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DRAFT

Third Generation Partnership Project

DRAFT MEETING REPORT v1.0.0.

3GPP TSG-CN#18

New Orleans, USA
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Hosted by "The North American Friends of 3GPP"

AT&T Wireless, Cingular Wireless, Cisco Systems, Conexant, Ericsson, InterDigital Communications, Lucent, Nokia, Nortel Networks, Sharp Laboratories, Snowshore, Tantivy, T-Mobile, TruePosition

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CN Chairman's Executive Summary

CN requests guidance from SA on how to handle the request to review the documents from TC MTS on Network Integration Testing Methodology. The issue is wider than CN, so a coordinated 3GPP view is necessary.

CN is informing SA1 via liaison (NP-020672) that SS invocation of SMS barring over GPRS is acceptable as a release 6 item (and not to earlier releases), however control of SS over GPRS is a major task and CN has doubts as to whether the benefit is worth the effort required for this capability.

Considerable progress has been made in addressing the IETF interoperability concerns for release 5. The CN response on this item is found in NP-020678. Note that many of these CRs are conditionally approved since they are linked to SA2 agreed CRs or CRs brought into SA by interested companies (SDP editing). In addition, the proposed SDP editing solution highlighted an issue with uncoordinated network policies that is addressed in NP-020677. A workshop with IETF in the February timeframe should be set up to address Release 6 issues. Operator attendance is desirable, since one goal is to give the IETF early visibility of 3GPP requirements.

CN will not start investigations or work on IMS access via SIM in 3G UEs unless given guidance to do so by SA. It was realized that this is an area of contention with respect to security. The SA decision will be communicated to the CN WGs. It was also noted that this is a VERY late requirement for Release 5.

CN approved CRs which provide a reject code to signal lack of support of SMS over GPRS in release 5 (reject code #69). If a positive indication of how a network supports SMS is desired, then an SA1 requirement is needed. This is viewed as a functional enhancement.

ITU-T SG11 have indicated that they will not split out the 3GPP SIP to BICC/ISUP profile from the rest of Q.1912.SIP. Furthermore, the deliverable will be ready no earlier than November 2003. This will cause a slip from the planned March, 2003 completion of the IMS to CS interworking work item. CN agreed that for Release 6, CN3 will create a standalone document providing the mapping. Initial work will be based upon an Ericsson proposal, but an alignment will be done with output of the April SG 11 rapporteurs' meeting. Alignment with ITU and incorporation of Q.1912.SIP by reference are long-term goals.

A response to the liaison from ITU-T SSG on Q.1741.3 will be produced by the ITU-T coordination ad-hoc. This will be presented for approval at CN#19. This information will then be distributed to the SDOs. This schedule should allow the SDOs to reply by the April ITU deadline. The baseline will be based upon the output of TSG#18 and is in line with the ITU-R response.

SA is requested to NOT to generate any future category B or C CRs on release 5. This destabilizes the work and impacts release 6. SA should also ensure that liaisons from their WGs appear at CN in a timely manner.

Miscellaneous working group issues:

- The collocated August 2003 CN WGs meeting is moved to August 25-29, 2003 (still at ETSI)
- ASN.1 CRs which correct errors preventing proper compilation are considered essential corrections and allowable.
- The CN5 decision to produce CRs every other plenary will be revisited at CN#19. CN5 is requested to provide statistics on the number of CRs agreed between CN#17 and CN#18, between CN#18 and CN#19, and the number of colliding CRs.
- WG chairs were asked to provide statistics on the number of delegates participating for IMS only, GSM or GPRS only, or both. This will provide input for further reorganization discussions.
- CN2 and CN4 do not believe that merging makes sense in 2003.
- TR 29.962 (SIP interworking) will be updated by CN3 at their February CN3 meeting and reviewed by CN1 at their April CN1 meeting. Ownership is with CN3.
- CN5 Chair [Ard-Jan MOERDIJK] announced his intention to resign from CN5 chairman position. Elections will be organised by MCC in the January CN5 meeting.

The following new or revised WIDs were approved:

- Mn interface (MGCF to IM-MGW) NP-202600
- Mp interface (MRFC to MRFP) NP-020601
- Presence NP-020679
- Ze interface NP-020680
- OSA Release 6 NP-020537

- Interoperability and Commonality between IP Multimedia Systems using different IP connectivity networks NP-020572

Although not formally approved, CN endorsed work on the following topics. The relevant WGs should agree the WIDs for presentation at CN#19.

- Enhanced Dialled Services (dependent on SA approval of this item)
- WLAN stage 3 work

1 Opening, of the meeting

Mr. Stephen Hayes of Ericsson welcomed the delegates to New Orleans on behalf of the hosts.
The meeting was chaired by Mr. Stephen Hayes, (Chair, Ericsson). Additional support was provided by Mr. Ian Park (Vice-Chair, Vodafone), Mr. Kunihiko Taya (Vice-Chair, NEC), and Mr. David Boswarthick (CN Secretary, MCC).

2 Approval of the agenda

NP-020500 **Draft agenda for CN #18 meeting.** *MCC.* **APPROVED.**

NP-020501 **Allocation of documents to agenda items (start of day 1).** *Source: CN vice-chairman.* **NOTED.**

NP-020502 **Allocation of documents to agenda items (end of day 1).** *Source: CN vice-chairman.* **NOTED.**

NP-020503 **Allocation of documents to agenda items (end of day 2).** *Source: CN vice-chairman.* **NOTED.**

NP-020504 **Allocation of documents to agenda items (end of day 3).** *Source: CN vice-chairman.* **NOTED.**

3 IPR declarations

The Chairman reminded delegates of the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.
The delegates were invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of TSG_CN and the CN working groups
- to notify the Director-General or chairman of their respective Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms

4 Meeting Reports

4.1 Report from CN#17 meeting

NP-020505 **Draft report from CN #17 meeting. Source: MCC**
Status: **APPROVED.**

4.2 Reports from other groups

No input

4.3 IETF coordination report

NP-020645 **IETF coordination report. Source: CN Chair.**
Content: Contains the CN chairman's status report on progress of IETF work.

All critical release 5 drafts expected to be completed in Dec 2002 except for diameter drafts. Diameter base expected to complete in January.
Compromise reached with IETF on use of diameter. 3GPP will be allocated permanent command codes for Release 5 for use in Cx/Dx and Sh. For release 6, 3GPP should work with IETF to develop a full multimedia AAA application.

Drafts being tracked:

Release 4: 2
Release 5: 45
Release 6: 21

Drafts not yet approved by IESG (technical stability)

Release 4: 0
Release 5: 9
Release 6: 20

Drafts not yet published as RFCs (formally available)

Release 4: 0
Release 5: 29
Release 6: 21

Drafts approved by IESG since TSG#17: 8

Drafts published as RFCs since TSG#17: 7

All Release 5 dependencies (except diameter base and nasreq) are expected to be approved by the IESG before the end of the year. This includes all the expected SIP and security drafts. Diameter base should be approved in January. No date known for nasreq, but dependency is minor.
IANA will be instructed to allocate a set of permanent command codes to 3GPP for use with Diameter in Release 5. The intention is to replace this with an IETF standardized application in Release 6. This work is now chartered in AAA.
The credit control draft work has not progressed far enough in the IETF to be useful to 3gpp. The current draft will be copied into 32.225 and work will continue in the IETF. This item is now chartered.
IETF dependencies for Release 6 now starting to crystallize. Conference calls to progress this work anticipated to begin in January.
IETF now provides a tracking tool to allow the tracking of internet drafts (https://datatracker.ietf.org/public/pidtracker.cgi).

RFC editor production is improving after difficulties due to manpower and workflow.

Status: **NOTED.**

4.4 CN Chairman's report

No input.

5 Incoming liaisons

5.1 From TSG-CN working groups

LSs moved to other agenda items:
0514 moved to 8.1
0517 moved to 9.1
0519 moved to 8.1

0515 **LS on the protocol development for the GMLC – PPR, Lpp-interface [N4-021503], source CN4**

Content: In this LS CN4 inform SA2 that they agree with the SA2 proposal that the OMA Location Group be allowed to undertake the development of the protocol for the GMLC – PPR, Lpp-interface. The expertise in the development of protocols specific to location services lies in OMA Location Group. The CN4 chairman and the chairman of the OMA Location Group will maintain close contact to monitor and report the progress of this protocol development work for the CN and SA plenary meetings.

Status: **NOTED.**

5.2 From other 3GPP groups

LSs moved to other agenda items:
0513 moved to 8.1
0516 moved to 8.1
0657 moved to 8.1
0658 moved to 9.11

0648 **LS on Subscriber and Equipment Trace concepts and requirements, source SA5**

Content: SA5 SWGD would like to inform the CN, CN1, CN4, GERAN, and SA2 that, following presentation of TS 32.421 “Trace Concepts and Requirements” V1.0.0 to TSG-SA #16 in June 2002, the requirements in TS 32.421 have been further refined, and the attached version 2.0.0 is sent for approval to TSG SA #18 in December 2002.

Currently SA5 SWGD is working with the detailed Trace configuration and control parameters and Trace activation/deactivation mechanisms, which will be included in TS 32.422 (Trace Control and Configuration Management). SA5 SWGD plans to send detailed requirements to CN1, CN4, and GERAN as soon as possible, presumably after its next meeting in January 2003.

The next step for SA5 SWGD is to get into the detailed requirements for Trace data and reporting, which will be included in TS 32.423 (Trace Data Definition and Management).

Comments: Adrian Zoicas [MCC] added that CN and the CN WGs can take this as notification that work is under way in SA5 on Subscriber and Equipment Trace concepts, and work can begin in CN.

It is likely that a draft version of 32.423 will emerge from the January SA5 meeting to be used as a base for work in CN.

CN1 and CN4 therefore expect to receive detailed requirements at their upcoming meeting and will proceed with the work based upon this input.

Status: **NOTED.**

0655 **LS on CN related work on 3GPP-WLAN Interworking, source SA2**

Content: The LS describes SA2's work on 3GPP-WLAN Interworking. The purpose of the work item is to introduce possibility for providing IP connectivity and IP based services to 3GPP subscribers over WLAN.

SA2 requests CN, CN1 and CN4 groups to initiate necessary work items for creating stage 3 specifications for the above type of signalling interfaces and reference points in the release 6 time frame.

Comments: CN4 will have the primary responsibility for the CN WID. CN4 are requested to create the appropriate WID for the CN work on 3GPP-WLAN Interworking. Interested companies are requested to bring contributions on this to CN4. Other affected groups also will need to have the chance to review the WID.

Nokia volunteered to take the lead on this and ensure the WID is seen by CN4 and CN1 (as well as any other groups that need to see it).

Given that there was CN consensus to proceed with this work, technical activity can proceed while the formal WID is in progress. Siemens mentioned that a lot of work had already been done in this area by the ETSI BRAN and IEEE groups. This can be re-used by 3GPP and will be considered in the work on WLAN interworking

Status: **NOTED.**

0656 **LS on IMS Access via SIM in 3G UEs, source SA2**

Content: The LS proposes to use a mechanism to access IMS by using a SIM card.

SA2 consider that if the proposal is not accepted, subscribers who still use a SIM card will not be allowed to access IMS.

Operators will incur high costs to offer IMS services because it will be necessary to provide a USIM to all IMS subscribers, and an early deployment of IMS systems could not be possible.

Rel. 5 UEs need to support SIM cards to be commercially successful.

Comments: SA3 will discuss the relate security issues in TSG SA next week.

If the security issues are substantial it will be difficult to get this done by the Rel-5 time frame. There is currently no assessment of the size of this work in CN.

This work will have impacts on both CN1 and CN4.

Nigel Barnes [Motorola] clarified that the SIM specifications stop in Rel-4, so this work is required to make backwards compatible improvements for the SIM.

