

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

1. EXECUTIVE SUMMARY

There has been one CN1 meeting since the previous TSGN plenary. CN1 #28 in Dublin was hosted by the European Friends of 3GPP and the meeting report is in document NP-030038.

Contributions were received on several release 6 work items. If all release 6 related CRs and those release 5 CRs which are not intended for release 6 are approved in this meeting then it will trigger the creation of Rel-6 versions of CN1 TSs 24.008, 24.228 and 24.229.

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. The total number of CRs which CN1 provides for approval is 67.

There were two elections during the CN1 meeting. Hannu Hietalahti from Nokia / ETSI was re-elected as chairman of CN1. Andrew Howell from Motorola / ETSI was re-elected as vice chair and Richard Brooke from Samsung / ETSI was elected as vice chair. There were no other candidates, so no voting was needed.

2. INFORMATION TO BE NOTED

2.1 Meeting schedule for 2003

Date	Meeting	Venue	Host
10 – 14 February 2003	CN WGs (CN1 #28)	Dublin, Ireland	
12 – 14 March 2003	CN #19	Birmingham, UK	UK Friends of 3GPP
31 March – 4 April 2003	CN1 #29	Sophia Antipolis	ETSI
19 – 23 May 2003	CN WGs CN1 #30	San Diego, USA	North American Friends of 3GPP
4 – 6 June 2003	CN #20	Hämeenlinna, FINLAND	Nokia
18 – 22 August 2003	CN WGs CN1 #31	Sophia Antipolis, France	ETSI
17 – 19 September 2003	CN #21	GERMANY	
27 – 31 October 2003	CN WGs CN1 #32	China	Japanese Friends of 3GPP and Ericsson China
10 – 12 December 2003	CN #22	Hawaii	North American & Japanese Friends of 3GPP

2.2

TSGN #18 requested to know the numbers of delegates following different main issues in the working group and the informal show of hands during the meeting gave the following result:

Responsibility area	number of delegates
IMS only delegates	8
Cellular only delegates	3
IMS & cellular delegates	21

There were altogether 37 participants in the meeting, so the table represents the opinions of majority of the group.

This result highlights an issue which has been noticed earlier; it is fairly difficult to find issues which could be discussed in parallel in CN1. If reorganisation of CN1 group becomes necessary, then somewhat different questions should be asked when more Rel-6 work items such as MBMS and WLAN have proceeded to greater level of detail.

2.3 Liaison statements for information

All agreed outgoing liaison statements from CN1 to the other groups have been sent after the meeting. The liaison statements from CN1 in NP-030039 are provided for information for TSGN plenary.

CN1 often receives LS from some other group requesting the working group to carry out an action, e.g. to draft and agree a CR for plenary approval. Usually such LSs are accompanied with either attached CR or a CR

submitted by some companies and in this positive case the CN1 task is to review the proposal and hopefully agree some revision of it. But since the meetings are very much contribution driven, there is no progress if no contributions are received.

Therefore, a new procedure was adopted. If no delegation volunteers to draft CRs related to such a 'dead-end' LS then the chairman indicates this via email to the originator of the LS and to the chairman of the originating group. This unofficial correspondence aims at raising a warning that a work item is in danger of being incomplete if no action is taken by the supporting companies.

2.4 Comments on the 3GPP work plan

It was agreed that the IETF drafts which have matured to RFCs need to be marked 100 % complete and the RFC number is to be added in the name part of each such draft. All completed Rel-5 IETF dependencies can be pushed down to completed items group.

There were also rumours about delays in SA groups deliverables in some Rel-6 work items but since the latest 3GPP work plan dated 2003-01-15 does not give any indication of this, it was decided to keep the CN1 due dates as they were before.

Additionally to this it was spotted after the CN1 meeting that the 3GPP work plan gives pointer to an outdated WID for presence stage 3. The most up to date version is NP-020679.

3. ISSUES FOR ACTION/DECISION BY CN PLENARY

3.1 Liaison statements to TSGN plenary

Additionally to the liaisons for information in NP-030039 there are three LSs which have been sent from CN1 to TSGN either for information or requesting that TSGN plenary action.

