

Source: TSG-CN2 chairman
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Subject: CN2 status report

TSG-CN2 has held one meeting since the last plenary;

- CN2#32 16th – 20th February, Atlanta, USA. Hosted by American Friends of 3GPP. Report in **NP-040088**.

1 Executive summary

Three Liaison Statements were sent out from CN2 (**NP-040088**):

1. Reply to LS on IP Flow Based Bearer Level Charging (To: SA2)
2. Reply to GSMA IREG on requirement for video telephony.
3. LS to SA5 on the GGSN address to be stored in CDRs.

CN approved 31 category F, 4 category B, 1 category D, and some 30 mirror CRs. CN2 endorsed 3 changes in 5 tdocs to change specifications within other groups' remit (2 mirror CRs). 174 tdocs were handled during the meeting and 2 after.

CN2 forgot to make 2 Rel-6 mirror CRs of Rel-5 changes. These mirrors were approved off-line after the CN2 meeting (**NP-040092/N2-040175** and **NP-040092/N2-040176**). The Rel-6 changes are identical to Rel-5.

Rel-6 work item of CAMEL-SCUDIF inter-working is complete.

Rel-6 work task to define Change of Position reporting criteria is complete.

CN2 has solved most known open issues. The GGSN address format (IPv4 or IPv6) issue is open but needs input from SA5-B. Input is requested in a LS. Missing IANA package ID for CAMEL tones has been resolved after CN2 meeting by Kimmo Kymäläinen.

It is apparent that the remaining CN2 delegates want to fix CAMEL4 spec before handing it out to CN4. That explains the number of input documents to CN2. I assume that number of documents will drop after the last CN2 meeting.

2 CAMEL phase 1 (R96)

No change.

3 CAMEL Phase 2 (R97 & R98)

No change in CN2.

4 CAMEL phase 3 (R99)

- A. **NP-040090 23.078-CR653** "DP Triggering without having armed the TDP". Essential SDL correction.

5 3GPP Rel-4

In the 3GPP release 4 there is no new CAMEL phase. No changes.

6 CAMEL phase 4 (Rel-5)

The progress by functionality:

- A. Interaction with optimal routing: No change.
- B. Call party handling:
 - NP-040091 23.078-CR670 “Correction to handling of DFC in CS_gsmSSF”. SDLs did not have proper inputs in proper places.
 - NP-040092 23.078-CR648 “Missing DisconnectLeg Result”. This CR makes sure that MSC sends proper operation result to SCP.
 - NP-040092 23.078-CR667 “Correction to CUG handling for NP calls”. Makes sure that CUG and barring instructions from SCP work correctly.
 - NP-040092 23.078-CR668 “Correction to CAMEL_ICA_MSC (hanging connector)”. Clarifies which DP is to be reported in a certain case.
 - NP-040092 23.078-CR669 “Allowing Export_leg at DP Alerting and DP Answer”. Allows new ICA leg to be moved to CSID1.
 - NP-040092 23.078-CR671 “Correction to Request Report BCSM Event handling in CSA_gsmSSF”. Clarifies the case when RRB is w/o LegID.
 - NP-040092 23.078-CR673 “Correction to Split Leg handling in CSA_gsmSSF”. Essential clarification to SDLs.
 - NP-040092 23.078-CR675 “Correction to CS ID Prompt & Collect”. Clarifies how to use CSID with user interaction.
 - NP-040092 23.078-CR680 “Correction to SplitLeg preconditions”. Makes stage 2 consistent to stage 3.
 - NP-040092 29.078-CR348 “Correction to SplitLeg and MoveLeg preconditions”. Restricts SplitLeg to active phase, and allows it while in Monitoring state.
 - NP-040093 23.078-CR681, 29.078-CR349 “Correction to Disconnect Leg preconditions”. Denies DL while user interaction.
- C. Mid call procedure for MO and MT call handling: No change.
- D. CAMEL for IMS: No change.
- E. CAMEL control over MT SMS: No change.
- F. Inclusion of flexible tone injection: No change.
- G. Provision of location information of called subscriber (Alerting phase):
 - NP-040091 23.078-CR678 “Correction to Information Location at DP O_Term_Seized”. A word of warning to service designers. They should arm certain DP to get location information.
- H. Notification of GPRS mobility management to CSE: No change.
- I. Inclusion of ODB data in the CSE-HLR interface: No change.
- J. Location information during an ongoing call (Handover DP).
 - NP-040093 23.078-CR709 “Starting of Timer Tccd after ACR on DP 'Change of Position’”. Very important correction to get correct charging. Tccd ensures that SCP is not dead, and prepay calls is not free of charge.
- K. GPRS AnyTimeInterrogation: No change.
- L. IMEISV to SCP: No change.
- M. Partial implementation of CAMEL4: No change.
- N. Miscellaneous:
 - NP-040096 23.078-CR692, 29.078-CR355 “LLC passes on the gsmSSF - gsmSCF interface.” Improves MT data call acceptance by avoiding unnecessary CAMEL user interaction.
 - NP-040091 23.078-CR661 “Correction to dialed services triggering for NP and NC calls”. Clarifies N-CSI triggering for ICA legs.
 - NP-040091 23.078-CR663 “Correction to No Answer handling (CAMEL_OCH_MSC2)”. Clarifies CWA operation at this detection point.
 - NP-040091 23.078-CR666 “Handling of DFCWA in ETC and CTR procedures”. Corrects SDL signals while in user interaction.
 - NP-040091 23.078-CR674 “Correction to both way through parameter for ETC and CTR”. Clarifies that the parameter relates to calling party connection.