CN can only wait and see the outcome of discussions on this in TSG-SA. Stephen Hayes will feed back the outcome from SA to the CN WGs so they can gauge whether to start work on this or not.

Several companies mentioned that it is late in the day to accept new functionality in Rel-5. The lateness of this request will be brought up at the SA plenary.

Stephen will report to SA that CN have no particular position on this work, apart from the concern that it is a late new functionality for Rel-5.

Status: **NOTED.**

5.3 From other groups

LSs moved to other agenda items:
00632 moved to 9.1

0508 Liaison to multiple SDOs requesting input for "Media Coding Summary Database" project [LS12-16], source ITU-T

Content: The LS has been broadcast to 3GPP groups. Most likely that SA4 will have the action to deal with this.

Status: **NOTED.**

0509 **LS on New Video Coding Standard H.264/AVC [LS15-16], source ITU-T**

Content: The LS has bee broadcast to 3GPP groups. Most likely that SA4 will have the action to deal with this.

Status: **NOTED.**

0510 **New Question on Use of Public Telecommunication Services for Emergency and Disaster Relief Operations [LS23-16] , source ITU-T**

Content: The LS has bee broadcast to 3GPP groups. Most likely that SA, SA1 and/or SA2 will have the action to deal with this.

Status: **NOTED.**

0511 **LS to 3GPP TSG WG CN4, CN, SA3, SA2, and GSMA SerG on the protocol development for the GMLC Lr-interface [SI1102059], source LIF-Sig**

Content: The development work of the MLP-based Lr interface has already started within the LIF SIG-Roaming Ad-hoc group. This work takes into account the changes that have been introduced in 3GPP TS 23.271 during SA2#25 and SA2#26.

LIF Sig expect the protocol for the Lr interface to be ready by March 2003, as requested by SA2, depending upon completion of the stage 2 specifications in a timely manner.

As the LIF will consolidate with OMA in September 19th, 2002, this work will subsequently continue within the OMA Location Working Group. This group will maintain and publish the protocols that can be used at the Le and Lr interfaces. Your references to these specifications will need to be updated, details will be available after November 15th in an LS from OMA.

LIF Sig will report the progress of the work on the Lr interface at each 3GPP TSG CN and SA plenary.

LIF SIG Roaming ad-hoc asks CN4 to note LIF's response to SA2 and LIF SIG Roaming work will continue in OMA to comply CN4 decision.

The plenary noted that the interworking between the groups seems on course although the promised reporting did not occur at this plenary.

Note: Related liaisons need to be addressed to OMA Location working group.

Status: **NOTED.**

0512 **LS on Document Review of DTR/MTS0082 UMTS Network Integration Testing Methodology and TSS&TP [TD020], source ETSI TC MTS**

Content: ETSI TC MTS has received the attached document DTR/MTS0082 UMTS Network Integration Testing Methodology and TSS&TP for approval as a TR at the next TC MTS meeting in March 2003.

MTS has discussed this document and requests that your body will provide technical comments to the proposed document before it is approved.

Comments: Needs to be seen by TSG-T; it can also be noted that this is made to old versions of the R99 specs. It was noted that the document refers to testing methodology as opposed to actual testing.

It was agreed to highlight this to TSG-SA so we can get a coordinated view across 3GPP on how to handle this subject.

This document would be of Interest to GSM Association IREG and they should have seen it (although the LS has not been forwarded to them).

Status: **NOTED.**

0646 **Liaison response on signalling requirements for IP-QOS, source ITU-T SG11**

Content: Study Group 11 has received a number of liaisons concerning end-to-end QoS. Study Group 11 thanks the liasing Study Groups and Questions for the valuable material.

Based on that material, Study Group 11 has begun development of the Signalling Requirements for IP-QoS. The signalling requirements are based on Y.1541, Y.qosar, Y.1540, Y.1221 and E.QSC. This work is looking at end to end QoS independent of access technology and network transport.

The intended link to the preliminary document however was not actually provided.

SG 11 ask to be kept informed of work on an on-going basis, in order to aid them in progressing their signalling requirements for IP-QoS.

Comments: ITU-T SG 11 are looking for requirements on e2e QoS; possibly SA2 need to look at this and respond.

Status: **NOTED.**

0649 **LS on Update on ITU-T SSG Vision WorkUpdate of Q.1/SSG's Work Activities In The Area of IMT-2000 and Beyond Vision, source ITU-T SSG Chairman**

Content: Should be handled in Future Evolution Workshop.

Status: **NOTED.**

6 Reports from TSG-CN working groups (& CN Ad Hocs)

6.1 Reporting from TSG-CN WG1

6.1.1 Status report from CN1

NP-020539 **Status Report for TSG CN WG1 CN1 chairman**

Contents: Contains the usual chairman's reporting from CN1 and the following *ISSUES FOR ACTION/DECISION BY CN PLENARY*

Liaison statements to TSGN plenary

Liaison statement NP-020514 provides the CN1 answer to IETF LS in NP-020393 which was forwarded to CN WGs in the previous TSGN plenary. This LS was agreed in CN1 #26 after the first CN1 review of the IETF LS and because of further decisions CN1 – SA2 joint session this LS is now outdated and should be noted in this plenary meeting.

A subsequent LS including the decisions in the CN1 - SA2 joint session is provided in NP-020519. This later LS together with corresponding information from SA2 should be used as the basis if the TSG plenaries see it as appropriate to respond formally to the LS from IETF.

Controversial issues

Detecting IMS emergency calls in Rel-5

PS domain emergency calls are not supported in Rel-5 but there is a requirement for the network to detect an attempted emergency call and based on the indication from P-CSCF, for the UE to attempt CS emergency call instead. Two designs have been outlined in CN1 and after detailed analysis it has been agreed that both the download of emergency numbers from GPRS network to the UE and the P-CSCF checking whether the dialled number is an emergency number are needed to cover the problem completely. The related CRs are provided for approval separate from other CRs since Ericsson and Lucent were concerned that the emergency number download mechanism covers only the PS domain, and the CS domain would also benefit from a similar procedure.

IETF LS on SIP compliancy

Several changes to 3GPP usage of SIP have already been agreed in CN1 and also between CN1 and SA2 in a joint session during CN1 #27. The ones which were agreed during the WG meetings are provided for approval as part of the WG CR package. Two further issues which had to be left open during the WG meetings due to objections were explicit indication of SigComp usage and avoiding SDP manipulation at an CSCF by rejecting the INVITE with 488 (Not acceptable here). The delegations which support these changes have submitted contributions to this plenary meeting in NP-020634 and NP-020635.

SMS over GPRS

CN1 agreed the minimum solution for Rel-5 networks to guide the UE attempting to send MO SMS in the PS domain to try the CS domain instead. This indication is given in the SMS relay layer RP-protocol error message using cause value #69, "Requested facility not implemented". This CR is N1-022498 in NP-020570.

This mechanism can also be supported by networks in earlier releases, because the cause value is an already existing one and not specifically added for Rel-5. However, no criteria for the UE to attempt PS SMS again can be achieved with this method.

Additionally to this minimum solution CN1 discussed the possibility of explicit DL indication of either support of PS SMS or non-support of PS SMS in the serving network. Such an indication would be needed in order to allow the mobiles of later releases to use PS SMS efficiently. If the indication is dynamically controlled by the network it could also be used for load balancing between PS and CS SMS, but this was considered as a new feature which SA1 should study and make service requirements, before the discussion can continue in CN.

SigComp compressor / decompressor synchronisation

The CR in NP-020567 was agreed as the backup plan in case no IETF specific mechanism for compressor restart is available at the time of TSGN #18. The CR was not challenged in CN1 but it was also seen by the originators that if IETF comes up with a good solution in time for TSGN #18 then 3GPP should adopt that instead of or additionally to the approach defined in the CR. No alternative solution has so far been decided by the IETF.

Emergency calls in IMS domain in Rel-5

Ericsson requested NP-020568 to be kept separate from the other CRs. Their concern was that it looks as though the P-CSCF shall always check the request-URI (even though there may not be anything to check). Therefore the mandatory requirement to check against the emergency number list was seen as problematic.

Another emergency call related CR in NP-020569 was submitted by Ericsson and Lucent since the change agreed in CN1 covers only PS domain changes. There has been a lot of discussion on a similar change in CS domain but that part of the change could not be agreed and it is not covered in the CR agreed in CN1.

Comments: Note: the IETF response LS was dealt with on Thursday 11:00 when Allison Mankin (IETF Area Director) joined the meeting by telephone conference.

Status: **NOTED.**

NP-020540 **CN1 meeting report from CN1#26, MCC. NOTED.**

NP-020541 **CN1 meeting report from CN1#26bis, MCC. NOTED.**

NP-020542 **CN1 meeting report from CN1#27, MCC. NOTED.**

NP-020543 **All LSs sent from CN1 since TSG CN#17 Meeting [Pack1], MCC. NOTED.**

NP-020544 **All LSs sent from CN1 since TSG CN#17 Meeting [Pack2], MCC. NOTED.**

6.1.2 Questions for advice and decisions from CN1

No input.

6.2 Reporting from TSG-CN WG2

6.2.1 Status report from CN2

NP-020520 **Status Report for TSG CN WG2, source CN2 chairman.**

Comments: Contains the usual chairman's reporting from CN2 and the following ISSUES FOR ACTION/DECISION BY CN PLENARY

CN2 asks CN plenary guidance about correcting ASN.1 syntax errors in frozen releases. Vendors can fix most errors manually while they do ASN.1 compilation. However, all vendors must do the same corrections.

If the ASN.1 is not corrected, the compiler will produce an error. This is a justification to allow these CRs to be accepted to frozen releases.

Therefore CN Plenary allows dispensation to CN2 to correct these ASN.1 syntax errors in frozen releases.

Regarding the merge of CN2 & CN4, the CN2 chair mentioned that CN2 have enough work on Rel-4 and 5 corrections to justify the existence of CN2 until end 2003, even before CN2 consider the Rel-6 work.

The CN Chair will inform the PCG that it does not currently seem likely to merge CN2 and CN4 in 2003, but the situation will be reviewed during 2003.

Certainly cost cutting will be required in 3GPP and more specifically in MCC for 2003.

Lucent requested CN2 and CN4 chairs to synchronise their agendas in order to allow delegates to move from one group to the other.

No decision could be taken in CN about the CN2 & CN4 merger at this time.

ACTION: The CN chair asked the WG chairs to provide some statistics/numbers on the interest domains of delegates attending WGs. How many cover traditional GSM only, how many cover IMS only, and how many cover both topics?

There may be some scope to re-organise the distribution of the work between the two groups.

Status: **NOTED.**

NP-020521 **CN2 #26 and 27 meeting reports, source MCC. NOTED.**

NP-020522 **LSs sent from CN2 since TSG CN#17 meeting, source CN2. NOTED.**

6.2.2 Questions for advice and decisions from CN2

No Input.

6.3 Reporting from TSG-CN WG3

6.3.1 Status report from CN3

NP-020606 Status Report for TSG CN WG3, source CN3 chairman

Comments: Contains the usual chairman's reporting from CN3 and the following ISSUES FOR ACTION/DECISION BY CN PLENARY
CN3 presents a TR 29.962 on interworking between the 3GPP profile of SIP, which mandates the SIP extensions “preconditions”, “update” and “100rel”, and SIP clients not supporting these extensions. It has been under discussion for a long time in CN1 and CN3 whether such an interworking needs to be specified in 3GPP, especially since the required extensions are IETF RFCs. IETF does not see interworking issues because SIP terminals can reduce their functionality to the common set of capabilities. This is not acceptable to 3GPP because the 3GPP related extensions have to be supported in the IMS to allow IMS-based charging. The TR identifies interworking issues and suggests solutions.

