	23.078	R99	3.A.0	approved
N2-010809	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3		1	F	23.018	R99	3.9.0	revised to 821
N2-010810	6.5	CR	Handling of Reconnect on the MSC-VLR Interface	Vodafone Group Plc.	CAMEL3	322	1	F	23.078	R99	3.A.0	approved
N2-010811	9.2	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service(previously N2-010613)	Siemens AG	CAMEL3	333	2	F	23.078	R99	3.A.0	approved
N2-010812	9.3	CR	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service.	Siemens AG	CAMEL3	341		A	23.078	Rel-4	4.2.0	approved
N2-010813	6.1	CR	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	Nokia	CAMEL3	204	1	F	29.078	R99	3.9.0	approved
N2-010814	7.1	CR	Correction of the MAXIMUM-FOR-SCI-BILLING-CHARGING value	Nokia	CAMEL3	205	1	A	29.078	REL-4	4.2.0	approved
N2-010815	6.2	CR	Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3	325	1	A	23.078	Rel-4	4.2.0	approved
N2-010816	6.2		Indication of deletion of CSI in Notify Subscriber Data Change	Lucent Technologies	CAMEL3	318	1	A	29.002	Rel-4	4.5.0	endorsed
N2-010817	6.3	INFO	Correction to CAMEL Procedure Names during RoutingAreaUpdate	Lucent Technologies	CAMEL3			A	23.060	Rel-4	4.2.0	endorsed

N2-010818	6.1	CR	Clarification of sending CAMEL information in stand alone ISD case	Alcatel SA	CAMEL3			A	29.002	Rel-4	4.5.0	endorsed
N2-010819	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3			A	29.002	Rel-4	4.5.0	endorsed
N2-010820	6.2	CR	Clarification on NSCD when data is withdrawn	Alcatel SA	CAMEL3	342		A	23.078	Rel-4	4.2.0	approved
N2-010821	8.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3		1	F	23.018	R99	3.9.0	endorsed
N2-010822	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3			A	23.018	Rel-4	4.4.0	endorsed
N2-010823	6.5	CR	Handling of Reconnect on Leg2 Disconnect	Vodafone Group Plc.	CAMEL3			A	23.018	Rel-5	5.1.0	endorsed
N2-010824	6.5	CR	Clarification of the CUG data used in IDP	Alcatel SA	CAMEL3	328	1	F	23.078	R99	3.A.0	approved
N2-010825	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	340	1	F	23.078	R99	3.A.0	revised to 845
N2-010826	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	209	1	F	29.078	R99	3.9.0	approved
N2-010827	6.5	CR	TDP3 triggerin criterion in MO case	Nokia	CAMEL3	331	1	F	23.078	R99	3.A.0	approved
N2-010828	7.1	CR	TDP3 triggerin criterion in MO case	Nokia	CAMEL3	332	1	A	23.078	REL-4	4.2.0	approved
N2-010829	6.5	CR	Precision abour default values for ServiceInteractionIndicatorsTwo parameters	Alcatel SA	CAMEL3	206	1	F	29.078	R99	3.9.0	revised to 844
N2-010830	8.5	CR	Ability to arm Mid Call DP for the duration of a call	CN2	CAMEL4		1	C	22.078	Rel-5	5.4.0	endorsed
N2-010831	8.12	CR	Additional event to mobility management for GPRS subscriber	Siemens AG	CAMEL4		1	B	22.078	Rel-5	5.4.0	endorsed
N2-010832	8.15	LS OUT	Draft Liaison Statement on Definition of Subscriber Status information for GPRS in CAMEL Phase 4	T-Mobil	CAMEL4							revised to 850
N2-010833	8.15	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAMEL4		1	B	23.078	Rel-5	5DA1	revised to 858
N2-010834	8.6	TS	Propopsal for 23.078 Part II for IMS/CAMEL interworking	Lucent Technologies	CAMEL4					Rel-5		noted
N2-010835	8.6	CR	CR to 23.218 : Addition of CAMEL Procedures	Lucent Technologies	CAMEL4				23.21 8	Rel-5	0.6.0	noted
N2-010836	8.4	DISC	CPH : Open Issues and Decisions	Vodafone Group Plc.	CAMEL4							revised to 857
N2-	8.4	CR	Parameters in SRI from gsmSCF	Vodafone	CAMEL4		1	F	23.078	Rel-5	5DA1	revised to

