

Source: TSG-CN2 chairman
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Subject: CN2 status report

TSG-CN2 has held two meetings since the last plenary;

- CN2 Rel-6 EDS ad hoc 1st – 2nd April, Sophia Antipolis, France. Hosted by European Friends of ETSI. Report in **NP-030184**.
- CN2#29 19th – 23rd May, San Diego, USA. Hosted by American Friends of 3GPP. Report in **NP-030184**.

1 Executive summary

Rogier Noldus (Ericsson) was elected as CN2 vice chairman.

No LS was sent from CN2 since TSG CN#19 Meeting.

One CR was approved in R99 CAMEL3 plus its mirror CRs.

No changes to Rel-4 except a mirror CR were approved.

CN2 will produce collective CRs (one CR per affected specification) on Rel-6 Enhanced Dialed Services (EDS) for either CN#21 or CN#22 plenary.

No united view on the CN2-CN4 merge except that everyone wants CN2 to merge, sooner or later.

2 CAMEL phase 1 (R96)

No change.

3 CAMEL Phase 2 (R97 & R98)

No change.

4 CAMEL phase 3 (R99)

The progress by functionality; the most important changes were the following:

- A. ATM/ATSI: No change.
- B. GPRS inter-working. No change.
- C. MO SMS: No change.
- D. Call Gapping / SCP load control: No change.
- E. Dialed services: No change
- F. CF notification: No change
- G. Call-related: No change.
- H. Miscellaneous:
 - **NP-030185 23.078-CR581** "Behaviour of HLR upon location updating in CAMEL Phase 3". The CR removes references to CAMEL2 spec, here we shall have CAMEL3 or higher. No Rel-5 mirror. Rel-5 CR is in next document.
 - **NP-030189 23.078-CR593** "Behaviour of HLR upon location updating in CAMEL Phase 4".
- I. Controversial issues in CAMEL3: None

5 3GPP Rel-4

In the 3GPP release 4 there is no new CAMEL phase. The following Rel-4 issues are worth noting:

- A. CAP-over-IP. CN4 and CN2 have completed the work.

- B. The inter-working between CAMEL3 and Rel-4 GPRS barring classes is specified. Currently, this is the only technical difference between R99 CAMEL3 and Rel-4 CAMEL3.
- C. The 3GPP Rel-4 set of specifications have a separate copy of R99 CAMEL3. This is similar to the R98 copy of the R97 CAMEL2.

6 CAMEL phase 4 (Rel-5)

The progress by functionality:

- A. Interaction with optimal routing: No change.
- B. Call party handling:
 - NP-030188 23.078-CR486 “Implementing and handling of the Outstanding Request Counter”. The CR clarifies how many resumption operations the SCP shall send in each case.
 - NP-030188 23.078-CR561 “Correction to Cancel IF”. The CANCEL operation parameters are clarified.
 - NP-030190 29.078-CR308 “Removal of SCI Operation from NC call CAP syntax”. E-parameters are not applicable for SCP created legs – thus operation removed from the (ICA) application context.
 - NP-030190 29.078-CR312 “Correction to SplitLeg pre-conditions”. ICA legs can be moved to CSID1 in alerting, active or mid-call phase. Legs from CSID1 can be split only after answer.
 - NP-030188 23.078-CR559 “Correction to Destination Routeing Address in ICA”. The wording improved e.g. to allow ICA(short code / VPN#).
- C. Mid call procedure for MO and MT call handling: No change.
- D. CAMEL for IMS:
 - NP-030191 23.278-CR040 “Incorrect list of TDPs listed for O-IM-CSI”. Originating services CSI listed terminating services trigger detection points.
 - NP-030191 23.278-CR041 “Corrections to process IM_SSF”. SDLs are corrected to reflect SIP rules better.
 - NP-030191 23.278-CR042 “Redundant check for Final_Response_Received in Disconnect procedures”. An unnecessary check in SDL is removed.
- E. CAMEL control over MT SMS:
 - NP-030186 23.078-CR314 “Health warning for Calling Party Number length in IDP SMS”. A health warning about MT SMS in which the calling number exceeds 16 digits.
 - NP-030187 23.078-CR324 “ASN.1 change for Calling Party Number length in IDP SMS”. Same topic as previous CR but ASN.1 improved to allow 20-digit numbers in CAMEL4.
- F. Inclusion of flexible tone injection: No change.
- G. Provision of location information of called subscriber (Alerting phase): No change.
- H. Notification of GPRS mobility management to CSE:
- I. Inclusion of ODB data in the CSE-HLR interface: No change.
- J. Location information during an ongoing call (Handover DP).
 - NP-030189 23.078-CR586 “Removal of Int_CWA in Process CAMEL_T_CHANGE_OF_POSITION_MSC”. Continue With Argument operation is unnecessary in change of position cases. CWA will not appear in EDP-Ns.
- K. GPRS AnyTimeInterrogation: No change.
- L. IMEISV to SCP: No change.
- M. Partial implementation of CAMEL4: No change.
- N. Miscellaneous:
 - NP-030189 23.078-CR565 “TC-ABORT shall not cause "same signal" output in GPRS dialogue handler”. Corrects a minor SDL modelling issue.
 - NP-030188 23.078-CR554 “Correction to MAP PRN and to MAP SRI”. The CR clarifies the Send Routeing Info operation parameters sent by the SCP.
 - NP-030188 23.078-CR556 “Correction to assisting gsmSSF”. The CR corrects a comment box in SDLs. The comment was invalid for the assisting gsmSSF case.
 - NP-030188 23.078-CR560 “Default value for Domain Indicator in ATI IF”. The CR clarifies the HLR functionality in a backward compatible manner. If the AnyTimeInterrogation does not specify domain (CS/PS) then HLR assumes CS - as in CAMEL3.
 - NP-030188 23.078-CR562 “Correction to Specialized Resource Report IF”. A clarification to the wording.
 - NP-030190 29.078-CR309 “Correction to IPSSPCapabilities ASN.1 syntax”. Prior this CR there were invalid references to older CAMEL phases in ASN comments.
 - NP-030190 29.078-CR310 “Removing UnknownLegId Error from DFCWA”. The CR removes an irrelevant error code for a certain CAP operation.