A joint CN1 and CN3 session agreed that the existing version is the basis for further contributions. This version 1.0.0 is presented in NP-020610 to CN#18 for information. Further steps that have been identified are:

- CN1 will review this TR and make further contributions.
- CN3 still has some pending contributions that could not agreed in last CN3 meeting.
- The TR will be presented to CN#19 + x for approval.
- SA2 will be asked to provide solutions to the issues identified in the TR on stage 2 level.
- CN1 and CN3 will implement stage 3 changes in their specifications depending on SA2’s decisions.

CN#19 is too soon to get TR29.962 approved. It is more likely to be done by CN#20.

Keith Drage [Lucent] stressed that it is essential that SA2 get to see this TR early so they can start to examine architectural issues. Once CN3 feel the work is mostly complete, they may send the latest version of the TR to SA2.

The version 1.0.0 presented to this plenary (in NP-020610) does not include completed issues from CN3.

These changes will be agreed in the Feb 2003 meeting and the new version will not be available to CN1 for review before their April Meeting.

Once it has had the review from CN1 it will be forwarded to SA2 for their review.

Status: **NOTED.**

NP-020607 LSs sent from CN3 since TSG CN#17 Meeting, source MCC. NOTED.

NP-020608 CN3#25 Draft Meeting Report, source MCC. NOTED.

NP-020609 CN3#26 Draft Meeting Report, source MCC. NOTED.

6.3.2 Questions for advice and decisions from CN3

No Input.

6.4 Reporting from TSG-CN WG4

6.4.1 Status report from CN4

NP-020538 Status report from CN4, source CN4 chairman

Comments: Contains the usual chairman's reporting from CN4 and the following ISSUES FOR ACTION/DECISION BY CN PLENARY
SS barring for SMS over GPRS

SA1 asked CN1 and CN4 to specify the handling for SS barring of SMS via the SGSN, for Release 99 if possible, subject to constraints of changing specifications and implementations that far back. Invocation of barring of MT SMS – this is handled in the HLR (currently only for delivery via an MSC). To extend the applicability to delivery via an SGSN would be acceptable for Release 5, because the specification work would be straightforward, and the processing in the HLR would be simpler than it is at present – the current handling has to check whether the delivery will be via an MSC or an SGSN before deciding whether the delivery should be barred; **<< CN Plenary agreed this is required for Rel-6 only>>**

- Invocation of barring of MT SMS – this would be handled in the SGSN. The specification work would be straightforward, though the implementation would be less so. SGSN manufacturers would be reluctant to include this before Release 6; **<< CN Plenary agreed this is required for Rel-6 only>>**
- Call-independent SS procedures for the control of SS barring using relay of the signalling from the MS through the SGSN to the HLR – this would require major development in both the MS and the SGSN. Neither CN1 nor CN4 would be prepared to accept this before Release 6. Even for Release 6, the benefit is not seen as being enough to justify the effort of specification and development, bearing in mind that most subscribers will have access to the call-independent SS procedures using signalling via the MSC/VLR. For the minority of subscribers who have a GPRS-only subscription, the option of control of the barring services by the service provider would allow the barring of SMS to be set up to meet the subscriber's requirements. **<< CN Plenary did not support the introduction of this functionality in any release.>>**

CN Agreed to inform SA1 and SA2 of this via an LS **[NP-020660]**.

Status: **NOTED.**

NP-020660 **LS on SS barring for SMS transfer over GPRS, source CN.**

Content: TSG CN have discussed the request from SA WG1 to CN WG1 and CN WG4 to consider specifying the support of SS barring of SMS transfer in the PS domain

TSG CN reached the following conclusions:

The specification of invocation of SS barring of MO SMS and MT SMS through an SGSN will be done in CN4.
This will require changes to the definitions of the behaviour of the HLR and the SGSN, and the MAP protocol for the transfer of SS subscription information from the HLR to the SGSN. TSG CN believe that minor changes would also be required to TS 23.060, which is in the remit of SA WG2.
The impact on implementations would be acceptable as an enhancement for Release 6, but several companies were not prepared to accept that it is a necessary correction for Release 5 or earlier.

The specification of control of SS using the SGSN as a relay between the UE and the HLR would require major specification work in both CN1 and CN4: in CN1 to define the behaviour of the UE and the protocol for transport of the SS control signalling between UE and SGSN, and in CN4 to extend the supplementary services specifications to show the possibility of relaying the SS control signalling through the SGSN. The impact on implementations, both UEs and core network entities, would be major, and the additional capability would offer a benefit only to those subscribers who have a GPRS-only subscription. Those subscribers who have a GPRS-only subscription and wish to set up SS barring of SMS transfer can use the subscription option for control of the barring service by the service provider. TSG CN therefore recommend strongly to SA1 that the possibility of control of SS using the SGSN as a relay between the UE and the HLR should not be pursued.

TSG CN ask SA WG1 to confirm to CN WG1 and CN WG4 that it is acceptable to specify the invocation of SS barring of SMS transfer (both MO and MT) in the PS domain as part of UMTS Release 6.

TSG CN ask SA WG1 to confirm to CN WG1 and CN WG4 that it is acceptable not to pursue the specification of control of SS using the SGSN as a relay between the UE and the HLR.
A response in time for the CN WG meetings in February 2003 will enable CN4 to consider the necessary changes to their specifications at that meeting.

TSG CN ask SA WG2 to take note of TSG CN's recommendations to SA WG1, and to draft the necessary changes to TS 23.060 for Release 6.

Comments: Some minor editorials were required

Status: **REVISED to 0672.**

⇓ REVISED ⇓

NP-020672 **Rev. LS on SS barring for SMS transfer over GPRS, source CN.**

Status: **APPROVED.**

NP-020573 **CN4 meeting reports after CN#17, source MCC. NOTED.**

NP-020574 **CN4 Output LSs after CN#17, source MCC. NOTED.**

6.4.2 Questions for advice and decisions from CN4

No Input.

6.5 Reporting from TSG-CN WG5

6.5.1 Status report from CN5

NP-020533 **Chairman's report from CN5 (slide presentation), source CN5 Chair** *[Ard-Jan MOERDIJK].*

Comments: CN5 will only bring CRs to plenary every 6 months (in order to synch with the Parlay specifications). CN5 will not bring CRs to NP#18 meeting. In between these plenaries, interim CRs will be generated in the working groups. Motorola had some concerns with the management of interim CRs with CRs being made to older versions.

Ard-Jan assured the meeting that both MCC, and the rapporteurs track closely the CRs made to the specifications to ensure that clashes are avoided.

Some delegates had concerns with CN5 only producing CRs every 6 months, as it means that the CN5 specifications in between these 6 month periods will be 'out of date' or an empty plenary for OSA.

Ard-Jan announced his intention to resign from CN5 chairman position. Elections will be organised by MCC in the January CN5 meeting.

The CN chairman took the opportunity to thank Ard Jan for all his hard work as CN5 chairman and wished him all the best for his new role with his company.

Comments: There were concerns that the planned 6 month schedule would lead to both CR implementation difficulties (due to overlapping CRs between approved base versions of specs) and loss of sync with the other CN groups.

CN5 is requested to bring statistics on the number of overlapping CRs to the CN#19 meeting. Statistics should be provided on the number of CRs agreed before December, CRs agreed between December and March, and the number of conflicting CRs. An assessment will be made at that time whether or not CN5 can continue to have CRs approved only ever other CN plenary.

CN5 is encouraged to have at least two meetings co-located with the other CN groups each year. In 2003, the May and August meetings are intended to be co-located.

The MCC is instructed to prepare for CN5 elections in the January CN5 meeting.

Status: **NOTED.**

NP-020534 **LSs outgoing from CN5 between CN#17 and CN#18, source MCC. NOTED.**

NP-020535 **Draft Report of CN5#20, source MCC. NOTED.**

NP-020536 **Draft Report of CN5#21, source MCC. NOTED.**

6.5.2 Questions for advice and decisions from CN5

No Input.

6.6 Status ITU-T ad hoc group

0518 **LS IN - Request for new information for draft Recommendation Q.1741.3 (referencing of 3GPP Release 5), source ITU-T SSG.**

Content: ITU-T SSG thanks 3GPP for the input to our referencing Recommendations of Release 1999 and Release 4. ITU-T have updated our work plan and have started with referencing of Release 5. Their intention is to base the referencing on the different SDOs' specifications. The SSG would appreciate

if these SDOs' specifications refer to the same version of the 3GPP specifications. The goal is to have the referencing Recommendation for Release 5 ready in October 2003, based on a draft of this Recommendation planned for May 2003. To fulfil this goal it is necessary to receive information from the various SDOs as early as possible and latest end of September 2003.

Comments: RAN and CN will make their snapshot based on the expected Rel-5 output from this meeting (see content of TS 21.103).

The ITU-T coordination ad hoc will look at this LS and provide the output in the form of a LS to the SDOs. This will be contained in NP-020661

Status: **NOTED.**

0661 **LS OUT -information for draft Recommendation Q.1741.3 (referencing of 3GPP Release 5), source 3GPP ITU-T ad hoc**

Content: The document contains the list of 3GPP specifications and versions, which the CN ITU-T Co-ordination Ad-Hoc recommends, is the base for the SDO responses to ITU-T.

Comments: Plan is to produce the content of this LS based on the content of TS 21.103 that results from the changes in this (December 2002) plenary

The plan is to update the LS via email discussion by the ITU-T ad hoc. This final version will be produced and approved in the March plenary to be sent to the SDOs in the March 2003 CN Plenary. This will allow adequate time for the SDOs to provide the documentation to the ITU-T.

It was noted that the TSG_RAN group have adopted a similar approach for their response to the ITU-R.

Problems with the IETF open references. SDO do not usually allow open references in their specifications. The IETF drafts are mostly available but not missing the RFC numbers.

It may be possible to keep some IETF drafts on the 3GPP server to allow referencing. However the IETF were initially against this.

CN Plenary gave the remit to MCC to update any IETF references that are available before the end on the CR implementation period [1st week Jan 2003] automatically in the specifications.

CN Plenary agree in principle to the content of the LS

NOTE: SoLSA has already been removed from UMTS specifications to the line referring to it in the LS needs to be removed.

Status: **REVISED to 0673.**

⇓REVISED⇓

0673 **LS OUT -information for draft Recommendation Q.1741.3 (referencing of 3GPP Release 5), source 3GPP ITU-T ad hoc**

Status: **FORWARDED TO THE ITU-T Ad Hoc for email discussion.**

7 Release 4 & earlier: Approval of contributions (by Work Item)

NOTE - Rel 4 and previous releases are FROZEN. ONLY CAT F and CAT A CRS ALLOWED

7.1 CAMEL Phase 2 and Phase 3

0523 **CRs to R99 WI CAMEL3, source CN2. APPROVED.**

0524 **CRs to R99 WI CAMEL3, source CN2. APPROVED.**

0525 **CRs to R99 WI CAMEL3, source CN2. APPROVED.**

0575 **Corrections on Camel Phase 3, source CN4**

Comments: NOTE: 29.002 CR494r1 is called CR484r1 cover sheet - Kimmo, MCC will ensure it is correct in CR database.

Status: **APPROVED.**

7.2 Security

0545 **CR to R99 (with mirror CRs) on Work Item Security towards 24.008, source CN1. APPROVED.**

7.3 GPRS

0546 **CRs to R97 (with mirror CRs) on Work Item GPRS towards 04.08 and 24.008, source CN1. APPROVED.**

0576 **Corrections on GPRS Release 4 & earlier, source CN4. APPROVED.**

0613 **CRs to TS 09.61 and 29.061 back to R97 on GPRS, source CN3**

Comments: Linked to the CN4 CR Pack contained in NP-020581. The changes all the way back to R97 was deemed as a critical correction of an error by CN3.

It was noted that the TS 09.61 for R97 and R98 contains incorrect references.