One of these, N1-030271, reports to TSGN plenary and many 3GPP working groups that CN1 has revised the PS emergency call work item description. The main changes are the reduced scope to limit this BB level work item to CN working groups only and to ask SA2 to take the co-ordination of the WI. The SA working groups are requested to see if they need to draft a WI for the corresponding SA part of the work. SA1 is also requested to look at the Rel-6 UE requirements for emergency calls in CS and PS domain. TSGN plenary is requested to review and approve the revised work item in NP-030059 / N1-030217.

Some network implementation problems have been detected during the integration testing of GSM-UMTS multi mode R99 UE prototypes. Liaison statement N1-030305 asks TSGN and GERAN plenaries to decide if the known problems and some identified workaround solutions in R99 UE should be documented, and if so, what would be the right forum and method for the documentation. A related contribution from Nokia was discussed but not agreed in GERAN and CN1 meeting. GERAN has already sent a liaison statement on this issue GP-030322 / N1-030225 to GSMA board.

The third liaison statement in N1-030304 indicates that there is a R99 CR on PS domain MS Radio Access Capability with mirror CRs for approval to this plenary. An earlier version of the proposal was seen but not agreed in GERAN plenary. This version of the proposed change has been revised based on the comments which were received via email during the GERAN meeting. It was also checked during CN1 meeting that the current proposal which is provided for approval in NP-030043 / N1-030207 – 209 is in line with the existing single mode UMTS UE implementations. Since the MS RAC is very much GERAN related IE, CN1 wanted to give GERAN 2 a chance to review the new proposal and this LS is sent to GERAN 2 also. They were asked to reply directly to TSGN plenary if they do not like this version of the CR. GERAN 2 meeting is on the same week as TSGN #19.

3.2 Controversial issues

3.2.1 Known GSM phase 2 network errors

There are some known network problems in the current GSM phase 2 networks which either deny all services for a R99 UE or allow only degraded service in the affected networks. Liaison statement N1-030305 asks TSGN and GERAN plenaries to decide whether it is necessary to document the problems and the related UE workarounds and if so, where to do this. GERAN did also send a liaison statement to GSMA board on this issue.

3.2.2 IMS privacy

There were several contributions related to privacy in the latest CN1 meeting. The main open item is to agree the requirements for the UE and the network (AS) to provide privacy, if requested by the user. According to RFC 3323 privacy can be provided by the terminal and by the network. It is not yet clear whether 3GPP should mandate both.

The so far agreeable set of changes requires the UE to indicate the privacy request according to the RFC 3323 and adds some warnings for the UE implementor not to reveal any unintended identity or location related information in any of the headers if privacy is requested. CN1 has currently specified no mandatory AS or UE behaviour over and above the RFC 3323.

This CN1 open item in Rel-5 area is for information for the plenary. If CN1 can not proceed with privacy in the next WG meeting then an LS to SA1 may be needed to ask them to clarify the requirements.

3.2.3 PS emergency calls

This work item progressed a bit in the latest CN1 meeting since there is a revised WID and the proposal to indicate signalling QoS for prioritising the signalling PDP context in the AN for approval to this TSGN plenary. Another contribution on the indication of attach and PDP context establishment was discussed briefly related with a late contribution but here CN1 needs to agree first how far it can go in this issue without SA2 documentation.

This CN1 open item in Rel-6 area is for information for the plenary. CN1 and SA2 will need to co-operate to proceed with the work.

4. DOCUMENTS FOR APPROVAL

4.1 R98 and older work items

There are no CRs on any release before R99.

4.2 R99 work items

4.2.1 GSM-UMTS interworking and MM for UMTS

NP-030040 is a correction of release due to BSS generated reasons and trace activation in TS 09.08 / 49.008. When discussing the change it was spotted that the R99 version of the TS has not been updated for new references and the originator of the CR volunteered to draft a CR to the next meeting to correct this systematically everywhere in the TS.

NP-030041 contains one 23.009 CR with mirror CRs to further improve on the CRs which were approved in the previous TSGN plenary on the choice of protocol at the E-interface. The CR was revised by CN4 and this revision 1 is the same as document N4-030306.

4.2.2 TEI

NP-030042 is a correction of CC capabilities IE length in the circuit switched call control PDU definitions. An optional TLV codec IE must always contain IEI octet and therefore the length of the IE is incremented by one.

