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CN1 status report to TSGN plenary meeting #10

1   Introduction

This report summarises the progress of CN1 on the work items which have been active in the working group since TSGN plenary meeting #9. CN1 has had one regular meeting since TSGN plenary #7. CN1 #14 was held in Cardiff, UK, kindly hosted by Lucent. Additionally there has been a CN1 SIP ad hoc meeting and a joint meeting with SA2 on SIP issues. The meeting reports are available on the 3GPP server. CN1 #14 meeting report (Cardiff) is in tdoc NP-000659, CN1 SIP ad hoc meeting report is in tdoc NP-000660 and CN1-SA2 joint meeting report in tdoc NP-000661. All are available on the 3GPP server.

2   Executive summary

This time there are only 6 CRs against the old releases before R99. But the number of R99 CRs is very high as CN1 is proposing 40 CRs on R99 with many of them being linked with a mirror CR on newer releases.

CN1 SIP work has been started and three new specifications have been started.

No new work items are started but the existing Rel-4 and Rel-5 work item descriptions have been enhanced to give more accurate picture of the work that needs to be done.

More information on the status of each work item is given later in this report.

3 Information to be noted

3.1 Meeting schedule for year 2001

Meeting	#	Dates	Venue	Remarks
CN1	15	15.-19.1.2001	Beijing, China	CN WGs co-located
CN1 – SA2		13.-15.2.2001	Host needed	SIP joint meeting
CN1	16	27.2.-1.3.2001	Sophia Antipolis	CN WGs co-located
CN plenary	11	14.-16.3.2001	USA	
CN1-SA2		3.-4.4.2001	Candidate host Nokia	SIP joint meeting
CN1	17	14.-18.5.2001	Host needed	CN WGs co-located
CN plenary	12	13.-15.6.2001	Europe	
CN1	18	27.-31.8.2001	Host needed	
CN plenary	13	19.-21.9.2001	China	
CN1	19	22.-26.10.2001	Host needed	
CN1	20	20.-23.11.2001	Host needed	
CN plenary	14	12.-14.12.2001	Japan	

The meeting dates for year 2001 give the minimum number of meetings that will be needed to finalise the CN1 input to each plenary meeting. This leaves time for ad-hoc meetings that will be needed particularly on SIP issues in between the scheduled meetings.

3.2 Liaison statements already sent

All agreed outgoing liaison statements from CN1 have been sent after each meeting. The LSs from CN1 in NP-000662 are provided for information for TSGN plenary.

3.3 CN1 work item list

Several comments against the Rel-4 / Rel-5 work plan were made during the CN1 meeting #14 and SIP Ad-hoc#1. These comments have been collected in tdoc NP-000678.

CN1 – SA2 SIP joint meeting spotted one more place for improvement: work tasks with ID 1998 and 1278 are actually subtasks under of single CN1 WT. One WI has been approved for the CN1 WT with title "SIP Call Control protocol for the IM Subsystem". This approved WT should be added as a parent WT to cover both subtasks. The addition of the third new CN1 specification IM call model is subject to TSGN decision on the ownership of the specification, i.e. whether it is sufficient to add a task for CN1.

There are no new Rel-4 or Rel-5 work item descriptions for approval but the now that the WG has had some time to study the existing work items further, three revisions of existing work item descriptions are proposed for the plenary approval.

4 Issues for action/decision by CN plenary

4.1 Controversial issues for plenary decision

One long standing open issue has been the R99 vs. Rel-4 terminology to distinguish between the different requirements on CN protocols depending on the serving radio access network and in Rel-4 also the network interface between the AS and NAS. This time there is what CN1 believes to be an almost complete set of CRs for the plenary approval. The only missing CR from NP-000674 is 24.008 CRs for Rel-4 and R99. CN1 is working on the issue but was not able to agree a version for plenary approval. CN1 expects to be able to provide this missing CR to the next TSGN plenary meeting.

4.2 GSM Maintenance

4.2.1 GPRS

GPRS CRs in tdoc NP-000670 are provided for TSGN plenary for approval.

4.3 Release 99 work items

Progress of the specification 23.009 is presented for information in tdoc NP-000681.

All R99 work items have been reported as completed in CN1. The following corrections on R99 specifications have been agreed by the working group and are provided for approval.

4.3.1 EGPRS

EGPRS related CRs are provided for approval in tdoc NP-000668.

4.3.2 GSM-UMTS interworking and MM for UMTS

GSM – UMTS interworking related CRs for approval have been divided in multiple tdocs. Tdoc NP-000671 contains most of the CRs under this work item.

Tdoc NP-000677 is a 23.009 CR which was agreed in CN1 meeting but a related 23.009 CR to make corresponding changes in the SDL diagrams could not be provided during the meeting. Therefore the originator (Ericsson) was invited to bring the missing CR directly to this plenary for approval.

Tdoc NP-000686 is related with NP-000677 and this Ericsson contribution has not been seen in this revision by CN1.

4.3.3 Security

Security related CRs are provided for approval in tdoc NP-000672.