Status: **APPROVED.**

0629 **CRs to R99 (with mirror CRs) on Work Item GPRS towards 24.008, source CN1. APPROVED.**

7.4 Location service enhancement [LCS1]

0577 **Corrections on Location Service Enhancements Release 4, source CN4**

Comment: 29.010CR072r1 [N4-021235]should be 4.4.0 on CR cover page not 4.3.0.

Status: **APPROVED.**

7.5 Handover

No input.

7.6 GSM-UMTS interworking

0547 **CRs to Phase2 (with mirror CRs) on Work Item GSM/UMTS interworking towards 04.08 and 24.008, source . APPROVED.**

0630 **CRs to R99 (with mirror CRs) on Work Item GSM/UMTS interworking towards 23.009, source CN1. APPROVED.**

7.7 Transcoder Free Operation [TrFO]

0548 **CRs to Rel-4 (with mirror CR) and Rel-5 on Work Item TRFO-OOB towards 23.009, source CN1. APPROVED.**

0578 **Corrections on Transcoder Free Operation Release 4, source CN4. APPROVED.**

7.8 Enable bearer independent CS architecture [CSSPLIT]

0579 **Corrections on Enable bearer independent CS architecture Release 4, source CN4. APPROVED.**

0616 **CRs to TS 29.007 and TR 23.910 back to Rel-4 on CSSPLIT, source CN3. APPROVED.**

7.9 Multicall

0580 **Corrections on Multicall Release 4 & earlier, source CN4. APPROVED.**

7.10 OSA Enhancements [OSA1]

7.11 Small Technical Enhancements & Improvements [TEI]

0549 **CRs to R99 and Rel-4 (with mirror CRs) on Work Items TEI and TEI4 towards 23.009, 23.122 and 24.008, source CN1. APPROVED.**

0581 **Small corrections on technical enhancements and improvements for R97, source CN4. APPROVED.**

0582 **Small corrections on technical enhancements and improvements for R98, source CN4**

Comments: CR number should be CRA329 not CRA324 as stated on cover sheet.

Status: **APPROVED.**

0583 **Small corrections on technical enhancements and improvements for R99, source CN4. APPROVED.**

0584 **Small corrections on technical enhancements and improvements for Rel-4, source CN4**

Comments: RAN have approved the linked CRs so these CN4 CRs can also be unconditionally approved. **. APPROVED.**

0614 **CRs to TS 29.061 back to R99 on IPv6, source CN3. APPROVED.**

0615 **CRs to TS 29.007 back to R99 on CS multimedia, source CN3. APPROVED.**

7.12 Any Other pre-Release 5 WI

0550 **CR to R96 (with mirror CRs) on Work Item Multiband towards 04.08 and 24.008, source CN1. APPROVED.**

0585 **Corrections on Signalling over IP in Core Network, source CN4**

Comment: **Summary sheet is correct but, CR cover sheet for 29.202 Rel-5 is incorrect.**
MCC announced that the database is correct, but will revise the CR.

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	STATUS
29.202	006	2	N4-021318	Rel-4	M3UA for 3GPP networks	F	APPROVED
29.202	007	2	N4-021319	Rel-5	M3UA for 3GPP networks	A	APPROVED

29.202	008		N4-021396	Rel-4	IETF RFC reference for M3UA	F	APPROVED
29.202	009		N4-021397	Rel-5	IETF RFC reference for M3UA	A	REVISED to 0664

Status: **PART APPROVED.**

0664 Corrections on Signalling over IP in Core Network, source CN4

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	STATUS
29.202	009		N4-021397	Rel-5	IETF RFC reference for M3UA	A	APPROVED

Status: **APPROVED.**

8 Release 5:

NOTE - Rel 5 release is Functionally FROZEN. CAT B and CAT C CRs are NOT ALLOWED
NOTE - CAT-D CRs are allowed up until TSG#18 (Dec 2002). At that time we will examine if CN can continue to allow CAT-D CRs until March 2003.

8.1 Provisioning of IP-based multimedia services [IMS]

0667 **CN1 IMS Open Items List, source Dynamicsoft**

Content: CN1 have been maintaining an IMS Open Items list for the last 12 months to track the open issues and progress towards stabilisation of the CN1 IMS specifications.

As of CN#18 there are ***14 not done or only partly done items*** on this list and of these the vast majority of open items are in TS 24.228, which contains informative call flows.

It therefore can be concluded that the other two CN1IMS specifications (TS 23.218 and TS 24.229) can be considered stable and according to the original intention the maintainer considers that this document has become redundant with the full stabilisation of Rel-5 IMS related CN1 TSs (except for TS 24.228) and therefore the intention is to cease maintaining this document.

A further complete pass through TS 24.228 is required to align with the final versions of the IETF RFCs and to be consistent throughout with the changes already identified here. This task can be expected to be completed at CN#19.

Comments: The intention is to not maintain this document for Rel-5.

It can be assumed that the alignment work with IETF for Rel-5 is completed at this meeting (CN#18)

Status: **NOTED.**

0551 **CR to Rel-5 on Work Item IMS-CCR towards 24.008, source CN1**

Status: **REPLACED BY 0647.**

⇓ REVISED ⇓

0647 **CR to Rel-5 on Work Item IMS-CCR towards 24.008, source CN1.**

Comments: Actual CR is missing from pack.

Status: **REVISED to 0670.**

⇓ REVISED ⇓

0670 **CR to Rel-5 on Work Item IMS-CCR towards 24.008, source CN1. . APPROVED.**

0552 **CR to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 1, source CN1. APPROVED.**

0553 **CR to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 2, source CN1**

Comments: Dynamicsoft stated that they do not wish to see this sort of clean up CRs to Rel-5 in future meetings.

Status: **APPROVED.**

0554 **CRs to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 3, source CN1**

Comments: This issue needs to be examined by CN4 in order to ratify the assumption on which the CR was based. CN4 may need to approve a companion CR.

Also the CR is written to wrong base version (5.1.0 not 5.2.0).

Status: **NOT APPROVED - SENT BACK to CN4 and CN1 for further work.**

0555 **CRs to Rel-5 on Work Item IMS-CCR towards 24.228,- pack 1, source CN1. APPROVED.**

0556 **CRs to Rel-5 on Work Item IMS-CCR towards 24.228,- pack 2, source CN1**

Comments: One CR contained in the pack is linked to a CR to 29.229 contained in another CR pack.

Dynamicsoft said that if 24.228 is to become a really useful document it needs to be kept in alignment with 24.229, and synchronized CRs need to provided to both specifications.

The goal should be to keep them aligned, but if the change cannot be made to 24.228 in time, this should not stop essential corrections to 24.229.

Status: **APPROVED.**

0557 **CRs to Rel-5 on Work Item IMS-CCR towards 24.228 and 24.229,- PCF/PDF, source CN1**

Comments: PCF to PDF change in SA2 CRs need to be approved in SA#18.

Status: **CONDITIONALLY APPROVED [SA2 CRs must be approved in SA].**

0558 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 1, source CN1**

Comments: **NOTE:** CR199r1 interacts with other CRs to 24.229. The implementation relies on correct ordering of CRs. The implementation relies on correct ordering of CRs. The interaction chain is described in NP-020665.

Status: **APPROVED.**

0559 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 2, source CN1**

Comments: **NOTE:** CR212r1 interacts with other CRs to 24.229. The implementation relies on correct ordering of CRs. The implementation relies on correct ordering of CRs. The interaction chain is described in NP-020665.

Status: **APPROVED.**

0560 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 3, source CN1**

Comments: **NOTE:** CR217r1 interacts with other CRs to 24.229. The implementation relies on correct ordering of CRs. The interaction chain is described in NP-020665.

Status: **APPROVED.**

0561 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 4, source CN1. APPROVED.**

0562 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 5, source CN1**

Comments: **NOTE:** CR266r2 interacts with other CRs to 24.229. The implementation relies on correct ordering of CRs. The implementation relies on correct ordering of CRs. The interaction chain is described in NP-020665.

Status: **APPROVED.**

0563 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 6, source CN1**

Comments: **NOTE:** CRs contained in the pack interact with other CRs to 24.229. The implementation relies on correct ordering of CRs. The implementation relies on correct ordering of CRs. The interaction chain is described in NP-020665.

Status: **APPROVED.**

0665 **Handling of colliding CN1 IMS CRs to TSGN #18, source CN1 chair**

Content: It was noticed after submitting the CN1 agreed IMS CRs on 24.229 to TSGN #18 that there are interactions between some of the CRs.

Three groups of such related CRs were identified during the discussion in TSGN #18 and based on the above principles a proposal was made to treat them as follows:

Both NP-020561 (N1-022497) and NP-020562 (N1-022447) change subclause 5.4.4.2.1 and 5.4.4.2.2 but these can be implemented in any order with the same outcome. Therefore there is no collision between these two CRs.

The following six CRs on 24.229 contain some overlapping changes but the problem can be overcome by implementing them in the following order:

1. NP-020559 / N1-022084 first
2. NP-020558 / N1-022080
3. NP-020561 / N1-022020
4. NP-020561 / N1-022497
5. NP-020563 / N1-022467
6. NP-020562 / N1-022493 last

N1-022499 in NP-020566 needs to be revised to avoid conflict with other CRs N1-022080, N1-022108, N1-022125 and N1-022154. These other CRs are independent of each other and can thus

be implemented in any order. The only condition here is that they must all be implemented before adding the revision of NP-020566 in NP-020663, if the later one gets approved.

Should any of these listed CRs fall in TSGN #18, then that CR is just removed from the implementation sequence and implementing the remaining CRs will still produce the correct result.

Status: **NOTED.**

0564 **CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 7, source CN1. APPROVED.**

0565 **CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR144r2, source CN1. APPROVED.**

0567 **CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR285r1, source CN1**

Comments: APPROVED the CR but CN1 need to examine the requirement for additional clarification to preclude recovery mechanisms which do not align with the sigcomm standard.

Status: **APPROVED.**

0568 **CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR290r1, source CN1**

Comments: Ericsson still have some concerns with this CR. An operator that implements IMS without conversational services would mean there would be no support for emergency services.

The Checking functionality needs to be mandatory. If the list is NUL there needs to be some lightweight handling.

Ericsson objected to the CR presented in this document, but were willing to work on a compromise solution. However CN plenary cannot agree fundamental changes that override the decisions taken in CN1.

After some checking Ericsson agreed to the CR, although some modifications may be required at a future CN1 meeting.

Status: **APPROVED.**

0586 **Corrections on IP-based Multimedia Services, source CN4. APPROVED.**

0591 **SPI Corrections on IP-based Multimedia Services, source CN4. APPROVED.**

0587 **Corrections on IP-based Multimedia Services Cx/Dx-interface, source CN4. APPROVED.**

0588 **Corrections on Charging Information; IMS Cx/Dx-interface, source CN4. APPROVED.**

0589 **Corrections on User-Authorization-Type AVP; IMS Cx/Dx-interface, source CN4. APPROVED.**

0590 **Corrections on Error handling in S-CSCF; IMS Cx/Dx-interface, source CN4. APPROVED.**

0592 **Corrections on Error handling in HSS; IMS Sh-interface, source CN4. APPROVED.**

0593 **Corrections on IP-based Multimedia Services Sh-interface, source CN4. APPROVED.**

0633 **Report on the Download of local emergency numbers, source Ericsson**

Content: The document presents the current status of how download local emergency numbers to the UE in a VPLMN.

Ericsson proposes that CN gives CN1 a directive to enhance the solution outlined in CR 716rev2 of 24.008 to give a uniform behaviour for rel-5 terminals. This may e.g. be achieved by downloading the list of emergency numbers via the LOCATION UPDATING ACCEPT message over CS domain.

Comments: CN Plenary instruct CN1 to provide the parallel capability for the CS domain as a part of Rel-5.