NP-030043 defines the encoding of MS Radio Access Capability IE for UMTS only UE. The encoding of this GSM and GERAN related IE has been discussed between CN1 and GERAN and this version has been revised and agreed based on comments received on the mailing lists and it also aligns with the known existing implementations. This change was submitted separate of the other CRs since GERAN did not have time to see this last version of the CR and therefore CN1 sent LS N1-030304 to GERAN 2, copied to TSGN, asking GERAN 2 to reply directly to this plenary if they can not endorse this version of the CR.

4.3 Release 4 work items

NP-030044 contains one Rel-4 CR under WI TEI -4. The CR aligns 24.002 with the decisions in the other groups to remove the S reference point inside the MS. The S reference point was initially considered to be the one between Mobile Termination (MT) and Terminal Adaptor (TA) but the current specifications consider TA as a subset of MT.

4.4 Release 5 work items

4.4.1 Provisioning of IP-based multimedia services (IMS)

4.4.1.1 Corrections to 23.218

It is possible for an application server (AS) to receive the charging function address either via Sh interface or via ISC interface. 23.218 CR in NP-030045 / N1-030309 defines that if there is a conflict between the two, then the information which is received via ISC wins.

The other CR on 23.218 removes unnecessary and incorrect text about implicit registered public user identities being included in third party registration from S-CSCF to AS. The public user identities are actually included in NOTIFY message.

4.4.1.2 Corrections to 24.228

NP-030047 contains four changes. N1-030269 is Alignment of the registration state event package with draft-stripping-reg-event-00. N1-030247 does several changes: header stripping was removed as an outcome of IETF LS, the indication of compression with 'comp=sigcomp', the usage of Security-verify header is aligned with RFC 3329 and Request-URI and port number corrections to non-hiding call flows. N1-030248 makes the same correction on hiding flows. N1-030249 is one more CR making a similar change but this one has some additional changes to bring clause 10 to the same level of systematic flow updates as the others are already.

The CR in NP-030048 is split out of the previous CR package since it depends on the approval of the corresponding 24.229 CR N1-030284 in NP-030052. There was no concerns of the contents of either CR, but the 24.228 change is justified only if the corresponding 24.229 CR is approved. The technical issue is that additionally to the changes in NP-030047 this CR defines that there is no need to distinguish between MO and MT S-CSCF addresses for SUBSCRIBE. So the routing towards the home network can be done without looking at Service-Route.

NP-030049 contains CRs which add privacy related headers 24.229 and make corrections to profile tables.

NP-030050 contains corrections to 24.229 to CSCF encoding of SDP components to 488 (Not acceptable here) response, UE registration and de-registration procedures and emergency number handling in P-CSCF.

NP-030051 is a set of miscellaneous 24.229 corrections to authentication, expiration of registration, routing, authorization token, reducing the scope of subclause 5.1.2a and profile tables.

NP-030052 contains another set of miscellaneous corrections on 24.229 to registration and authentication, media authorisation and the usage of various headers.

NP-030053 contains IMS CRs on 24.228 and 24.229. This is CN1 contribution to TSGS plenary request to the working groups to study the impact of allowing IMS access with Rel-4 or older SIM. There were no objections to the CRs in CN1 but they were kept separate of the other CRs to allow the plenary meetings to decide which releases, if any, should contain this option. CN1 understood that the SIM usage in IMS may be limited to Rel-5 only. These CRs can be implemented on either Rel-5 or Rel-6 or both, depending on the plenary approval. Approving the CRs for Rel-5 only triggers the creation of Rel-6 versions of 24.228 and 24.229. Conditional approval subject to the approval of related CRs from the other groups should be considered.

The two CRs in NP-030054 add the signalling PDP context indication between the UE and the CN. There were no objections against the CRs in CN1 meeting but these CRs are separated from the others due to a dependency to corresponding CRs on 29.060 and 29.061. SA2 requested CN1, CN4, RAN 3 and GERAN 2 to do their part of the signalling PDP context prioritisation. CN1 is not aware of the status of the related other CRs in the other groups but SA2 indicate in their LS that they have already agreed stage 2 in 23.107.

4.4.2 TEI-5

NP-030055 makes the support of USIM mandatory for all UEs from Rel-5 onwards in N1-030213 and additionally it solves a long standing issue by making a clear distinction between SIM and USIM related requirements in 24.008. There is also a GERAN initiated CR to introduce high multislot classes to MS CM and MS RAC. This was revised in CN1 to complete the correction of IE field names. The other CRs are on locking and non-locking shift IEI, combined attach and RAU reject with no cause and GERAN feature package 2.