TDoc	Agenda	Type	Title	Source	WI	CR	Rev	Cat	Spec	Release	Version	Status
010837				Group Plc.								856
N2-010838	8.4	CR	Enhancement of 'Procedure Handle_SCI' for Call Party Handling	Alcatel	CAMEL4		2	F	23.078	Rel-5	5DA1	approved
N2-010839	8.4	CR	Enhancement of the SendChargingInformation procedure for Call Party Handling	Alcatel	CAMEL4		2	F	29.078	Rel-5	d540	approved
N2-010840	8.4	CR	SrfCallSegment and tariff switch timers for Apply Charging and Apply Charging Report	Alcatel	CAMEL4		2	F	29.078	Rel-5	d540	approved
N2-010841	8.4	CR	CWA considering multiple legs.	Alcatel	CAMEL4		1	F	23.078	Rel-5	5DA1	approved
N2-010842	6.2	CR	Clarification on ATM	Alcatel SA	CAMEL3	343		A	23.078	Rel-4	4.2.0	approved
N2-010843	6.5	CR	Handling of Reconnect on the MSC-VLR Interface	Vodafone Group Plc.	CAMEL3	323	1	A	23.078	Rel-4	4.2.0	approved
N2-010844	6.5	CR	Precision about default values for ServiceInteractionIndicatorsTwo parameters	Alcatel	CAMEL3	206	2	F	29.078	R99	3.9.0	approved
N2-010845	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	340	2	F	23.078	R99	3.A.0	approved
N2-010846	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	344		A	23.078	Rel-4	4.2.0	approved
N2-010847	6.5	CR	Introduction of SMS Reference Number	Ericsson	CAMEL4				23.078	Rel-5	5DA1	withdrawn
N2-010848	6.3	CR	Correction to CAMEL Procedure Names during RoutingAreaUpdate	Lucent Technologies	CAMEL3			F	23.060	Rel 99	3.9.0	endorsed
N2-010849	6.4	CR	Introduction of SMS Reference Number	Ericsson	CAMEL3	210		A	29.078	Rel-4	4.2.0	approved
N2-010850	8.15	LS OUT	Liaison Statement on Definition of Subscriber Status information for GPRS in CAMEL Phase 4	CN2	CAMEL4							approved
N2-010851	8.15	CR	Introduction of subscriber status information in PS domain	T-Mobil	CAMEL4			C	22.078	Rel-5	5.4.0	endorsed
N2-010852	8	CR	Tones support for Camel Phase 4	Logica	CAMEL4			B	23.078	Rel-5	5DA1	revised to next meeting
N2-010853	7.1	CR	Clarification of the CUG data used in IDP	Alcatel SA	CAMEL3	329	1	F	23.078	Rel-4	4.2.0	approved
N2-010854		CR	Precision about default values for ServiceInteractionIndicatorsTwo parameters	Alcatel SA	CAMEL3	211		A	29.078	Rel-4	4.2.0	approved

N2-010855	8.2	CR	Route not permitted IE in ERB in the case of MF	Siemens AG	CAMEL4			F	23.078	Rel-5	5DA1	revised to next meeting
N2-010856	8.4	CR	Parameters in SRI from gsmSCF	Vodafone Group Plc.	CAMEL4			2F	23.078	Rel-5	5DA1	approved
N2-010857	8.4	DISC	CPH : Open Issues and Decisions	Vodafone Group Plc.	CAMEL4							noted
N2-010858	8.15	CR	ATI/PSI Enhancement for PS Domain	T-Mobil	CAMEL4			1B	23.078	Rel-5	5DA1	approved

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Annex D   Joint meeting between CN1/2/3/4/5 (Part of CN1 report)

IMS 23.218 issues for joint CN WG session

N1-011373 : 23.218,   Lucent T., Type: CR , Title: CR to 23.218: Service Triggering at Registration

Discussion : Forward to N1#20 joint for N2 review. Agreed earlier in CN1#19bis. This CR affects chapter 11 which is handled also in 1526. A contradiction between these 2 tdocs was identified. Can any CAMEL information be of interest for S-CSCF? Revision is needed of Fig. 11.1 in clause 11.1.1 to highlight that the service may be triggered via ISC also during registration.

The interfaces and the text will be merged with 1526 into the common revised tdoc 1597.