Vodafone support the approach of having a consistent approach for both CS and PS domains. However the CR deals only with PS emergency calls for them moment.

Relates to the CR contained in 0569 as parity needs to be maintained between the two.

After some additional discussion it was determined that the plenary would approve a CR providing downloads in both the CS and PS domain.

Status: **NOTED.**

0569 **CR to Rel-5 on Work Item TEI5 towards 24.008,- CR716r2, source CN1**

Comments: Downloading of local emergency numbers to the mobile station.

Status: **REVISED to 0652.**

⇓ **REVISED** ⇓

0652 **CR to Rel-5 on Work Item TEI5 towards 24.008,- CR716r3, Ericsson and Lucent.**

Comments: The meeting felt it would be logical to have parity for the downloading of local emergency numbers to the mobile station in both the CS and PS domain for Rel-5 and Rel-6.

Siemens had concerns with the approval of the CS domain CRs. However these PS domain CRs have been fully reviewed by CN1.

After some checking Siemens agreed that they could agree to this CR with the inclusion of one small editorial remark.

Status: **REVISED to 0674.**

⇓ **REVISED** ⇓

0674 **CR to Rel-5 on Work Item TEI5 towards 24.008,- CR716r2, source CN1. APPROVED.**

SECTION ON IETF DISCUSSIONS:

0513 **Response to IETF LS on Interoperability Issues and SIP in IMS [SP-020627], source SA**

Content: In this LS 3GPP thanks the IETF for the liaison titled “Liaison Statement on Interoperability Issues and SIP in IMS”. 3GPP generally supports the interoperability goals as stated in the liaison. Any changes to IMS must be done as part of the 3GPP process and must satisfy the market and regulatory requirements established for 3GPP systems.

The 3GPP WGs have been requested to analyse the impacts of the specific interoperability issues identified in the liaison. Those fixes which can be accomplished by December without sacrificing crucial requirements will be corrected as part of Release 5.

Those interoperability issues which cannot be quickly resolved as part of Release 5 (i.e., cannot be completed by December) will need further discussion. A primary requirement of 3GPP is to ensure backwards compatibility between releases (especially with respect to terminals). Therefore, it is proposed that 3GPP and IETF collaborate (perhaps by a workshop involving the relevant working groups in 3GPP and IETF) to address any remaining non-compliances after December.

Status: **NOTED.**

0514 **Liaison statement on Interoperability Issues and SIP in IMS [N1-022160], sourceCN1**

Comments: Superseded by NP-020519

Status: **NOTED.**

0519 **Liaison statement on Interoperability Issues and SIP in IMS [N1-022503], source CN1**

Content: Following their preliminary analysis of the specific technical issues identified by IETF Working Group Chairs, Area Directors, and IESG members in the Liaison to 3GPP, CN1 has held a joint meeting with SA2 on these issues. As a result of the outcome of the discussions at the joint meeting with SA2 and additional discussion on CRs at CN1#27, CN1 has been able to make additional progress on addressing. The updated information on the progress in release 5 for each of the specific technical issues is contained in this LS.

Comments: This LS will be revised once CN Plenary decide on the handling of the related 4 CRs.

Status: **NOTED.**

0516 **Liaison statement on Interoperability Issues and SIP in IMS [S3-020578], source SA3**

Content: SA3 point out a couple of matters related to security below.

The usage of S/MIME from UA to UA mentioned in issue 3 and 7, would sacrifice current 3GPP requirements as pointed by CN1 in their Liaison statement. When tunnelling SIP messages inside S/MIME, requirements pointed out in issue 2 would be prohibited as well. An alternative may be

investigated whether S/MIME usage could be exercised between one 3GPP network element and a SIP User Agent outside of IMS. Due to the stringent timetable, however, SA3 do not believe the investigation could be concluded in R5.

Issue 1 discusses P-CSCF initiating BYE request on behalf of IMS-compatible terminal. Other than CN1's answer, SA3 observe another scenario when a SIP User Agent outside of IMS would like to authenticate BYE request from IMS P-CSCF. In this case, the external User Agent is a valid one instead of an attacker. Still, SA3 agree CN1's conclusion that forged BYE from external network is the Internet interoperability issue as well as the scenario pointed in this Liaison statement.

Regarding P-CSCF performing identity checks (issue 5), SA3 confirm that no claim has been raised up in SA3 to change security requirements for IMS. It is seen an essential thing that operator's network must be able to verify the identity has an association with private ID to be charged, and the association should be established before usage. This however, does not impose restriction to services provided by any third party as explained by CN1 in their Liaison statement.

Status: **NOTED.**

0657 **Liaison statement on Interoperability Issues and SIP in IMS [S3-020578], source SA2**

Content: The following is SA2 opinion on the issues identified by the LS(s):

1) The P-CSCF initiating BYE requests

"The P-CSCF may send a BYE on behalf of the UA, generally because the P-CSCF has been notified by the radio layer that the UA has lost contact. Of course, the P-CSCF doesn't have the credentials to provide authentication of the BYE, so many UAs will consider this to be a forged message. This also renders 3GPP UAs vulnerable to denial of service attacks using forged BYEs."
SA2 understanding of the issue is that 3GPP requires the ability to terminate an ongoing session from the network, i.e. CSCF nodes. This is essential for charging and policy functions for IMS in 3GPP. As there are no alternative approaches available, no changes are feasible in Release 5, even though there are some valid concerns that have been identified by CN1 & SA3.

2) The P-CSCF stripping headers

"The P-CSCF strips away Route, Record-Route, Via, Path, and Service-Route headers before passing messages on to the UA. It then reinserts them messages in the other direction, and may also strip out Route headers inserted by the UA. This breaks end-to-end protection using S/MIME and prevents the UA from accessing external services using loose routing. It also prevents the UA from knowing about any proxies that may have piggybacked on its registration using the Path mechanism, which is a serious violation of the openness principle and leaves 3GPP users registering with external servers subject to certain man-in-the-middle attacks affecting REGISTER messages without any way to detect those attacks."
SA2 & CN1 have agreed to address this issue in Release 5 in order to not introduce backward compatibility aspects towards the UE in future releases and also to reduce/eliminate options for different solutions. Discussion paper and CRs for SA2 & CN1 impacts were presented for the discussion. In order to make 3GPP UEs and the P-CSCFs more compliant to IETF SIP, the requirement to strip headers have been removed. Additionally, it is still possible, based on operator policy to enforce predefined routes in the P-CSCF as supported with header stripping.
Corresponding CRs have been submitted and handled at the joint SA2-CN1 session. SA2 has then approved the stage-2 CR for 23.228 (S2-023547).
Note that one company has expressed concern regarding this change and two other companies have expressed concerns regarding the delay this may cause in CN1 WG to complete the affected specifications by December plenary.

3) CSCFs editing SDP

"The CSCF may edit SDP sent from or to the UA in order to force the selection of codecs considered favourable to the operator. This has the side effect of breaking end-to-end protection of the SDP using S/MIME. It also precludes interoperating with external elements when both the IMS UA and the external UA share only a common codec not supported by the P-CSCF."
Many companies believe that 3GPP should provide a solution without breaking the end-to-end concept in regards to modifying SDP (e.g. restricting Codec usage) in the network without the end points awareness.
Appropriate CRs supported by several companies were available to provide a solution that fulfils operators' requirement to restrict users from using services that are not allowed by the operators and allows terminals to get appropriate information to proceed with the sessions according to operators allowed policy. The stage-2 CR for 23.228 is attached in S2-0233600rev1

But the group could not agree to the solution described in S2-023600rev1 at this session. Some companies believed that the solution proposed has disadvantages, which do not outweigh the benefit of addressing the IETF concern partially (e.g. the use of S/MIME is not addressed with the proposed revised approach).

Note that the use of S/MIME can't be addressed within 3GPP Release 5 as elaborated in the LS from SA3 & CN1.

6) Network configuration hiding

"The I-CSCF (or THIG) may encrypt Via and Route information when acting in topology-hiding mode. This was allowed for in earlier SIP specifications, but the use has been deprecated for a variety of reasons. The exact impact on interoperability remains unknown.
This issue has been discussed and it was clarified that it is an operator's choice if they want such implementation in their IMS networks and 3GPP specifications provide the solution on how to achieve this.

Stage-2 CR S2-23548 was presented at the meeting and has been approved in SA2. They will need to be approved in SA#18 meeting.

Additionally, SA2 has taken into account inputs from CN1 and SA3 and agrees with the conclusion with additional clarifications provided through this LS & associated CRs.

GENERAL DISCUSSIONS:

It was agreed that SA2 and CN1 are now in synch. that 'NETWORK HIDING' is OPTIONAL.

Status: **NOTED.**

0566 **CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR278r3, source CN1**

Status: **REVISED to 0663.**

⇓ REVISED ⇓

0663 **CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR278r4, source CN1**

Comments: Contains the "P-CSCF does not strip away SIP headers" CR.

Condition of approval is that the linked CR is approved in SA.

Status: **CONDITIONALLY APPROVED [SA2 CRs must be approved in SA].**

0635 **CR 24.229-284r3 on SDP media policy rejection, source Dynamicsoft, Ericsson, Vodafone, Nokia, AWS**

Content: Contains the "SDP media policy rejection" CR to 24.229.

Comments: mmO2 mentioned that there are other issues that need to be examined in relation to this CR, although they do not object to the actual CR contained in the tdoc. When the final decisions are taken in SA, mmO2 believe that the others issues such as call set-up time will need to be re-examined in CN.

mm02 and Orange has concerns in using the 488 (Not Acceptable Here) code as it is not yet stable. A lot more work is required in this area.

CN must prioritise on producing robust protocols. If different networks have different media policies then this makes a fragile system.

Orange agree that 488 can be used as it is in line with the IETF SIP. However with this solution there will be some added delay. This CR introduced the 488, which means that the UE does all of the work. Orange suggest another approach where the core network does the work.

The performance and delay issues need to be highlighted by CN to SA plenary.

Orange proposed some alternative text, as well as Dynamicsoft proposing a general improvement to the English of the text.

It was agreed that in the long term, a method was needed to allow UEs to determine the policy restrictions of the intervening network. This is a general issue which will require work in IETF. The IETF AD in the conference call confirmed that this seemed to be a reasonable extension to the IETF protocols. This could not be done before Release 6.

Status: **REVISED to 0668.**

⇓ REVISED ⇓

0668 **Rev. CR 24.229-284r3 on SDP media policy rejection, source Dynamicsoft, Ericsson, Hutchison, Vodafone, Nokia, AWS**

Status: **CONDITIONALLY APPROVED [SA2 CRs must be approved in SA].**

0634 **CR 24.229-283r2 on Support of comp=sigcomp parameter, source Dynamicsoft, Ericsson, Nokia, Motorola**

Comments: In relation the backwards compatibility problems, CN asks that the IETF be aware of 3GPP's concern with backwards compatibility when it comes to modifying their RFCs.

It was agreed that methods should be worked on with the IETF to avoid this situation in the future. This could be a topic for future discussions with the IETF. In addition, it was agreed that providing the 3GPP requirements to IETF as early as possible will alleviate this problem.

Status: **APPROVED.**

0669 **LS OUT on Interoperability Issues and SIP in IMS, source CN**

Comments: Contains an LS to TSG SA and is based on the original LS from CN1. It is intended that TSG SA ratify the LS from TSG_CN and forward it (or a modified version) to the IETF.

Should be based on the CN1 LS.

Should tell SA what CN have done and the concerns we have.

High-light the agreements on the CRs

Concerns with the SDP editing CR and the requirement for future work

Ask SA to give clear guidance to CN4 on subscribed media

Decide what needs are to be done next.

Need to get SA3 involved to deal with the security models.

Comments: Call for a workshop in Feb 2003 between 3GPP and IETF - scope should be to work out the identified interoperability problems. CN4 need to be involved in the workshop to be held in Feb 2003.