The Use of Nb UP protocol after inter-MSC handover CR in NP-030056 is linked with the following Rel-5 CRs from CN3:

- N3-030117 CR 23.910-045r1 (Rel-5)
- N3-030119 CR 29.007-067r1 (Rel-5)

All three should be treated in TSGN plenary as a group of CRs making one change. Additionally to these two CRs CN3 has treated Rel-4 CRs on the same issue.

The WI differs from the CSSPLIT which was used in CN3 since CN3 CRs are on Rel-4 and the CN1 CR is for Rel-5 only. Iu user plane was introduced to 23.034 in Rel-5 due to GERAN Iu and therefore the CN1 part of the change is only applicable from Rel-5 onwards.

4.5 Release 6 work items

4.5.1 Presence

Several contributions were discussed and CRs on the presence TR 24.841 addressing publication of presentity information, updating of subscriber attributes and watcher authorisation were agreed. The TR is not yet under TSG version control and there are no changes to the WID, so there are no presence related documents for plenary approval.

4.5.2 MBMS

There is a proposal to revise the MBMS work item description in NP-030060. The main changes are that the schedule is delayed until TSGN #21, The architecture now exists in TS 23.246, TR 24.846 should be added to listed documents and this BB level WI has no AN impact even though the main feature level WI 2544 does affect AN.

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

No contributions were received on this WI.

4.5.4 IMS Stage-3 Enhancements.

No contributions were received on this WI.

4.5.5 Emergency call enhancements

The new PS emergency call work item in NP-030059 has been reviewed by the related CN working groups and CN1 submits it for TSGN approval on behalf of the CN WGs.

It is intended that this updated WID replaces the existing one and thus the WI remains as a BB 1653 under feature 1652 'Emergency call enhancements'.

The main changes are reduced scope of the WI to exclude all groups outside CN and to add more detailed analysis of the impacted CN documents. The more narrow scope is reflected in the indication of no impact on AN or SIM.

Liaison statement N1-030271 was sent out to all related groups (SA1, SA2, SA3, CN, CN3, CN4, RAN2, RAN3, GERAN2, GERAN3, T3) to indicate the main changes in the WID and to ask particularly the SA groups to consider whether they want to draft a WID to cover their part of the work.

4.5.6 T-GSM

NP-030058 is a GERAN initiated CR which introduced new frequency bands to MS CM and MS RAC IEs. NP-030057 and NP-030058 trigger the creation of Rel-6 version of 24.008.

4.5.7 TEI-6

NP-030057 contains the first Rel-6 CR from CN1. The CR removes unnecessary requirement for the network to suspend downlink data transmission during P-TMSI allocation. NP-030057 and NP-030058 trigger the creation of Rel-6 version of 24.008.

4.5.8 WLAN interworking stage 3

CN1 discussed a proposed CN-wide WLAN stage 3 work item description and some comments were given. One of the main discussion points was whether the proposed specification 24.abc in CN1 area would be needed or not. The decision was to ask the MCC not to allocate a specification number for it before CN1 and CN4 have reviewed the scope of the new 29.abc and 24.abc and decided whether both of them are needed or is 24-series document a subset of the 29-series one.

It was agreed that CN4 should take the lead in this work and therefore CN4 was requested to submit the WID for TSGN #19 for approval on behalf of the CN working groups.

5. ACKNOWLEDGEMENTS

European Friends of 3GPP hosted the CN WG meetings in Dublin at the home of the world famous beer. The delegates took a practical view either agreeing or disagreeing the documents but not arguing endlessly so that we had time to enjoy some of that local delicacy.

Per and David did an early preparation of the working group documents for this plenary allowing me an early start on this report and thus saved the winter holiday for all three of us.

Thanks for the CN1 meeting both from myself and also on behalf of the newly elected vice chairs for the support in the election.

Robert Zaus from Siemens did a good job correcting old damages of 24.008 split to CN and AN parts by separating the SIM and USIM requirements throughout the TS. The 24.008 split drafting group tackled the problem with a less optimal solution to overload the term 'SIM' to mean either SIM or USIM or both as appropriate. Back in R99 were agreed to improve it 'as soon as the rush is over'.