Conclusion : Merged into 1597/ Replaced by 1597

N1-011480 : 23.218,   Lucent T., Type: CR , Title: CR to 23.218 Addition of CAMEL Procedures to section 11

Discussion : At the TSG CN2 ad hoc held between the 11th -13th September 2001, a decision was taken to provide CAMEL specific functional behaviour in the IM-SSF in terms of SDL diagrams. This CR proposes that the SDL be included in a specification under the control of CN2. A companion contribution to CN2 (N2-010730) proposes the creation of a new Technical Specification, currently referred to as 23.078 Part II which will host the SDL diagrams that describe the CAMEL specific functional behaviour in the IM-SSF. No SDL based description for call related functional behaviour of the IM-SSF is intended for any of the related technical specifications.

The principal of moving sections to 23.078 Part II was seen benefitial and reduces interaction between WGs. The intention to move call flows from 24.228 is to have only the two flows indicated in 23.218, and not the whole lot. The deletion of editors note in beginning of clause 11, or a revision, is needed. But the architecture overview in 11.6.1 shall stay. Should section 11 of 23.218 be moved to CN1s responsibility since it is now an overview with stable general content which can be modified through endorsed CRs from CN2 ? Yes. But in 11.5 there is more detailed stuff, so could this part be moved to CN2 as well ? Yes, this split was agreed and CN2 decides were to place this.

Additionally many comments were made to clarify and clean up section 11, eg introduce a Note to show there is no interaction to the UE, and paragraphs should be streamlined during the move.

Conclusion : Revised to 1596, and to be reviewed in N1 part of this meeting

N1-011596 : 23.218,   Lucent T., Type: CR , Title: CR to 23.218 Addition of CAMEL Procedures to section 11

Discussion :

Conclusion : Agreed

N1-011505 : 23.218,   Ericsson, Type: CR , Title: Evolution of TS 23.218

Discussion : This contribution proposes that TS 23.218 does not repeat what is already included in other specifications, and concentrates on the filter criteria. After performing the stage 2 of the filter criteria, CN4 should be informed in order for the stage 3 work for the filter criteria to be completed.

Copying some architecture diagrams was done due to ease of overview, but the principal of not duplicating any parts was recognized due to syncronization problems between WGs. The duplicated diagrams with 23.228 are intended

deleted when raising the TS to formal approval. The draft 23.218 is written as a start for CN1 activities, but CRs should be submitted to remove duplications.

24.228 is now almost unmanagable due to the size, and ISC flows will worsen that aspect. 24.228 is for call control and not for service control, so some wanted the ISC call flows in 23.218 only. But since stage 3 work in 24.229 might need some more details it was advocated that some ISC call flows could be introduced in 24.228 also. It was agreed that no systematical update of all call flows in 24.228 will be done to indicate ISC interaction, but having some examples should be considered.

TS 23.218 details the stage 2 aspects of the filter criteria and MRF functionality was agreed. And the mapping from ISC to CAP/OSA within CN2/CN5 documentations was dealt with earlier this morning and agreed. Chapter 12 in 23.218 with OSA should be modified with CRs according to the way CN2 parts have been agreed upon,- meaning just the interfaces should be left in 23.218 for CN1 to maintain. With this 23.218 section 12 is under N1 responsibility and informing N5 of any changes thereafter.

11.3 and 11.4 should be moved by new CRs to CN2 as well, and for the signalling diagram in 23.218 it should be included in the CN2 documentation also. The scope of 23.218 is not limited to the list provided in this CR.

Conclusion : Noted

N1-011522 : 23.218,   Motorola, Type: TS , Title: TS 23.218v070 "IP multimedia Session Handling; IP multimedia Call Model"

Discussion : The scope is maintained, but the structure is changed since the Draft 23.218 was presented in the Dresden CN WGs joint meeting. Now presented for information.

Conclusion : Noted

N1-011526 : 23.218,   Motorola, Type: CR , Title: Editorial and Minor changes against TS 23.218

Discussion : At CN1#18 in Dresden Motorola contributed N1-010983, which discussed the reorganization of TS 23.218 based on the agreed Architecture for Service Control and also advocated allocating responsibility for sections 6 to CN2 and section 8 to CN5 and was agreed in principle. At the following CN1#19 meeting held in Helsinki a follow up contribution N1-011277 was agreed implementing these changes. This contribution adds additional structure to the document particularly in those new sections added as a result of discussions at CN1#19 and also cleans up some editorials in the document.