Suggestion to add CR numbers to the LS of approved CRs.

Minor editorials also need to be added.

Status: **REVISED to 0678.**

⇓ REVISED ⇓

0678 **LS OUT on Interoperability Issues and SIP in IMS, source CN. APPROVED.**

0671 **LS OUT to SA1 on handling of subscriber media, source CN**

Comments: The SDP control done at S-CSCF level, as it stands in the 24.229, is referring both to policy control and users subscription. But at this stage, no further work has been handled in CN4 on subscribed media (i.e. users subscription), as clear requirement is still needed from SA regarding the parameters which can be part of subscription.

1. Regarding SDP control, the proposal is to use the 488 (Not Acceptable Here) response when receiving an Invite with not acceptable SDP parameters. This solution allows to have the same level of control regarding SDP parameters for local policy and users subscription, namely Media Types, Codecs, etc.

2. TSG CN do see that there is an interest of having the possibility to define subscriber profiles (Golden, Silver, Basic…) in order to offer different level of IMS service for the user. In this perspective CN identified the following SDP parameters as potentially useful:

- *Media Type: allows to identify the different services (audio, video and text) although all three will probably be part of each profile.*
- *Bandwidth: correlated with the media type, it would allow the operator to define several rates depending on the media used (e.g. higher rate for video than for text).*
- *Codec: this information is the most accurate information which could give an indication of the application requested by the subscriber.*

Furthermore, having it would allow the operator to dedicate premium codecs to Gold Subscribers. An example of the codec control could be to allow the use of AMR WB for Gold Subscribers, where Basic Subscribers would only authorised to use AMR.

- *Other SDP parameters could also be used for other purposes, like the Direction Tag parameter.*

Some concerns have been raised about the fact that having codecs in the users subscription would require heavy O&M activity when new codecs are deployed (i.e. update all the users subscription).

A solution could be to define profiles which would refer to a set of SDP parameters. So when new codecs are deployed, there is no need to change the users subscriptions but only the content of the profiles the users subscriptions are referring to.

This feature is seen by operators as very important as it could be a major tool to differentiate their offers.

TSG CN plenary ask TSG SA to set the needed requirements on Subscribed Media and to inform CN4 about it.

Comments: Ericsson had concerns with CN describing the potentially useful SDP parameters this LS. They felt this needs be examined in CN4. However the meeting felt it was useful to indicate to SA the initial information that has come out of discussions in CN and CN4.

Alternative text was proposed to take Ericsson's concerns in to account.

Status: **REVISED to 0677.**

⇓REVISED⇓

0671 **LS OUT to SA1 on handling of subscriber media, source CN**

Status: **APPROVED.**

8.2 OSA enhancements [OSA1]

8.3 CAMEL Phase 4 [CAMEL4]

0526 **CRs to Rel-5 WI CAMEL4, source CN2. APPROVED.**

0527 **CRs to Rel-5 WI CAMEL4, source CN2. APPROVED.**

0528 **CRs to Rel-5 WI CAMEL4, source CN2. APPROVED.**

0529 **Editorial CRs to Rel-5 WI CAMEL4 and IMS-CAMEL (TS 23.078 and TS 23.278) , source CN2. APPROVED.**

0530 **CRs to Rel-5 WI IMS-CAMEL, source CN2. APPROVED.**

0531 **CRs to Rel-5 WI IMS-CAMEL, source CN2. APPROVED.**

0532 **CRs to Rel-5 WI IMS-CAMEL, source CN2. APPROVED.**

0594 **Corrections on Camel Phase 4, source CN4**

Comments: Note: Presentation cover sheet does not indicate the editorial CR (F instead of D)

Status: **APPROVED.**

8.4 Location Service Enhancements [LCS1]

0595 **Corrections on Location Service Enhancements Release 5, source CN4. APPROVED.**

8.5 End to End QoS [E2EQoS]

0611 **Open issues for TS29.207, Version 5.0.0, source CN3**

Content: All open issues for 29.207 have been resolved apart from the reference to an Internet Draft that will be updated to refer to the RFC. Waiting for RFC number to be assigned for draft-ietf-rap-rsvp-authsession.

Status: **NOTED.**

0612 **Open issues for TS29.208 Version 5.0.0, source CN3**

Content: Following issues are open for 29.208:

The specification may be updated when IETF specifies new parameters to define RTCP bandwidth in a new RFC on "SDP bandwidth modifiers for RTCP". To be studied when the RFC becomes available; awaiting decision in SA4 also.

- Re-introduction of streaming class to QoS mapping rules for authorization has to be considered. To be studied by CN3 #27.

Status: **NOTED.**

0620 **CRs to TS 29.207 and TS 29.208 on RTCP headers, source CN3. APPROVED.**

0621 **CRs to TS 29.207 on updates to the Go PIB, source CN3. APPROVED.**

0622 **CRs to TS 29.207 and TS 29.208 on DIFFSERV, source CN3. APPROVED.**

0623 **CRs to TS 29.207 and TS 29.061 on error handling in the GGSN, source CN3. APPROVED.**

0624 **CRs to TS 29.207 and TS 29.208 on PCF / PDF terminology, source CN3**

Status: **CONDITIONALLY APPROVED - SA2 Linked CRs.**

0625 **CRs to TS 29.207 on various e2EQoS topics, source CN3. APPROVED.**

0626 **CRs to TS 29.208 on various e2EQoS topics, source CN3. APPROVED.**

0627 **CRs to TS 27.060 on various e2EQoS topics, source CN3. APPROVED.**

8.6 Security enhancements [SEC1]

No input

8.7 Service Change and UDI Fallback [SCUDIF]

618 **CR to TS 23.172 on SCUDIF, source CN3. APPROVED.**

619 **CRs to TS 23.172, 27.001 and 29.007 on SCUDIF, source CN3. APPROVED.**

8.8 Technical Enhancements and Improvements [TEI5]

0570 **CRs to Rel-5 on Work Item TEI5 towards 23.034, 24.008, 24.011, 43.068 and 43.069, source CN1**

Comments: 2 CRs replaced by company contributions contained in NP-020650 and 0651.

Spec	CR #	R	C	Rel	Tdoc Title	TDoc #	STATUS
23.034	007	3	F	Rel-5	Introduction of GERAN Iu-mode	N1-022427	Approved
24.008	698		F	Rel-5	Inclusion of EDGE RF Power Capability in the CM3 IE	N1-021997	Approved
24.011	024	2	F	Rel-5	SMS over GPRS disabled	N1-022498	Approved
43.068	008	1	F	Rel-5	MS late entry notification	N1-022428	Replaced by 0650
43.069	007	1	F	Rel-5	MS late entry notification	N1-022429	Replaced by 0651

Status: **PART APPROVED.**

0650 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM.**

Comments: Made to wrong version.

Status: **REVISED to 0653.**

⇓REVISED⇓
0653 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM.**
Comments: Minor editorial comment to the text "equal to or higher than"
Status: **REVISED to 0675.**
⇓REVISED⇓
0675 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM. . APPROVED.**

0651 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM.**
Comments: Made to wrong version.
Status: **REVISED to 0654.**
⇓REVISED⇓
0654 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM.**
Comments: Minor editorial comment to the text "equal to or higher than"
Status: **REVISED to 0676.**
⇓REVISED⇓
0676 **CRs to TS 24.008 on Late Entry, source Nortel, Siemens, Kapsch, SAGEM. . APPROVED.**

0596 **Small Technical Enhancements and Improvements for Rel-5, source CN4. APPROVED.**

0597 **Small Technical Enhancements and Improvements for Rel-5 ETRAN-IPtrans, source CN4**
Comments: These are Category B, linked to CRs from RAN3.
Status: **APPROVED.**

0598 **Small Technical Enhancements and Improvements for GTP specification Rel-5, source CN4. APPROVED.**

0599 **Small Technical Enhancements and Improvements for MAP specification Rel-5, source CN4. APPROVED.**

8.9 Any other Rel-5 WI

0571 **CR to Rel-5 on Work Item IUFLEX towards 29.018, source CN1**
Comments: CR is written to wrong base specification - however there is no clash with the implementation
Status: **APPROVED.**

0617 **CRs to TS 43.010, TR 23.910, TS 24.022, 29.007, 27.001, 44.021 and 48.020 on CS Data, source CN3**
Comments: CAT B CRs as requested by GERAN
Status: **APPROVED.**

9 Release 6

9.1 IMS Phase 2 [IMS]

0517 **LS on Interworking between SIP/SDP and BICC/ISUP [N3-020878], source CN3**

Content: TSG CN WG3 is responsible for the specification of the Interworking between the 3GPP IP Multimedia Core Network Subsystem (IM CN SS) and Circuit Switched networks. An integral part of this specification is the definition of the Control Plane interworking, e.g. the mapping between 3GPP Profile of SIP, as defined in 3GPP TS 24.229, and the ISUP and BICC protocols.

As part of ITU-T BICC Capability Set 2, the ITU-T SG11 is tasked with defining the protocol interworking between SIP/SDP and ISUP/BICC at the Network-to-Network interface. The requirements for this work originate from a number of organisations external to the ITU, e.g. general Internet community and specific network operators.

During the TSG CN WG3 #19 meeting it was agreed that in order to avoid duplication, to ensure commonality and to avoid conflicting technical specifications it was agreed that the most suitable forum to define the protocol interworking would be the ITU-T. This decision was further supported whilst considering the level of ISUP and BICC technical expertise within ITU-T and in particular Study Group 11.

It was therefore agreed to utilise the work within the ITU-T SG11 and if necessary to provide 3GPP architectural and protocol specific requirements into the ITU-T SG11.

Status of the Interworking specification

During the TSG CN WG3 #25 meeting the status of the ITU-T SG11 specification, as described in N3-020813, for the Interworking between SIP/SDP and ISUP/BICC was discussed. This discussion focused on the progress of the work within ITU-T SG11 and the possible impacts on the 3GPP March 2003 deadline for completion of the specification of the Interworking between the 3GPP IM CN SS and CS networks.

In summary, the status of the ITU-T SG11 was noted as:

- The definition of the requirements within Q.6 & 9/11 are now becoming stable;
- Both draft Recommendations (Q.1912.SIP and Q.SIPPROF) are unstable and a number of issues have been highlighted, which have caused a level of contention within SG11. It is understood that these issues may result in a delay in completion of this work.

Issues for consideration

The stabilisation of the SG11 Technical Report now clearly describes the requirements in terms of individual scenarios; each scenario being supported by different organisations. However, it is also important to understand that that functional content and network architecture are not common across each of the defined scenarios. It is also important to note that, unlike the 3GPP scenario, several scenarios are technically unstable and will require further architectural development which will in turn enable the definition of a minimum set of SIP/SDP.

In considering that timing, functional content, network architecture and technical stability are not common across each of the these scenarios it is of particular concern how these issues will impact the ITU-T finalisation dates of their Recommendations and the subsequent impact on the 3GPP planned completion dates.

In considering the possible impacts on the 3GPP completion date for the Interworking between the IM CN SS and CS networks, TSG CN WG3 would encourage the ITU-T SG11 to consider the needs of 3GPP in terms of their time constraints and to consider the isolation of the 3GPP scenario from the other unstable scenarios.

To consider the needs of the 3GPP in terms of their Release 6 time constraints, i.e. completion date of March 2003. The output from ITU-T SG 11 must be easy to reference and shall be in a form that avoids the need for 3GPP to produce additional specifications in order to identify the relevant parts applicable for 3GPP. 3GPP therefore asks ITU-T SG 11 to consider how the requirements, as defined in section 1, can best be accommodated.

