3GPP TSG CN Plenary Meeting #17 **NP-020361**
4th - 6th September 2002. Biarritz, France.

Source: CN1 Chairman
Title: CN1 Status report
Agenda item: 6.1.1
Document for: INFORMATION

1. EXECUTIVE SUMMARY

The CN working group 1, 2, 3 and 4 meeting in Helsinki is the only CN1 meeting since the previous plenary. The meeting report is in document NP-020362.

Election of the second vice chairman of CN1 had been announced before that meeting with the aim of electing a vice chairman who would be active in IMS area, but the election had to be postponed since there were no candidates.

IMS work for Rel-5 was functionally frozen in TSGN #16 and as could be foreseen at that time, the number of necessary corrections is high. No IMS open items list is submitted to this plenary but CN1 intends to maintain the document as a WG to-do list.

Release 6 work has now been started and two new TRs have been created to collect temporary documentation on presence and MBMS. The first call flows have been added to the presence TR but the MBMS TR is so far an outline of what CN1 intends to document there. The intention is to provide both of these for information for TSGN plenary #18.

As usual, the documents for approval are presented by work item under each release. Category A mirror CRs have been grouped together with the corresponding category F CR. CN1 is presenting 89 CRs for approval to this plenary meeting.

A revision of Rel-6 work item presence is proposed in document NP-020386.

Additionally to this there are two new work item descriptions for approval in NP-020387 on "Interoperability and Commonality between IP Multimedia Systems using different “IP-connectivity Networks”; stage 3" and NP-020385 on "IMS Stage-3 Enhancements".

Rel-6 documents are still in the minority among the CN1 input documents but the number is expected to rise and therefore a Rel-6 ad hoc meeting has been added to the meeting calendar. The meeting on the 22nd to 24th of October 2002 will be kindly hosted by NTT DoCoMo in Munich, Germany.

2. INFORMATION TO BE NOTED

2.1 Meeting schedule for 2002 – 2003

Date	Meeting	Venue	Host
29 July – 2 August 2002	CN WGs	Helsinki, FINLAND	Sonera, Nokia, Elisa Communication, Ficora
4 – 6 September 2002	CN #17	Biarritz, FRANCE	Alcatel
23 – 27 September 2002	CN WGs	Miami, USA	North American Friends of 3GPP
22 - 24 October	CN1 Rel-6 ad hoc	Munich, Germany	NTT DoCoMo
11 – 15 November 2002	CN WGs	Bangkok, THAILAND	Japanese Friends of 3GPP
4 – 6 December 2002	CN #18	New Orleans, Louisiana, USA	North American Friends of 3GPP
10 – 14 February 2003	CN WGs		
12 – 14 March 2003	CN #19	Jersey Island, UK	UK Friends of 3GPP
7 – 11 April 2003	CN WGs		
19 – 23 May 2003	CN WGs		
4 – 6 June 2003	CN #20	FINLAND	Nokia
18 – 22 August 2003	CN WGs		
17 – 19 September 2003	CN #21	GERMANY	To be confirmed
27 – 31 October 2003	CN WGs	China???	Japanese Friends of 3GPP and Ericsson China
10 – 12 December 2003	CN #22	To be confirmed	North American & Japanese Friends of 3GPP

2.2 Liaison statements for information

All agreed outgoing liaison statements from CN1 to the other groups have been sent after the meeting. The liaisons from CN1 in NP-020363 are provided for information for TSGN plenary.

Liaison statement NP-020364 / N1-021835 is sent to GERAN and GERAN2. Hopefully these proposed CRs and the one which CN1 proposes to this TSGN plenary in NP-020383 clarify the text sufficiently to leave no possibility for misinterpretations.

SA2 liaised about an IMS related problem to CN1. If the UE requests for a signalling PDP context which the user expects to be free of charge and the serving SGSN is based on older reference version, then it is likely that the PDP context is activated successfully but as a chargeable general purpose PDP context with no indication to the user. Downlink indication

of successful establishment of signalling PDP context has been added to GPRS signalling in CN1 CRs NP-020371 / N1-021704 so that an the user can be given a warning if the network performs a fallback to normal PDP context activation.

2.3 Comments on the 3GPP work plan

The latest version of the 3GPP work plan was distributed for information but it was not reviewed this time.

3. ISSUES FOR ACTION/DECISION BY CN PLENARY

3.1 Liaison statements to TSGN plenary

Liaison statement NP-020364 / N1-021782 deals with an issue which CN1 could not solve and had to ask SA2 and TSGN guidance. SA2 have had their meeting between CN1 #25 and TSGN #17 and therefore it is expected that SA2 reply to this LS should be available in the plenary meeting. The related CR N1-021675 proposed that a request from P-CSCF to UE to use separate streams for media components of the session should be added to SDP. This downlink indication to require separate streams is currently required in.23.228 stage 2 but implementing that requirement would mean changes to either SIP or SDP or both. Since no such indication is currently available the related IETF drafts draft-ietf-mmusic-fid-06 (August 2002): "Grouping of media lines in SDP" and draft-camarillo-mmusic-separate-streams-00 (December 2002): "Mapping of Media Streams to Resource Reservation Flows" would delay the completion of Rel-5 IMS. According to the information which was available at the time of CN1 meeting, the delay would be about six months.
CN1 would like to hear from SA2 whether any alternative mechanisms would be available, and if not, CN1 requests that TSGN and SA2 consider whether CN1 should proceed with the current working assumption despite the delay to Rel-5 completion which it probably will cause. There is no related CR for approval in this meeting.

