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

1. EXECUTIVE SUMMARY

The CN1 meeting in this plenary period was number 37. And just like the previous one, also this meeting concentrated in completing Rel-6 work items. Most work items can now be declared complete, but it was agreed during the meeting that three of them will require extension until June 2005 plenary. The rapporteurs have drafted the extension forms based on the agreed open issues that were found in the meeting. More than 400 document numbers were allocated to this meeting.

CN1 forwards 96 CRs to this plenary for approval. As an indication of frequent exchance of information between the WGs striving to complete the stage 3 of Rel-6, we received 66 liaison statements and sent 18 new ones.

This meeting was kindly hosted by NTT DoCoMo, Vodafone, Fujitsu and NEC in the pleasant climate of Sydney in Australia.

The CN1 meeting report is provided by the CN1 MCC expert Andrijana Jurisic for information to this meeting in NP-050059.

It has been agreed within CN1 to extend the lead time for document submission from the old three days to four and half days. Due to this, an update of the WG Terms of Reference was requested but also several other issues were updated while preparing a new version of the ToR. However, it should be noted that the new version which is submitted to this meeting as NP-050065 is only an updated version of the CN1 ToR and it does not yet study how CN1 might change when it becomes CT1 in the next plenary period.

2. INFORMATION TO BE NOTED

2.1 Meeting schedule for 2004 and 2005

No additional meetings have been agreed and from now on CN1 will be following the agreed CN working groups meeting schedule for year 2005. The chairman did ask if there was a need to schedule an extra meeting to handle either all CN1 tasks or specifically new Rel-7 work items. At the moment the absence of feedback is considered to mean that the delegates are reasonably happy with the agreed meeting schedule, even though it has lead to long working days during the meetings.

2.2 Liaison statements for information

The liaison statements from CN1 #37 that are not addressed to CN plenary are submitted in NP-050060 for information.

Additionally to those, three liaison statements have been separated to standalone documents, as they have been sent for information for the plenary.

NP-050090 / N1-050270 is on misalignment amongst the 3GPP specifications, “Re-authentication and key set change during inter-system handover”. There has been a long debate on the key set handling at 2G – 3G handover, and consequently SA3 and CN1 have already changed their specification to clarify the critical procedures. However, RAN2 have not made their part of the change. CN1 seeks SA plenary guidance on how to proceed, as if no changes are made by RAN2, then the already approved CRs by CN1 and SA3 will have to be reversed with another set of CRs.

NP-050091 / N1-050277 is a reply LS on IP multimedia messaging capabilities. In this LS CN1 replies to an earlier LS where SA1 say that they do not want to remove the existing stage 1 requirements for iscomposing and list servers in IMS messaging. It turned out that SA1 was right in keeping the requirements, as CN1 has been able to agree the corresponding stage 3 CRs to fulfill these requirements.

NP-050092 / N1-050416 is an LS on status of 3GPP IMS management object. CN1 informs OMA and 3GPP2 that the work on 3GPP IMS management object has been completed for Rel-6 and 3GPP TS 24.167 is forwarded to this CN plenary for approval. The latest version of the MO specification documents the means for provisioning of private and public user identity and home network domain name for early IMS with SIM card.

2.3 3GPP work plan status

CN1 tasks on the 3GPP work plan version dated on the 19th of January 2005 were reviewed during the meeting and several comments were made. The chairman circulated a work item status summary document on the CN1 email reflector after the meeting. Some comments were received and the WI status information in the table below includes all received comments.

IETF dependencies across the whole CN are already listed in a separate document that is maintained by the CN chairman and these open items only represent the work which CN1 still intends to do on Rel-6 even if there are no changes in the specifications outside CN1 requiring further changes.