Comments: The ITU-T have seen this LS from CN3 (via the ITU-T ad hoc), and the response from the ITU-T is contained in NP-020632

Status: **NOTED.**

0632 **In response to your views and requirements concerning SIP-ISUP/BICC interworking [COM11-LS10] , source ITU-T SG11**

Content: On the requirement level three different profiles are defined. Profile A makes reference to 3GPP TS 24.229. The three profiles are the basis for the protocol work (on draft Q.1912.SIP).

The earliest date that Q.1912-sip can be consented is 2003-09-12. After that an approval procedure is initiated. Therefore the earliest date, assuming successful approval, that recommendation can be approved is November 2003.

It is planned to have an interim Rapporteurs meeting scheduled on 7-11 April 2003 and one electronic meeting later for possible line by line review, which will deal with SIP-BICC/ISUP interworking.

The recommendation Q.1912.sip will be a document encompassing the protocol for the three SIP-ofiles. The text related to profile A constitutes an integrated part of Q.1912.sip.

Comments: The ITU-T response does not satisfy the requirements laid down by CN3 in the original LS.

Iain Sharp added that the ITU-T have modified the structure of Q.1912.SIP to assist 3GPP's work in that area.

Status: **NOTED.**

0631 **A proposal for baseline SIP-BICC/ISUP interworking text, source LM Ericsson**

Content: At the last SG 11 meeting in Geneva it was decided that the Q.1912.SIP document is kept as one document, which includes all profiles. The discussion was triggered by a Liason Statement from 3GPP CN 3, a contribution from Vodafone and a contribution from Ericsson.

The Ericsson proposal included a baseline text, which only deals with Profile A. Profile A (3GGP profile) is defined in TS 24.229. From a technical point 95% of the contribution was accepted. However, with the present structure of the document it is hard to identify all points.

Therefore, Ericsson think that the annex, which is the rest of this document and based on the Ericsson contribution, mentioned above, could be a good starting point for the work of defining a SIP-BICC/ISUP interworking specification in CN 3 (TS 29.163).

Comments: This document will be taken by Ericsson to the CN3 meeting in Feb. 2003.

Status: **NOTED.**

0662 **Handling of IMS/CS Interworking, source, Nortel**

Content: ***The document proposes:***

Completing the work in ITU does offer direct benefits to 3GPP, and it is desirable to retain the original agreement while making sure the release 6 timetable is still met. It is proposed that:

- At this meeting, 3GPP agrees to keep the work in ITU.
- 3GPP closely monitors the work in ITU and reviews the plan after the ITU rapporteurs meeting to make sure that the release 6 deliverable is not risked.
- Companies supporting the work on CS/IMS interworking are encouraged to focus on technical contributions to progress the work in ITU according to the scope that ITU has agreed.

Comments: mm02 supported having the ITU-T approach as it would give a more global solution.

Dynamicsoft supported using the ITU-T documentation.

Ericsson questioned the 90% complete figure for work in ITU-T and stated it was closer to 40% complete (depending on acceptance of Ericsson contribution in the ITU-T). Also Ericsson believes there is adequate expertise in CN3 to do the work on BICC, and suspect that 3GPP has a more specific knowledge of SIP than the ITU-T.

It was mentioned that the freezing dates for Rel-6 have not yet been agreed in 3GPP.

Also the ITU-T documents are not publicly available to the world, and may need to be kept on the 3GPP network to allow for referencing.

Ian Park [Vodafone] noted that there are some regulatory concerns to the SIP.T profile that may lead to delays in the approval of the recommendation in the Rel-6 timeframe.

Ludwig Hiebinger [Siemens] supported the opinion that delivery in ITU-T will cause delays in the delivery of 3GPP's work, and prefers to see this done in 3GPP CN3.

Similarly Nokia supported bringing the work into CN3.

Norbert Klehn [CN3 chairman] prefers that the ITU-T provide the output on time although this is not likely. For this reason 3GPP must examine other ways to complete the work. Even if the ITU-T

provide the output by Nov 2003, this will only be a starting point for 3GPP's work. Also the maturity of the ITU-T work is doubtful.

Nortel do not have any fundamental problems with 3GPP taking the work back from the ITU-T, but suggested we wait until 2003 Q.1 or Q.2 to take a more stable output from the ITU-T as a base for our work.

Are there major concerns with delaying the work from March?

The next ITU-T meeting where this will be treated is in April 2003.

The following process was agreed.

In the CN3 Feb 2003 meeting CN3 could study how the information is imported into 29.163. The Ericsson proposal can be used as a basis.

In the CN3 May meeting CN3 will do a re-synchronization with the output of the ITU-T. Although 29.163 will proceed as a self contained document, 3GPP should strive for as much alignment as possible.

The plan should be to have 29.163 presented for information in June 2003, and approval in September 2002.

The long term plan is to remove the 3GPP specific material and replace it with a reference to Q.1912.SIP in order to avoid deviations between the ITU and 3GPP worlds. This will be done only if it is possible to do so.

<<synch>>

Status: **NOTED.**

0600 **Updated WID for Media Gateway Control Function (MGCF) - IM Media Gateway (IMS-MGW) Mc Interface between IMS-MGW and MGCF, source CN4. APPROVED.**

0601 **WID for Mp interface protocol definitions, source CN4**

Content: Contains the WID for Mp (MRFC - MRFP) interface protocol definitions.

The intention of this WI is to define the use of H.248/MEGACO including the additional H.248/MEGACO Multimedia Packages between the MRFC and MRFP and to define the relationship between the S-CSCF – MRFC –interface (Mr-interface) SIP and SDP procedures/instructions and the associated H.248/MEGACO, including the additional Packages and procedures.

Comments: Lucent mentioned that some of this work is covered on other Rel-6 work items. <<synch>>

Status: **APPROVED.**

0610 **TR on 'Signalling Interworking between the 3GPP Profile of SIP and non-3GPP SIP Usage [N3-021028], source CN3**

Comments: Open issues should be presented when the TR is presented to the Plenary for information or approval.

Status: **NOTED.**

9.2 Support of Presence Capability [PRESNC]

0604 **WID: Support of the Presence Service in Core Network Signalling Protocols, source CN1**

Comments: Change of plenary dates in timescales

Status: **REVISED to 0679.**

⇓ REVISED ⇓

0679 **WID: Support of the Presence Service in Core Network Signalling Protocols, source CN1. APPROVED.**

9.3 Security Enhancements[SEC1]

0602 **WID: Protocol definition for automatic distribution of MAP security keys, source CN4**

Status: **REVISED to 0666.**

⇓ REVISED ⇓

0666 **WID: Protocol definition for automatic distribution of MAP security keys, source CN4**

Content: Contains the WID for Protocol definition for automatic distribution of MAP security keys.

This work item describes ongoing work in CN4 for the stage 3 work on Ze interface for automatic key distribution for MAP security.

Comments: Presented for information at plenary at CN#19 and approved at plenary at CN#21. In fact it is an error. Should be presented for info at CN#20

Status: **REVISED to 0680.**

⇓REVISED ⇓

0680 **WID: Protocol definition for automatic distribution of MAP security keys, source CN4. APPROVED.**

9.4 Emergency Call Enhancements [EMC1]

No input

9.5 Speech Recognition and Speech Enabled Services[SRSES]

No input

9.6 Generic User Profile [GUP]

No input

9.7 OSA Enhancements [OSA3]

0537 **Updated Rel-6 Work Item Description for OSA Stage 3 CN5**

Content: Contains the updated WID for OSA Stage 3.

Status: **APPROVED.**

9.8 Multimedia Broadcast and Multicast Service [MBMS]

No input

9.9 Preferred Framing Protocol [PFP]

No input

9.10 Small Technical Enhancements and Improvements [TEI6]

9.11 Any otherRel-6 WI

0572 **WID: Interoperability and Commonality between IP Multimedia Systems using different "IP-connectivity Networks"; stage 3, source CN1. APPROVED.**

0603 **CR PACK on Location Service Enhancement for Release 6, source CN4**

Comments: The CRs contained in this pack APPROVED
Question is when to implement these CRs. Do we wish to create Rel-6 version of MAP at this plenary? It all really depends upon the stability of TS 29.002. Although it is stable in Rel-5 it is likely that there will be Rel-5 CRs to this specification in future CN4 meetings.

The possibility of putting this CR 'in the freezer' really does open the door for errors. After some discussion it was agreed to approve these CRs and create the Rel-6 versions of the specification.,

Status: **APPROVED.**

0658 **LS on Enhanced Dialled Services, source SA1.**

Content: In this LS, SA1 inform SA that there has been considerable discussion in SA1 and CN2 on the issue of a new Work Item Description for Enhanced Dialled Services for CAMEL 4, Release 6. The feature had originally been in CAMEL Phase 4, but was removed as it was not completed in time for Release 5.

SA1 received a LS from CN2, which indicated that SA1 must agree on the requirement to add Enhanced Dialled Services to CAMEL4 before CN2 will approve the WID (N2-021063).

SA1 discussed the issue raised by CN2. Majority (two operators and several vendors) of SA1 members supported in principle the requirement to add Enhanced Dialled Services to CAMEL4 in 22.078 but there were two operators that objected. SA1 was therefore unable to decide on this issue and would like SA to make this decision. The issues raised are listed below:

- It is understood by some companies that 3GPP is focusing new features towards the IM CN subsystem. Some companies were concerned that continuing to add CAMEL services for the CS domain was not in line with this principle.
- Concern was expressed on how widely this feature may be used, since only two operators were actively supporting the proposal.

SA1 requests that SA discuss the issues above and decide if this feature should be added to CAMEL4 in Rel-6

Status: **NOTED.**

0605 **WID: Enhancement of dialled service for CAMEL4 Work Item Description (WID) for TSG-CN, source Samsung**

Content: This Work Item Description describes the work to be done for Release 6 CAMEL Phase 4 to complete the feature “Enhancements of dialled services” within Release 6 time schedule.

Comments: NTT DoCoMo also support this WID.

The WID has been seen by CN2 but agreement could not be reached. CN4 has not seen or reviewed this WID. There is presently no other WID being discussed in SA1.

Ian Park [Vodafone] mentioned that there is a lot of work remaining to do on the resolution of open issues for Rel-5 in CN2.

Vodafone ask that that if this WID is approved, there is the a condition that this WID does not take too much essential time from the ongoing work on CAMEL 4.

Keijo [CN2 Chair] assured the meeting that in CN2 previous releases have priority on new features. This will be the case for future meetings in relation to dialled services

CN Plenary support this WID, with the caveat that it is given lower priority in CN2 than the Rel-5 Camel work. Since there was agreement in principle, technical work can begin in CN2/CN4 provided SA supports this activity.

The WID needs to be technically reviewed by CN2 and CN4.

Status: **NOTED.**

10 TSG CN work organization

10.1 Principles for work organization within CN

No input

10.2 Terms of Reference

No input

10.3 Support Arrangements

No input

10.4 Working methods / Work Style

No input

10.5 Future Meeting Schedule

NP-020659 **2003 Meeting schedule** *Source: MCC.*

Comments: Individual WGs are free to organise additional meetings as they feel necessary.

CN5 will also come to May and August Meetings

Initial plan for May meeting is San Diego, USA.

It was agreed to move the August meeting (Sophia) back to 25th-29th August.