Liaison statement NP-020364 / N1-021834 seeks confirmation for the principle that as a backup for the so far non-existing SIP mechanism, the UE could receive the IPv6 address of the DNS via GPRS signalling. The related change requests were technically reviewed and conditionally agreed in CN1 and CN3.
SA2 and TSGN plenary are asked to confirm that this is acceptable.

3.2 Documents which need particular attention

3.2.1 Codec change at relocation or handover

In R99 there is just one default UMTS speech codec and therefore the codec negotiation at handover and relocation is straightforward since both MSCs can rely on the default codec and none of them support any further UMTS codecs. But in later releases more UMTS codecs may be supported and the specification does not cover the codec selection at handover or relocation.

The proposals from Ericsson and Nokia have been discussed both in a CN1 – CN4 joint session and in the working groups separately. Ericsson proposes to always negotiate to default codec before handover or relocation and Nokia proposes a signalling mechanism to indicate the codecs which have been negotiated across the radio interface. The compromise which was agreed in the CN1-2-3-4 WG meeting was to take the Ericsson approach for R99 and Rel-4 and Nokia proposal for Rel-5. There were concerns that the Nokia proposal would impact MAP. The CRs are in NP-020366.

3.2.2 Registration with integrity protection

NP-020379 / N1-021792 was agreed in CN1 meeting but after the meeting some delegations found problems with it and therefore a revised version is proposed in NP-020335. This later revision of the CR is co-signed by several companies but it has not been reviewed by the working group. If the later revision is acceptable for the meeting, then it should be treated as a normal revised CR. If not, then the plenary is requested to decide upon the older version also.

3.2.3 Providing the DNS IPv6 address to UE via GPRS

This procedure is proposed in NP-020372 (N1-021678 and N1-021833) as a backup routine for the UE to obtain the DNS IPv6 address via GPRS. This will be needed in case the corresponding IETF mechanism which is defined in draft-ietf-ipv6-dns-discovery-05.txt and draft-ietf-pppext-ipv6-dns-addr-00.txt is not available in time for Rel-5.

Both these CN1 CRs and the corresponding CN3 CRs (N3-020669, N3-020688) were agreed conditionally in the WG level. The condition is that SA2 agrees the proposed principle of indicating the IPv6 address of DNS server to the UE via GPRS procedures.

3.2.4 Service request procedure

The CR in NP-020381 / N1-021775 defines that if the network has accepted SERVICE REQUEST for data then the UE shall not repeat service request procedure until in PMM-IDLE mode again. This CR was reviewed and agreed by CN1 but it depends on TSG-SA approving the related stage 2 CR in 23.060 CR 388 r1 (SA2-021894).

4. DOCUMENT PACKAGES FOR APPROVAL

4.1 R98 and older work items

NP-020370 adds the GTT support at the radio interface from R97 onwards. The reason for late addition of feature is that there is a requirement in at least USA to support Global Text Telephony which is currently only Rel-5 feature. This is also the reason why no Rel-5 mirror CR is provided. Rel-5 already contains the same definition of one bit in BC IE which can be set by the UE to request GTT service.

The change only allows a pre-Rel-5 MS to support GTT but it does not define the service for the network.

4.2 R99 work items

4.2.1 GPRS (GSM-UMTS interworking and MM for UMTS)

NP-020365 is not only editorial but also corrects the scope of 23.014.

4.2.2 TEI

NP-020367 requires the UE to perform a RAU when entering a new PLMN.

NP-020368 contains three changes. Two of them are corrections to service request procedure and the third one covers for 24.008 the same RAU at PLMN change as document NP-020367 does for 23.122.

4.2.3 TrFO

NP-020366 defines that for R99 and Rel-4 the MSC-A must perform a fallback to default UMTS codec before handover or relocation. For Rel-5 the negotiated codecs are indicated towards MSC-B and because Rel-5 CR is not a mirror of the older releases it is also marked as category F. The CRs are presented in one package since they deal with the requirements on the same procedures even though the solution is different for different releases.

4.2.4 GSM Compact

GERAN has already decided to remove CBQ (Cell Bar Qualify) parameter and corresponding changes to 23.122 and 24.008 are done in NP-020369.

4.3 Release 4 work items

All Rel-4 CRs which are presented for approval to this meeting are category 'A'.

4.4 Release 5 work items

4.4.1 3GSplit

The CR in NP-020384 adds the indication of UE support of GERAN Iu mode to MS Classmark and MS Radio Access Capability. This GERAN CR was received by CN1 attached to a LS where GERAN asked for endorsement of it. The CR was endorsed with no revisions.