CN1 Rel-6 work item status in CN1 #37:

WI	%	Estim.	Open items
Group management (IMS2)	100	Mar-2005	
Conferencing (IMS2)	100	Mar-2005	None if the CRs to this meeting are approved
Messaging (IMS2)	100	Mar-2005	None if the CRs to this meeting are approved
Extensions to SIP (IMS)	100	Sep-2004	
Interworking towards IPv4 (IMS2)	100	Sep-2004	
Interworking with non-IMS SIP (IMS2)	100	Sep-2004	
Management object (IMS2)	100	Mar-2005	None if the TS is approved in this meeting
IMS interoperability	100	Dec-2003	
Presence	100	Mar-2005	
MBMS	100	Dec-2004	
WLAN scenario 2	100	Mar-2005	None if the CRs to this meeting are approved
WLAN scenario 3	100	Mar-2005	None if the CRs to this meeting are approved
Network sharing	100	Dec-2004	
Subscriber certificates	100	Mar-2005	
Domain specific access class barring	100	Mar-2005	None if the CRs to this meeting are approved (Rel-6 & Rel-7 CRs exist)
IMS Trace	2	Mar-2005	No open items for Rel-6, CN1 task has been moved to Rel-7 in CN #26
IMS2: additional SIP capabilities	97	Jun-2005	• The MCC was requested to register the orig-parameter with IANA • Completion of IMS-ALG procedures
PS handover (no CN1 task is shown in the work plan under feature 50500)		Jun-2005	• XID negotiation for ciphering parameters • and compression entities; • Handling of NSAPI-SAPI-PFI re-mapping; • Indication of support of PS Handover in MS RAC and MS network capability;
CS video and voice service improvements (no CN1 task is shown in the work plan under feature 31046)		Jun-2005	• Service-based handover to be added to clause 14 of TS 23.009

3. SPECIFICATIONS FOR APPROVAL

CN1 provides the 3GPP TS 24.167, 3GPP IMS Management Object (MO) stage 3, for approval in NP-050066. This specification is intended to define the IMS related UE data structures in a single management object. There is no intention to specify an MO maintenance framework within 3GPP, but device management defined by OMA will be used to read and manipulate the contents of this MO over the air.

4. ISSUES FOR ACTION/DECISION BY CN PLENARY

4.1 Liaison statements to TSGN plenary

CN1 #37 did send 18 liaison statements to the other groups, but none of these request CN plenary action.

4.2 Critical CRs

Already the previous CN plenary in December did see a set of CRs from CN1 and CN4 on alternative NAI in manual WLAN PLMN selection. The CRs could not be approved, due to GSMA IREG objection which they expressed in their LS to CN plenary. The CRs were forwarded back to the working groups which were tasked to find a solution to the problem. Now the DNS load issue which concerned GSMA IREG has been analysed more thoroughly, and sGSMA IREG was able to withdraw their objection based on this further study. CN1 and CN4 now forward for approval in principle the same solution as before, but rebased on the latest reference specifications and with minor modifications. The CN1 part is in NP-050079.

Another issue in WLAN area has been brought up by SA3 after CN1 meeting, and in their LS S3-050153 they recommend a further revision of N1-050354 in NP-050117.

MBMS related CRs N1-050307 – 309 in NP-050071 were isolated into a separate CR pack, since there is a dependency between the CRs in that CR pack. N1-050307 and N1-050309 in that CR pack depend on N1-050308 and cannot be approved without it. It was noticed during the meeting that one of the CRs, N1-050309 addressed not only MBMS, but also generic GPRS corrections. As there is no GPRS work item in Rel-6, it was agreed to reflect this dual nature of the CR by indicating TEI-6 as a secondary work item on this CR, to show that some of these changes are needed in implementations that do not support MBMS.

Conferencing CR N1-050374 in NP-050072 was agreed to be put in a separate CR pack even though there were no technical concerns on this CR. This change is related with a change of the scope of the work item, as it removes the dependencies to IETF floor control (BFCP) and conference policy control (CPCP) protocols that cannot be completed in time for Rel-6.

WLAN related CR NP-050080 was requested in the working group to be forwarded to the plenary in a separate CR pack even though the meeting did not find any technical or other reason to object it in the WG meeting. But some companies wanted to reserve the possibility to check it within their company before the plenary meeting.