11.2.3 was not seen as editorial change, and the interface to IM-SSF is still discussed in SA2 so this Sh interface is still not existing. The related diagram needs also to be changed accordingly. Change an editors note in 7.2.1 with reference to the 29.228 (in CN4 area). Clarification to be added to 8.2.1 on which MRF is meant . 7.2.3,- interface between HSSs to be deleted since CN4 does not work on it. But it is kept since it is copied from SA2 documentation. MRF figure interfaces is correct and the text should be changed accordingly. 6.8.2 diagram needs to be tided up due to 'view' problems. 2 diagrams intended to be the same,- needs to be done or only one kept.

Conclusion : Revised to 1597

N1-011597 : 23.218,   Motorola, Type: CR , Title: Editorial and Minor changes against TS 23.218

Discussion :

Conclusion : Agreed

N1-011534 : 23.218,   Nokia, Type: CR , Title: Filtering Criteria and Service Points of Interest

Discussion : The definitions of Filtering Criteria (FC) and Service Points of Interests (SPIs) in the current version of 23.218 are too loose. This document proposes some changes to chapters 5.2 and 6.8.1.3 in order to make the specification unambiguous in places where functionalities of FC and SPI are defined.

The list is not complete should be inserted as an editors note. Is RE-INVITE considered a request which can trigger the service ? Also INFO method should be able to trigger the Application Server. This contribution was ment for discussion, and comments are meant as input for a CR to the next CN1 meeting.

Conclusion : Noted

N1-011566 : 23.218,   Lucent T., Type: CR , Title: CR to 23.218 Correction to use of term Application Server in OSA context

Discussion : The term Application Server in the context of Open Service Access (OSA) is being used in a different manner than is defined in the OSA architecture in TS 23.127. OSA client applications are executed on an OSA Application Server which interfaces to an OSA Service Capability Server (OSA SCS) via the OSA Application Programming Interface (OSA API). However TS 23.218 refers to the OSA SCS as an Application Server.

The related SA2 CR was not agreed, so that modified part in 9.3.1 need to be reversed accordingly. Service Key needs to be restored,- and is a CAMEL related term. The CR for this will be provided in a later meeting.

Conclusion : Revised to 1599 which is to be reviewed by CN1.

<u>N1-011599</u> : 23.218, Lucent T., Type: CR , Title: CR to 23.218 Correction to use of term Application Server in OSA context

Discussion :

Conclusion : Agreed

<u>N1-011567</u> : 23.218, Lucent T., Type: DISCUSSION , Title: Dividing of work and responsibilities between CN1 and CN5 regarding MPCCS mappings to SIP

Discussion : This contribution falls into the decisions already made on work division and documentation strategy. So contributions are needed to introduce the proposal done here go into 23.218.

Conclusion : Noted

<u>N1-011568</u> : 23.218, Lucent T., Type: CR , Title: CR to 23.218 Additions to the OSA Specific sections on Session Handling with an OSA Service Capability Server

Discussion : Upon review of version 0.7.0 of TS 23.218 it was identified that the sections on IP Multimedia session handling with an OSA SCS are present only in a sceleton form. This paper proposes an initial content for these sections on OSA session handling. The proposed additions are far from complete, but are mainly intended to substantiate the placeholders for OSA sections and kick-start the work.

In 12.1 the propriatary interface is not allowed by SA2 anymore. 12.5 will be taken out to align with the newly agreed structure for 23.218.

Conclusion : Revised to 1600 which is to be reviewed by CN1.

<u>N1-011600</u> : 23.218, Lucent T., Type: CR , Title: CR to 23.218 Additions to the OSA Specific sections on Session Handling with an OSA Service Capability Server

Discussion :

Conclusion : Agreed

<u>IMS 24.228 issues for joint CN WG session</u>

<u>N1-011401</u> : S2-012460, To: N3, S4 Cc: N1 , Type: LS IN , Title: Liaison Statement on IMS to IP interworking functions

Discussion : Forwarded from CN1#19bis, and now forwarded from agenda item 3. CN3 should note that SA2 still has to assess what (if any) interworking cases are required to be supported between 3GPP IMS UE and non 3GPP IP network based end points. The actions are already carried out in N3.

Conclusion: Noted

<u>N1-011481</u> : 24.228, Lucent T., Type: CR , Title: CR to 24.228: Cx interface interaction in registration

Discussion : In the current version of 24.228, the IMS registration flows show the Cx messages cross the Cx interface. 29.228 "IP Multimedia Subsystem Cx Interface Singalling Flows and message contents" is the specification to define the Cx interface. In order to avoid updating 24.228 because of any changes happening in 29.228, it is suggested to keep Cx interaction in 24.228 as generic as possible. This contribution attempts to show the Cx interaction in 24.228 registration flows in a generic way, and also to identify the information which is needed to be sent to HSS and its corresponding SIP messages.