4.4.2 IMS CRs on existing CN1 specifications

NP-020371 contains four IMS related corrections on 24.008 dealing with PCO and TFT IEs.

IMS CRs on 23.218 are in NP-020373.

IMS CRs on 24.228 are in NP-020374.

IMS CRs on 24.229 are grouped to four documents NP-020375 – NP-020378

One more 24.229 CR has been split to NP-020379 because there is a proposal to revise it. This document was reviewed and agreed in CN1 but after the meeting several delegations have worked together to revise it to NP-020335 but this later revision has not been reviewed by CN1.

NP-020380 adds policy control reject code to PCO IE. The related CN3 CR on 29.207 in N3-020575 is also needed to make a complete error indication mechanism.

4.4.3 TEI-5

NP-020382 contains five CRs to clarify the UE RAU procedure in change of PLMN, change of nework mode of operation, T3312 expiry etc.

NP-020383 also contains five CRs under WI TEI-5. CN1 received a LS from RAN3 requesting that the working groups receiving the LS study the shared networks requirements and see if they need to draft any CRs. The cat. B CR on 23.009 was triggered by this LS. 24.007 CR is the result of discussion on CN revision level indicators between CN1 and GERAN. The normative specification which defines MSC-R and SGSN-R bits is owned by GERAN but CN1 wanted to clarify the CN interpretation of the meaning of those bits in a note which did already exist in 24.007. Additionally to that there are two ASCI related CRs and a correction to improve the consistency of 23.122.

4.4.4 IMS Technical Specifications for approval

There are no TSs or TRs for approval this time.

4.4.5 Dependency to IETF drafts

The dependency of IETF specifications has been reported to previous meetings already. Several of the main dependencies are already solved but some are still not available as RFCs. The remaining dependencies are listed on 3GPP website.

4.5 Release 6 work items

The work on Rel-6 work items has now been started in CN1 with 22 documents having been treated in the last meeting.

4.5.1 Presence

Presence TR is still being maintained within the working group. CN1 #25 decided to restructure the outline of the TR and also the first call flows were added after discussion on which cases need to be covered with the adopted minimalistic approach to keep the document easily maintainable.

CN1 proposes to revise the presence building block work item with ID 2503 under the main presence feature 2499. The main differences since the previous version are new schedule aiming at completion of the WI at TSGN #19, inclusion of CN5 OSA gateway mapping and the TR which is being maintained to hold presence related information. In order to avoid shared responsibility of the TR it was agreed to keep the TR within CN1. Also new interfaces have been identified and instant messaging along with the related IETF drafts is now split out of this presence WI. There are also more supporting companies than before.

Revised presence work item description is proposed for approval in NP-020386.

There are no presence related CRs for approval to this meeting.

4.5.2 MBMS

It was agreed to start collecting CN1 MBMS material in a TR which would be under CN1 responsibility and cover only CN1 related issues to avoid shared responsibility with the other CN working groups.
The intention is not to convert the TR into a TS later, but to collect the stable material from it to already existing other TSs.

There are no MBMS related documents for approval to this meeting.

4.5.3 Interoperability and Commonality between IP Multimedia Systems using different "IP connectivity Networks"; stage 3"

This work item proposes to identify and separate the access network specific parts of the Rel-5 IMS specification in order to allow other access networks additional to GPRS, such as WLAN, to be introduced and to align the common IM CN subsystem part with 3GPP2.

The work item is intended as a building block under the main feature with the same long name. The 3GPP work plan version dated on the 31st of July 2002 does not yet define this main feature work item so it is left up to the meeting how to document this building block in the work plan in case the work item can be approved.

It has not yet been decided whether the GPRS related IMS requirements should be collected in an annex of the currently existing TS 24.229 or split out to a separate new TS.

The work item is expected to be completed in two stages, the review part in TSGN #21 and the specification split in TSGN #23.

Document NP-020387 contains new work item for approval.

4.5.4 IMS Stage-3 Enhancements

This work item has got twofold goal. The intention is to cover in Rel-6 those still outstanding IMS issues which could not be implemented in time for Rel-5 and to keep following IETF specification evolution and implement the changes which are consequently needed in 3GPP CN1 specifications. It is not intended as a wide open mandate to make any changes that might be desirable but the work item description lists the intended focus areas.

The work item is intended to become a building block. The 3GPP work plan version dated on the 31st of July 2002 does not yet define this main feature work item so it is left up to the meeting how to document this building block in in the work plan in case the work item can be approved.

The expected completion time is TSGN #21.

Document NP-020385 contains new work item for approval.

3 ACKNOWLEDGEMENTS

Thanks again to Per Johan Jörgensen from MCC, the hosts and the delegates for supporting our work in CN1, including the delegates of the other CN WGs who have been available for a joint session whenever necessary. And special thanks for all for being sensible and keeping the number of summer meetings at reasonable figures. I believe I was not the only one who needed the break after the heavy Rel-5 tour last winter.