- **NP-030190 29.078-CR311** “Removing DFCWA from assisting gsmSSF dialogue”. Assisting SSF cannot do CPH – thus this CPH specific operation is removed from the application context.
- **NP-030189 23.078-CR594** “Inclusion of DFC IF to assisting gsmSSF”. The Disconnect Forward Connection was missing from assisting gsmSSF information flows.
- **NP-030188 23.078-CR563** “Reference to ITU-T timer for default No_Answer timer”. The default No_Answer timer range is clarified to be 10s – 3min.
- **NP-030189 23.078-CR596** “Replacing DP numbers by DP names”. The SDLs should not any more use DP numbers – names should be used instead.
- **NP-030190 29.078-CR323** “DP arming requirement for NP calls”. For the sake of future compatibility SCP shall arm certain EDPs for SCP created legs to make a controlling relationship. This will reduce number of problems with enhanced dialled services.
- **NP-030189 23.078-CR567** “Adding of TIF-CSI into CAMEL stage 2 MAP-ISD for Call Deflection”. TIF-CSI was missing from Stage 2 Insert Subscriber Data, although it is in the ASN.1.
- **NP-030189 23.078-CR572** “Receiving Int_CWA after reporting Abandon”. MSC shall accept Continue With Argument at Abandon EDP-R. The only relevant information is LegID.
- **NP-030189 23.078-CR576** “Correction to TC Establishment procedure”. The CR corrects an SDL modelling error.
- **NP-030189 23.078-CR585** “VLR number in ERB is not needed”. In the case of hand-over the VLR# is not repeated to SCP since it does not change. In inter-MSC handover it would be unclear which VLR number to be reported.
- **NP-030189 23.078-CR587** “SRI Handling and CAMEL phase 4”. The HLR SDLs are updated to CAMEL4 level.
- **NP-030188 23.078-CR564** “Correction to Reset Timer handling in CS_gsmSSF”. Simplifies the Reset Timer handling in the MSC. Previous SDL was open for different interpretations.
- **NP-030188 23.078-CR555** “Removal of ENC disarming from SDL”. The CAMEL4 SDL contained some extras of a cancelled charging notification feature.
- **NP-030190 23.078-CR321** “ASN.1 syntax basic corrections”. The title says it all.

Controversial CAMEL4 issues:

- MT SMS. Ericsson and Siemens have mutually exclusive CRs. Siemens made a counter proposal during the meeting and people had to think about it.

7 CAMEL phase 4 (Rel-6)

Two Rel-6 CAMEL issues were discussed in CN2 ad hoc. Collective CRs will be provided.

8 Other Work Items with impact on CAMEL

1. CN4 is working on pre-paid services inter-working with number portability. If they will select (CAMEL) MAP-AnyTimeInterrogation alternative this would mean also CN2 work.
2. SCUDIF will also have impact on CAMEL. CN4 is discussing the topic.

9 CN2 meeting calendar

Meeting calendar for 2003:

TITLE	TYPE	DATES	LOCATION	CTRY
CN2#30	WG	25 - 29 Aug	Sophia Antipolis	France
CN2#31	WG	27 - 31 Oct	TBD	TBD

Meeting calendar for 2004:

CN2 discussed the topic. Here are the key points:

1. The August meeting is not welcomed but probably there is very little we can do about it.
2. From the given options people preferred the November meeting (although a bis meeting is not possible) because:

- a. There is more time to prepare CRs.
- b. SA working groups have better changes to provide input.

10 Other issues to be mentioned

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

11 Merging to CN4

CN2 discussed the topic. Siemens, Lucent and Alcatel prefer merging to CN4 as soon as possible, i.e. start of 2004. T-Mobil and Nokia preferred merging at mid-2004. The CN4 (new) chairman guesstimated that "CN4 could have next year almost a day" available for CAMEL topics in beginning of 2004. This is about the same time slot that we have for joint meeting already. CN2 chairman's personal view is that that's not enough to proceed with CAMEL. However, gradually the CAMEL work will cease, unless new requirements pop up. My second term ends May 2004 thus this would be one natural point of CN2 termination.

12 Acknowledgements

I would like to thank host of the meeting for inviting us these nice locations.

I very much welcome Rogier Noldus to his new role as vice chairman. Rogier is a long-time member of CN2 and an active contributor.

Andrijana Jurisic certainly deserves thanks due to her consistent performance in supporting the meetings in "go no show" style of hers. She does it a lot better than her airlines for her... 8-). She also arranged the ad hoc premises for us.

Ian Park is the man behind many fluent procedures and practises of CN2, and not only CN2. To give one example, the working groups didn't have tdoc allocation on agenda items until he introduced them. From a regular delegate's point of view it was then very challenging to follow the meeting. In case of not having anything to do in his retirement days he could help us in a CAP clean-up. Fortunately, he haven't seem all of him yet, he'll be in the August CN2 meeting.