Documentation aspects was heavily discussed.

Conclusion : Revised to 1603

N1-011603 : 24.228,   Lucent T., Type: CR , Title: CR to 24.228: Cx interface interaction in registration

Discussion : How to achieve consistency for interacting protocols ? Terminology discussion on visited domain name.

Conclusion : Agreed

N1-011482 : 24.228,   Lucent T., Type: CR , Title: CR to 24.228: Cx interface interaction in session initiation

Discussion : Editorials to be corrected. Also the other direction needs to be shown. Will renumbering take place in all flows? Yes, but only one flow with table having reference from the others?

Conclusion : Revised to 1606

N1-011606 : 24.228,   Lucent T., Type: CR , Title: CR to 24.228: Cx interface interaction in session initiation

Discussion : The rapporteur will handle the editorial mistake in 7.3.2-6b.

Conclusion : Agreed

N1-011504 : 24.228,   Ericsson, Type: CR , Title: QoS flows: GPRS only, diffserv in core network, no SBLP

Discussion : Related to 1532. This contribution is a follow-up of N1-011358 presented in CN1 #19bis in Sofia Antipolis. The changes with respect to N1-011358 are:

- Only the relevant SIP and GPRS messages are detailed in the explanatory text.

- Clarified that the mapping between SDP and GPRS parameters is not going to be standardized.

Here only the messages triggering the GPRS procedures are shown, and not the parameters. What about mapping between SDP parameters to QoS ? Proposed to be done in N3, but is not good from UE viewpoint. Could Go interactions be shown here as well ? This is another proposal to be discussed in 1532. The mapping of codec parameters to be standardized or not was discussed.

Conclusion : Replaced by 1602

N1-011508 : 24.229,   Nokia, Type: CR , Title: Interworking between 3GPP and IETF SIP terminals

Discussion : In this contribution the possible interworking scenarios between a UE having IMS subscription and other UEs are shown and explained. The scenarios assume that the interworking is done by the terminals themselves, without the network's involvement. The scenarios take into consideration the requirements which need to be fulfilled by a UE having an IMS subscription.

It could be that these interoperability scenarios between non-3GPP UE and 3GPP UE would need to be adressed in IETF. The scenarios were considered possible and should be described in 3GPP specifications. How to document the case to make 3GPP UEs to interwork with non-3GPP UEs is the main issue. It seems also that any interworking needs to be handled in the network, since 3GPP UEs is dependent on the 3GPP network. But the interworking could also be handled by the UE, so the issue is still open.

After the 1588 discussion this contribution 1508 and 1533 will also be part of that interworking study, as input material.

Conclusion : Noted

N1-011532 : 24.228,   BT , Type: CR , Title: QoS flows: GPRS only, Diff Serve in core network with SBLPModel"

Discussion : Related to 1504, having N3 impacts. The addition compared to 1504 is the COPS part (start in flow 13). Data in flow 13 is needed in flow in 11 and 12 as well. Shall both 1504 flow and 1532 flows be included or only the 1532 ? The 2 flows are not mutual exclusive since 1504 does not have PCF. If the COPS are in the N3 documentation this would result in duplication with 24.228. Some COPS interaction was requested to be included as example flow in 24.228. More details in 7 and 10 in both proposals were requested.

Conclusion : Replaced by 1602

N1-011533 : 24.229,   BT , Type: CR , Title: Interworking with TS 24.229 SIP

Discussion : Redundant after the 1588 discussion, but will be part of the interworking study (together with 1508) which was initiated for 1588.

Conclusion : Noted

N1-011540 : 24.229,   Siemens, Type: CR , Title: Behavior of a B2BUA

Discussion :

Conclusion : Withdrawn

N1-011544 : Siemens,   Type: DISCUSSION, Title: S-CSCF selection problems

Discussion : The S-CSCF is selected by HSS when the UE has sent REGISTER, but then error cases like no S-CSCF is available or the selected S-CSCF is temporarily out of order may happen. In any case this should deal with what shall happen on the SIP interface. For the Cx interface interaction we need to involve CN4, and check if most of the cases HSS would respond with successful S-CSCF selections (not dumb ones). 6.8.1 in 23.228 adresses this selection on part of SA2. N1 needs to define the I-CSCF behavior, and acting as a proxy would leave any potential REGISTER retries for the UE to perform based on 4xx error message returned to its initial registration attempt.