Subscriber Certificates CR on 24.109 in N1-050358 / NP-050081 depends on corresponding SA3 change and therefore it can’t be approved on its own. The document is split to separate CR pack to allow conditional approval, based on SA plenary approving the corresponding 33.222 CR 15.

Additionally to these, there are several CRs provided for approval and are needed to complete the CN1 task in Rel-6. If any of these CRs are not approved, that creates a new open item in Rel-6 work plan.

4.2.1 Indication of CR impact area

The CR cover page template contains tick boxes to identify which system elements are affected by the CR. There was some uncertainty in how to use these, and the CN1 chairman was requested to ask for clarification of the criteria to indicate an impact on system element.

DOCUMENTS FOR APPROVAL

4.3 R98 and older work items

There are no GSM phase 2+ CRs for approval this time.

4.4 R99 work items

Document NP-050067 contains the only R99 CR with mirror CRs. The work item is ASCI / VGCS. These corrections to the voice group call establishment clarify that at least the downlink channel must be available to consider the call establishment successful.

4.5 Release 4 work items

There are no category F Rel-4 CRs for approval.

4.6 Release 5 work items

4.6.1 Provisioning of IP-based multimedia services (IMS-CCR)

This time we were able to squeeze the Rel-5 IMS corrections in a single document in NP-050069. This CR pack contains 8 Rel-5 CRs and 6 rel-6 mirror CRs. The main changes on 24.229 are correction of the S-CSCF handling of the de-registration cases with and without re-registration, message routing towards AS acting as routing back to back UA, handling of IOI in case of 1xx or 2xx responses and Request-URI handling for terminating requests. N1-050287 is part of a change that affects also 29.228, but no formal linkage between the two CRs has been defined, and they can be approved individually.

The 23.218 changes correct filter criteria matching, including default handling. No mirror CR is needed for call flow correction in N1-050298, since no Rel-6 version of 24.228 will be created. N1-050287 was initially accompanied with a corresponding Rel-6 mirror CR, but during the discussion the latest revision of that CR was converted to a category F CR under Rel-6 work item IMS2.

4.6.2 SCUDIF

There is one SCUDIF CR with a Rel-6 mirror CR for approval in NP-050068. This CR completes the recent in-call modification change by including the data rates in the appropriate service primitives between different signaling layers.

4.7 Release 6 work items

4.7.1 Presence

The presence CRs are provided for approval in NP-050078. These CRs solve an editor's note in 24.247 by defining the authentication proxy behaviour, correct syntactical errors in the 3GPP TS 24.141 call flows and replacement of XCAP package IETF draft reference with config framework draft.

4.7.2 MBMS

The MBMS CRs are provided for approval in NP-050070 and NP-050071. The MBMS documents were split in two CR packs because of technical dependency between three CRs in NP-050071, which clarifies the MBMS context handling and synchronization of the existing MBMS contexts between the network and the UE. The documents N1-050307 and N1-050309 depend on N1-050308 and can't be approved without it. NP-050070 adds the RRC establishment cause for MBMS, the TMGI as one possible mobile identity and the MBMS messages to the SM protocol message type list.

4.7.3 IMS Phase 2

Most IMS2 CRs are provided for approval in three CR packs NP-050072 to NP-050075. No technical comments were made against the standalone CR in NP-050072, but that was left in separate CR pack since it changes the work item scope by removing the references to floor control and conference policy control protocols.

NP-050073 is a collection of IMS related Rel-6 changes on several IMS related specifications. One change that affects TSs 23.218, 24.141, 24.147 and 24.247 is the removal of all references to 24.228 as we don't intend to produce a Rel-6 version of it. There are also two fairly minor editorial and cleanup CRs and the update of referenced IETF draft to RFC 3966. One of the CRs that affect the design is the adoption of the update draft of RFC 3312. This IETF draft was indicated to be in the RFC editor's queue already at the time of CN1 meeting, so it was considered safe to add this new dependency. The other changes are clarification of abnormal cases, filtering changes, addition of the Application Charging ID (ACID), routing related changes and correction to session setup without preconditions and reliable transport of provisional responses. The messaging related changes in this package remove the references to CPCP from 24.247 and correct the signaling flows. CR N1-050288 in NP-050073 is related with two other CN1 CRs, N1-050418 and 421 in NP-050075, but no linkage was defined between the documents and the CRs can be treated individually.