- [NP-040091 29.078-CR351](#) “Correction to description of Service Interaction Indicators Two parameter”. Similar change to stage 3.
- [NP-040091 23.078-CR676](#) “Correction to forwarded leg handling with Suppress O-CSI”. Aligns SDL with information flows.
- [NP-040091 23.078-CR677](#) “Correction to ORLCF handling for CAMEL calls in VMSC”. VMSC shall check if GMSC supports appropriate CAMEL4 CSIs.
- [NP-040091 29.078-CR347](#) “Correction to temporary connection establishment”. Hexadecimal digit B and its use is clarified.
- [NP-040092 23.078-CR679](#) “Correction to Tssf timer at Apply Charging”. Makes sure that Tssf is not set in Monitoring state. Rel-6 CR was done after meeting.
- [NP-040092 23.078-CR662](#) “Correction to DP description tables”. Clarifies that changeOfPosition DPs apply to VMSC only.
- [NP-040093 29.078-CR346](#) “Correction to GPRS protocol definition”. Makes sure that IMEI can be transported in Rel-5 CAPv3.

Controversial CAMEL4 issues:

- None

7 CAMEL phase 4 (Rel-6)

A. Enhanced Dialed Services

- [NP-040094 23.078-CR657](#) “No receipt of Int_DP_Analysed_Information in state Monitoring”. Fairly editorial correction.
- [NP-040094 23.078-CR652](#) “EDS and DisconnectLeg interworking”. The handling on receipt of DisconnectLeg (Leg1) after receiving of DisconnectLeg(Leg2) is the same one as the one relative to the receipt of ReleaseCall.

B. Change of position enhancement

- [NP-040093 23.078-CR682, 29.078-CR350](#) “Enhancement of Event Specific Information for DP 'Change of Position’”. This package completes the Rel-6 work task.

C. CAMEL inter-working with SCUDIF

- [NP-040095 23.078-CR688, 29.078-CR353](#) “CAMEL4 SCUDIF notification during active call for prepay”. This package completes the work item.

D. Miscellaneous

- [NP-040090 23.078-CR686](#) “GPRS ODB reporting to CAMEL SCP”. EntityReleasedGPRS shall be sent to SCP if ODB happens in order to close relationship correctly.
- [NP-040093 23.078-CR689](#) “NoReply timer clarification for follow-on calls”. SCP provided NoAnswer timer duration is used only once, then the value is “forgotten”.

8 Other Work Items with impact on CAMEL

1. MNP.
2. SCUDIF.

9 CN2 meeting calendar

Meeting calendar:

TITLE	TYPE	DATES	LOCATION	CTRY
CN2#33	WG	10 – 14 May	Zagreb	Croatia

10 Other issues to be mentioned

11 Acknowledgements

I would like to thank American Friends of 3GPP for hosting us in Atlanta.

Andrijana Jurisic deserves thanks as well. She is now between 3 groups but still works smoothly.

I would like to thank Rogier Noldus (vice chair) for chairing part of the meeting.