4.3.4 TEI

TEI CRs for approval are in tdoc NP-000673. Tdoc NP-000674 has already been presented in section 4.1 of this report.

4.4 Release 4 work items

4.4.1 Work Item descriptions

CN1 is proposing to revise the CS based emergency call work item in tdoc NP-000664.

Additionally to this proposed change CN1 noticed that no Rel-4 work item exists for ASCI. Therefore Rel-4 ASCI CRs were reviewed and agreed by the meeting but the approval of them in the plenary should depend on the approval of the Rel-4 work item.

4.4.2 ASCI

CN1 is not aware of any Rel-4 ASCI work item. A Rel-4 work item is needed in the TSGN plenary meeting before approving the CRs.

ASCI CRs are provided for approval in tdoc NP-000667.

4.4.3 GERAN support for GSM 700 MHz band

There is one GSM 700 related CR for approval is in tdoc NP-000669.

4.4.4 TRFO / OoBTC

There is one TRFO / OoBTC CR for approval in tdoc NP-000676.

4.4.5 TEI

The TEI CR in NP-000675 deals with V.44 data compression in SNDCP. The new data compression scheme was found useful by CN1. Similar CR on R99 was also discussed but it was not felt appropriate to agree it in the WG as it would be an addition of a feature to a frozen release.

4.5 Release 5

4.5.1 Work Item descriptions

CN1 is not proposing any new Rel-5 work items but now that the work has started the WG proposes two revisions of work items to reflect the real meeting schedules and the impacted documents.

Proposal to revise PS based emergency calls work item is in tdoc NP-000665.

Proposal was made by CN1 to revise SIP call control protocol for the IM subsystem is in tdoc NP-000666. It was noted during the meeting that there is a dependency between the completion of the IETF SIP RFCs and this work item. This dependency has not been reflected in the current WI description proposal as the template does not seem to allow the listing of the deliverables from the outside of 3GPP community.

4.5.2 New SIP related specifications

The main open items are at the moment

?? indication of network initiated de-registration to UE

?? Interaction of SIP signalling and QoS negotiation and RAB establishment for user data

?? Public and private identities (MAGNUS)

?? Recovery from a (P-)CSCF failure

?? Can 23.228 be stable enough for final approval in TSGS #10 with these questions?

CN1 has started new specifications to define the 3GPP usage of SIP protocol. The intention is to cover two work items, IP based multimedia (ID 1273) and Emergency call enhancements for IP & PS bbased calls (ID 1653) in these specifications.

CN1 has already started drafting the specifications but does not yet consider them mature enough to be presented to the plenary for information.

The new specifications can be characterised as follows:

24.228 (tdoc NP-000683)

?? Signalling flows for the IP multimedia call control based on SIP and SDP

?? Example signalling flows to expand on all of the call flows in stage 2 document 23.228 by adding more details.

?? Examples of interaction of SIP with the 3GPP protocols such as GPRS

?? This is where the complete signalling flows (but not necessarily all of them) are presented but the actual procedures will be described in 24.229.

24.229 (tdoc NP-000684)

?? IP Multimedia Call Control Protocol based on SIP and SDP

?? Minimum description of the requirements for CSCF and MT functionality in respect to SIP and SDP.

?? Interaction of SIP with 3GPP protocols

?? Stage 3 SIP protocol description, mandatory requirements on signalling procedures

    ?? References to IETF RFC

    ?? 3GPP extensions, if compatibility with IETF standard RFC can not be achieved

?? Applicable to the interface between

    ?? the User Equipment (UE) and the Call State Control Function (CSCF);

    ?? the CSCF and any other CSCF;

    ?? the CSCF and the Media Gateway Control Function (MGCF); and

    ?? the CSCF and an external Multimedia IP network.

23.cde (tdoc NP-000682)

?? IP Multimedia (IM) Session Handling; IP Multimedia (IM) call model

?? "23.018 for IM CN subsystem"

?? Interactions between service platforms and IP multimedia sessions

?? Alternative service platforms are covered:

    ?? CAP

    ?? SIP

    ?? OSA API

4.5.3   Working procedures & joint meetings

CN1 decided not to create a sub-working group for SIP issues at this time. But as SIP multimedia is seen as major task for Rel-5 CN1 has already started allowing more time for SIP related discussions by means of SIP ad hoc meetings, either within CN1 or as joint meetings with some other working group.

To allow rapid progress of 3GPP contributions destined to IETF CN1 has adopted the working procedure which is described in tdoc NP-000685. TSGN plenary is asked to endorse these procedures.

To allow more flexible working procedures and particularly to clarify the email approval process CN1 has revised its terms of reference. TSGN plenary is asked to endorse the new ToR in tdoc NP-000663.

The first TSGN WG meetings for 2001 have been scheduled at the same time to allow co-located meetings. CN3 proposed in their LS to CN1 (N3-000610 / N1-001289) - included in NP-000662 that a joint meeting on IM subsystem related issues, particularly on the responsibility of RTCP protocol should be arranged during our January 2001 meeting. The proposal was supported by CN1 and Tuesday the 15th of January 2001 was proposes as the meeting date.