NP-050074 is a set of CRs to correct the profile tables in Annex A of 3GPP TS 24.229.

The messaging related CRs on 24.247 in NP-050075 solve the two outstanding issues from the previous meeting in iscomposing and sending of the same message to multiple recipients.

Additionally there is clarification to MSRP procedures. The 24.229 changes in the same CR pack deal with IPv4 interworking at IMS-ALG, default handling of requests at S-CSCF if it fails to receive a SIP response or a timeout occurs, corrections to MGCF procedures at session establishment and correction to registration procedures. CR N1-050288 in NP-050073 is related with two other CN1 CRs, N1-050418 and 421 in NP-050075, but no linkage was defined between the documents and the CRs can be treated individually.

Extensions to SIP capabilities task within this work item could not be completed by this plenary and there is a request for extension until June 2005 in NP-050089. The open issue in this task is the completion of the IMS-ALG procedures. The MCC was also requested to register the orig-parameter with IANA.

4.7.4 WLAN interworking stage 3

The standalone CR in NP-050080 was split to separate CR pack since some companies wanted to reserve the possibility to check this CR on IP level access independence within their company before the plenary, even though they did not find any technical or other reason to object it in the WG meeting.

Another WLAN CR N1-050354 / NP-050117 had to be split to separate CR pack since SA3 have studied the matter after CN1 meeting and they recommend a further revision of the CR. It is expected that a revision of this CR will be provided as a company contribution directly to the plenary.

The other two CRs in NP-050079 solve the only remaining WLAN open item for Rel-6 by defining the procedures for manual WLAN PLMN selection via alternative NAI and an editorial update of terminology and definitions in 3GPP TS 24.234.

4.7.5 Subscriber Certificates (Security)

There are only two CRs on the subscriber certificates TS 24.109 under security work item. NP-050081 was split to a separate CR pack since it was assumed but not known for sure at the time of CN1 meeting whether SA3 would approve their corresponding CR to add PSK TLS to Rel-6. Due to this dependency to document S3-050145 containing 33.222 CR 15, CN1 asks for conditional approval of the CR.

The only other CR on subscriber certificates in NP-050082 is mostly editorial nature, but it needs to be categorized as correction, since also the requirements of bootstrapping procedure have been changed and the note in the protocol stack block diagram has been made normative.

4.7.6 Domain specific access class barring

ACBOP related CRs are provided for approval in NP-050083. The CR pack includes a mirror CR on 23.122, as the Rel-7 version of this specification has already been created. These CRs add the domain specific access class barring procedures to MM, GMM and UE idle mode procedures.

4.7.7 OEM Trace

There is a single CR on Trace for approval in NP-050084. This CR adds the use of the IMEISV in the BSSAP location update procedures and it is part of a package of linked CRs and the rest of the pack is expected to be provided by CN4 as follows: 29.002 CR 749, 23.012 CR 019, 23.018 CR 144 and 29.060 CR 543.

4.7.8 PS Handover

There is one CR on PS handover for approval in NP-050085. This CR adds inter-RAT information container IE to GMM attach and RAU messages, to piggyback the AN information that is needed at handover. The container is used for transport of the detailed level UTRAN capabilities of the mobile, as defined by RAN2 in 25.331.

CN1 task in PS handover could not be completed for this meeting, so there is a request for extension in NP-050088. The open items to be completed by June 2005 are XID negotiation during handover, NSAPI-SAPI-PFI re-mapping and indication of support of PS HO in MS RAC and MS network capability.