It was disputed wether I-CSCF is stateless or transaction statefull. The latter would be the case if I-CSCF should be able to reselect another S-CSCF if the first selected S-CSCF did not respond. Which of 23.228 or 24.228 should handle the error cases. S-CSCF failure at re-registration time is not covered in this contribution but it needs to be addressed at some point.

N1 working assumptions need to be confirmed in the joint meeting 17/10. N1 assumes this is not a SA2 issue any more and wonders what should happen with the LS now under preparation from N4 to SA2.

In the joint part of the meeting the LS was discussed, and it was thought that it should be adressed to N1 instead of SA2, if needed at all. Or leave the protocol actions for N1 and the architecture issues for SA2 in the planned LS from N4. Tdoc 1601 was issued for the LS to be seen this afternoon.

Conclusion : Noted

N1-011588 :   N3/Siemens, Type: DISCUSSION , Title: Extent of the specification work in 3GPP for IMS to IP interworking

Discussion : N3 would like to have N1s opinion on how to solve/divide interworking issues between themselves. Standard terms like '3GPP profile' should be used, and not 'IMS SIP'. An analysis of interworking issues would help out in how and where to do the work (in 1544 for the message part). Basic functionality must always be possible to work between non-3GPP UEs and 3GPP UEs. Codecs and IPv4/IPv6 is issues for interworking. Was it not the case that 3GPP enhancements to SIP would be taken into the IETF draft to come ? Only one SIP version exists so backwards compatibility is not an issue. The extensions from 3GPP was thought to be a part within the modularity within SIP. Then it is an IETF specific issue. But it was different opinions if interworking was needed to be worked on in N3 or not.

The scope for analysis to define the interworking issues will be for 3GPP UEs to legacy terminals and vice versa, and will be worked on by a small drafting group of volonteers. Further limitations to the scope is needed,- ie just SIP interoperability to RFC 2543 compliant terminals (eg not IP4 to IPv6 interworking).

The moderator(s) of the drafting group to analyse the interoperability scenarios between 3GPP UE and IETF compliant SIP terminals is Gautam T. and/or Gabor B. 1533 and 1508 is also starting points for this study.

Conclusion : Noted

N1-011589 : N3/BT, Type: DISCUSSION , Title: IMS to CS session cases to include in 29.163

Discussion : As information to N3 the PSTN related call flows in 24.228 will be proposed updated in the near future. Some possibel misleading text was pointed out. An open issue is if the terminating policy on IMS or CS is to be considered ? In the dashed line for ACM, which means optionality, the 183 Ringing needs to be dashed as well. Who is doing the work to land these flows to 24.228? The work can be done in N3 and then brought back to N1.

Conclusion : Noted, and this contribution will be seen in one of the next N1 meetings

N1-011598 : N3/Ericsson, Type: DISCUSSION , Title: Proposal for text to the scope section in TS ab.cde

Discussion : In order to progress the work on the new TS ab.cde (End-to-End QoS signalling flows) in N3, it is important to define a clear and focused scope for the TS.

This affects 24.228 and the worksplit, and the latter also needs to be described in the workplan if decided. To avoid double work boxes can be used for interactions and optionalities, and only example flows showing the Go Interface messages without details in 24.228. The details on parameters and mapping are proposed to be given eg in TS ab.cde and other related TSs. Are the principals from this contribution agreed? The TS ab.cde was agreed to be created. The scope is acceptable if it does not affect the merge of flows intended for 1602.

Conclusion : Agreed

N1-011601 : N4-011188 To: SA2, SA5   Cc: CN1 SA1, Type: LS OUT , Title: Selection of S-CSCF by I-CSCF based on capability requirements

Discussion : Related to 1544. SA2 earlier did not find it necessary to standardize the issue and it has not been raised since. The error handling should be clarified to have been resolved by N1. The proposed added IE has consequences for I-CSCF and SIP. I-CSCF should have a limited set of S-CSCFs to be selected and reselections should be handled in SIP. It is up to CN4 to agree this LS OUT which will be presented unchanged to CN4 this week.

Conclusion : Noted

N1-011602 : 24.228,   Ericsson/BT, Type: CR , Title: QoS flows: GPRS only, Diff Serve in core network with and without SBLP support

Discussion : This is the replacement of N1-011504 and 1532. Editorials can be corrected later in the annex where this eventually would go, and also some further work in conceptual areas are needed.

Conclusion : Agreed