4.7.9 CS video and voice services improvements

There is no CRs on this work item yet, but one 23.009 CR is foreseen necessary in service based handover area. Document NP-050087 requests one plenary period extension to complete the work by June 2005.

4.7.10 TEI-6

The majority of TEI-6 CRs are in NP-050076. The standalone CR in NP-050077 was split to a separate CR pack as there was question on the overall feasibility of the service based PLMN selection and in particular the affected specification release.

The ASCI CRs in NP-050076 clarify the identities to be used at notifications and add the definition of identity for notifications to dispatchers for both voice group call and voice broadcast call.

The rest of the CRs in NP-050076 are corrections on 24.008. These comprise correction of a collision case during attach procedure, addition of new messages to MM and CC PDU tables,

define the attach type and combined RAU conditions for DTM use, clarify the detach type to be used by the mobile when detach is performed during CS connection.

4.8 Release 7 work items

4.8.1 VGCS Enhancements

VGCS enhancements work item description is provided for approval NP-050062. This work item is intended as a building block under the main VGCS work item 31049. The scope of the WID is the addition of point-to-point SMS and GPRS, so it is not an update of the already existing CN1 owned VGCS work item 11045, but an additional one.

4.8.2 Combinational services (CS and IMS)

New work item description is provided for approval in NP-050063. This work item intends to cover the CN1 work in combinational services by CT #29 in September 2005. Changes on both the UE and core network are foreseen in 24.008 and 24.229 area.

CN1 is not quite sure of SA2 intentions in this area. It is not known whether SA2 intends to write some normative specification on the architecture based on the existing 3GPP TRs 23.899 and 23.9de. Furthermore the SA2 schedule for combinational services is not shown in the 3GPP work plan, so CN1 was not able to align the stage 3 estimates with the stage 2 schedule.

4.8.3 IMS applications – missing features

The previous plenary meeting already approved a work item for IMS protocol evolution. This time CN1 is providing for approval a new WID on the missing features. So the work item description in NP-050064 is not intended to replace the existing work item ‘IMS stage 3 IETF protocol alignment’ under unique ID 11052, but to add a new one to allow the work on conferencing and group management that could not be completed in Rel-6 to be continued in Rel-7.

In the working group meeting the work item description had only two supporting companies, and two more will be needed to approve it in the plenary.

4.8.4 IMS trace management

An updated trace work item description is provided for approval in NP-050061. The main change is new schedule now aiming at completion in March 2006 and thus probably making it Rel-7 work item instead of Rel-6. Now also the corresponding SA5 building block level work item has been identified as the parent work item for this work task.

4.8.5 IMS changes for NGN

A new TR to hold the IMS changes for NGN has been started. The reasons are twofold, as the TR can serve as a temporary storage for material that has not stabilized yet and it can be used

for holding back Rel-7 versions of the CN1 key specifications without having to stop the NGN work.

4.8.6 TEI-7

The CR in NP-050086 makes minor adjustments in the equivalent home PLMN handling which was introduced as a new feature already in the previous plenary meeting and triggered the creation of Rel-7 version of 23.122 as the first Rel-7 work item. There is no change in the intended procedures, but the distinction between HPLMN and EHPLMN is highlighted.

5. ACKNOWLEDGEMENTS

There has been discussion and criticism on meeting locations, as it is not possible to please everybody every time in a global organization. But at least I am very happy to thank the hosts on behalf of not only myself but also the whole working group, as I felt that most participants found it worthwhile, despite the long travel.

I would like to thank all the CN1 delegates for clearly visible improvement in the precision in the cover page details, as this time we did not have to ask Andrijana to make too many last minute corrections. But of course, it was very good to to have her there to take care of us when some issues required attention. And when she wasn't, due to visa problems that were beyond her control, Maurice Pope was able to step in to ensure that all documents were distributed well before the meeting.

I would also like to thank CN1 vice chairman Atle Monrad from Ericsson for chairing the last revision session on Friday afternoon to give one more chance to all CRs that were prepared in time and revised during the meeting.