Additional CN1 meeting in 31st March - 4th April **!! Warning Close to plenary !!**

Status: **REVISED to 0681.**

⇓ REVISED ⇓

NP-020659 **2003 Meeting schedule** *Source: MCC.* **NOTED.**

Dec 2002				
3GPPCN-#18	OR	4 - 6 Dec 2002	New Orleans	US
Feb 2003				
Joint CN WG Meeting (CN1, 2, 3, 4)	WG	10 - 14 Feb 2003	Dublin [Ireland]	
Mar 2003				
3GPPCN-#19	OR	12 - 14 Mar 2003	***Birmingham***	UK
May 2003				
Joint CN WG Meeting (CN1, 2, 3, 4, 5)	WG	19 - 23 May 2003	***San Diego***	
Jun 2003				
3GPPCN-#20	OR	4 - 6 Jun 2003	HÄMEENLINNA	FI
Aug 2003				
Joint CN WG Meeting (CN1, 2, 3, 4, 5)	WG	25 - 29 Aug 2003	***Sophia, ETSI***	***FR***
Sep 2003				
3GPPCN-#21	OR	17 - 19 Sep 2003	Berlin, DE	DE
Oct 2003				
Joint CN WG Meeting (CN1, 2, 3, 4)	WG	27 - 31 Oct 2003	***China, Ericsson***	***CN***
Dec 2003				
3GPPCN-#22	OR	10 - 12 Dec 2003	Hawaii	US
Mar 2004				
3GPPCN-#23	OR	10 - 12 Mar 2004	CHINA	CN
Jun 2004				
3GPPCN-#24	OR	2 - 4 Jun 2004	TBD	
Sep 2004				
3GPPCN-#25	OR	8 - 10 Sep 2004	US	US
Dec 2004				
3GPPCN-#26	OR	Dec 2004	Athens, Greece	GR

11 Specifications in TSG-CN domain

0636 **CR 012 to 21.101: "Correction to list of specs", source JMM, MCC**
Comments: CR cover sheet is made to wrong specification. Will be changed before presentation to SA.
Status: **NOTED.**

0637 **CR 009 to 21.102: "Correction to list of specs", source JMM, MCC. NOTED.**

0638 **CR 002 to 21.103: "Correction to list of specs", source JMM, MCC. NOTED.**

0639 **CR 009 to 01.01: "GSM Release 1999 specifications, source JMM, MCC. WITHDRAWN.**

0640 **CR 008 to 41.102: "GSM Release 4 Specifications", source JMM, MCC. WITHDRAWN.**

0641 **CR 002 to 41.103: "Correction to list of specs", source JMM, MCC. NOTED.**

0642 **CR 010 to 01.01: "List of R99 work items", source JMM, MCC. WITHDRAWN.**

0643 **Specs status list prior to TSGs#18, source JMM, MCC. NOTED.**

0644 **Spec numbers and titles, source JMM, MCC. NOTED.**

12 Review of 3GPP Work Plan

NP-020506 **3GPP Work Plan Source: MCC. NOTED.**

NP-020507 **3GPP Work Plan [Slide Presentation]** *Source: MCC.*
Comments: Updates made online >>>
Page 29 completion date should be TSG#21
CRs to downloading local emergency numbers have been agreed in CN#18
Page 43 estimated completion of Presence at TSG#20.
Need to add a statement on IMS access independence to the slides - completion of stage 3 planned for TSG#21.
Updates from the outcome of TSG#18 meetings will be input to the version to be presented to SA#18 meeting.
Page 34 CN3 have created TS 29.163 for the IMS to PS interworking.
Status: **NOTED**

13 Postponed issues from earlier in the meeting

No Input.

14 Any other business

CN#18 Decided the following rules for the handling of Rel-5 CRs to future meetings:

- **Category D CRs to Rel-5 are not allowed after this meeting (CN#18).**
- **It was not possible for CN to agree that non-essential corrections could no longer be allowed, as there still are a number of open issues that need to be handled in Rel-5.**
- **Several delegates wished to ask SA1 and SA2 to stop making CAT B or CAT C CRs for the Rel-5 Stage 1 and Stage 2 specifications, because this would jeopardize the stability of Rel-6. Stephen will report this to SA#18 meeting**

Elections will be held for CN chairs and vice chair in the March 2003 CN plenary. All of the present CN officials will stand for re-election.

In addition elections will be held for all of the other TSGs in March 2003. Exceptionally the PCG has allowed for the officials who have completed their second full term of office to run again for a third term, even if there is a competing candidate.

Elections will be held for CN1 and CN3 officials in the February meeting (Dublin)

The election for CN5 chair will take place in the January CN5 meeting.

15 Close of Meeting

The Chairman thanked the host, delegates and MCC for their participation, and closed the meeting at 16:15 on Friday 6th December.

ANNEX A:OUTPUT MATERIAL

A.1 Liaisons Approved

TDoc #	Tdoc Title	LS to	LS cc	LS
NP-020672	LS on SS barring for SMS transfer over GPRS	SA1, SA2	CN1,CN 4	S1-022247
NP-020677	LS OUT TO SA1 - guidance on subscriber media handling	SA	-	-
NP-020678	Liaison statement on Interoperability Issues and SIP in IMS	SA	-	-

A.2 New TSs /TRs Approved (to be placed under change control)

NONE.

A.3 New / Revised Work Items Approved

TDoc #	Tdoc Title	Source	Rel
NP-020601	Mp interface protocol definitions	CN4	Rel-6
NP-020679	Support of the Presence Service in Core Network Signalling Protocols	CN1	Rel-6
NP-020680	Protocol definition for automatic distribution of MAP security keys	CN4	Rel-6
NP-020537	Description for OSA Stage 3	CN5	Rel-6
NP-020572	Interoperability and Commonality between IP Multimedia Systems using different "IP-connectivity Networks"; stage 3	CN1	Rel-6
NP-020600	Media Gateway Control Function (MGCF) - IM Media Gateway (IMS-MGW) Mc Interface between IMS-MGW and MGCF	CN4	Rel-6

A.4 Status of CRs following TSG CN meeting #18

Spec	CR	Rev	Phase	Cat	Meeting-	Plenary doc	WG doc	TSG status	Subject	CR	Resulti	WG	Workitem
04.08	A1125		R97	F	NP-18	NP-020546	N1-022076	approved	No MT calls after	6.19.0	6.20.0	N1	GPRS
04.08	A1127		R98	A	NP-18	NP-020546	N1-022077	approved	No MT calls after	7.18.0	7.19.0	N1	GPRS
04.08	A1129		R96	F	NP-18	NP-020550	N1-022090	approved	Coding of the	5.18.1	5.19.0	N1	Multiband
04.08	A1131		R97	A	NP-18	NP-020550	N1-022091	approved	Coding of the	6.19.0	6.20.0	N1	Multiband
04.08	A1133		R98	A	NP-18	NP-020550	N1-022092	approved	Coding of the	7.18.0	7.19.0	N1	Multiband
04.08	A1135		R97	F	NP-18	NP-020547	N1-022352	approved	Clarification on revision	6.19.0	6.20.0	N1	GSM/UMTS interworking
04.08	A1137		R98	A	NP-18	NP-020547	N1-022353	approved	Clarification on revision	7.18.0	7.19.0	N1	GSM/UMTS interworking
04.08	A1139		Ph2	F	NP-18	NP-020547	N1-022393	approved	Clarification on revision	4.23.1	4.24.0	N1	GSM/UMTS interworking
04.08	A1141		R96	A	NP-18	NP-020547	N1-022394	approved	Clarification on revision	5.18.1	5.19.0	N1	GSM/UMTS interworking
23.009	081	2	R99	F	NP-18	NP-020549	N1-022270	approved	MSC_A_HO SDL	3.11.0	3.12.0	N1	TEI
23.009	082	2	Rel-4	A	NP-18	NP-020549	N1-022271	approved	MSC_A_HO SDL	4.5.0	4.6.0	N1	TEI
23.009	083	2	Rel-5	A	NP-18	NP-020549	N1-022272	approved	MSC_A_HO SDL	5.2.0	5.3.0	N1	TEI
23.009	084	3	Rel-5	F	NP-18	NP-020548	N1-022239	approved	Inter-MSC relocation	5.2.0	5.3.0	N1	TRFO-OOB
23.009	088		R99	F	NP-18	NP-020630	N1-022234	approved	Clarification of the	3.11.0	3.12.0	N1	GSM/UMTS interworking
23.009	089		Rel-4	A	NP-18	NP-020630	N1-022235	approved	Clarification of the	4.5.0	4.6.0	N1	GSM/UMTS interworking
23.009	090		Rel-5	A	NP-18	NP-020630	N1-022236	approved	Clarification of the	5.2.0	5.3.0	N1	GSM/UMTS interworking
23.034	007	3	Rel-5	F	NP-18	NP-020570	N1-022427	approved	Introduction of GERAN	5.0.0	5.1.0	N1	TEI5
23.122	056		R99	F	NP-18	NP-020549	N1-021945	approved	Correction of	3.8.0	3.9.0	N1	TEI
23.122	057		Rel-4	A	NP-18	NP-020549	N1-021946	approved	Correction of	4.2.0	4.3.0	N1	TEI
23.122	058		Rel-5	A	NP-18	NP-020549	N1-021947	approved	Correction of	5.1.0	5.2.0	N1	TEI
23.218	029	1	Rel-5	F	NP-18	NP-020552	N1-022142	approved	Clarification on	5.2.0	5.3.0	N1	IMS-CCR
23.218	030	3	Rel-5	F	NP-18	NP-020553	N1-022468	approved	Clarification on MRFP	5.2.0	5.3.0	N1	IMS-CCR
23.218	031	1	Rel-5	F	NP-18	NP-020552	N1-022144	approved	Support of originating	5.2.0	5.3.0	N1	IMS-CCR
23.218	033		Rel-5	F	NP-18	NP-020552	N1-022297	approved	Addition of Request-	5.2.0	5.3.0	N1	IMS-CCR
23.218	034	1	Rel-5	F	NP-18	NP-020552	N1-022469	approved	Clarifications on Annex	5.2.0	5.3.0	N1	IMS-CCR
23.218	038	1	Rel-5	F	NP-18	NP-020552	N1-022475	approved	Clarification to use of	5.2.0	5.3.0	N1	IMS-CCR
24.008	695	1	R99	A	NP-18	NP-020546	N1-022062	approved	No MT calls after	3.13.0	3.14.0	N1	GPRS
24.008	696	1	Rel-4	A	NP-18	NP-020546	N1-022063	approved	No MT calls after	4.8.0	4.9.0	N1	GPRS
24.008	697	1	Rel-5	A	NP-18	NP-020546	N1-022064	approved	No MT calls after	5.5.0	5.6.0	N1	GPRS
24.008	698		Rel-5	F	NP-18	NP-020570	N1-021997	approved	Inclusion of EDGE RF	5.5.0	5.6.0	N1	TEI5
24.008	699	1	R99	F	NP-18	NP-020629	N1-022072	approved	Use of "LLC SAPI not	3.13.0	3.14.0	N1	GPRS
24.008	700		Rel-4	F	NP-18	NP-020629	N1-022041	approved	Use of "LLC SAPI not	4.8.0	4.9.0	N1	GPRS
24.008	701	3	Rel-5	F	NP-18	NP-020670	N1-022159	approved	Flow Identifier	5.5.0	5.3.0	N1	IMS-CCR
24.008	702	1	Rel-4	F	NP-18	NP-020548	N1-022066	approved	Clarification of the	4.8.0	4.9.0	N1	TRFO-OOB
24.008	703	1	Rel-5	A	NP-18	NP-020548	N1-022067	approved	Clarification of the	5.5.0	5.6.0	N1	TRFO-OOB
24.008	704		Rel-5	A	NP-18	NP-020629	N1-022042	approved	Use of "LLC SAPI not	5.5.0	5.6.0	N1	GPRS
24.008	705	2	R99	F	NP-18	NP-020545	N1-022150	approved	Cell barring after	3.13.0	3.14.0	N1	Security
24.008	706	1	Rel-4	A	NP-18	NP-020545	N1-022074	approved	Cell barring after	4.8.0	4.9.0	N1	Security

Spec	CR	Rev	Phase	Cat	Meeting-	Plenary doc	WG doc	TSG status	Subject	CR	Resulti	WG	Workitem
24.008	707	1	Rel-5	A	NP-18	NP-020545	N1-022075	approved	Cell barring after	5.5.0	5.6.0	N1	Security
24.008	708		R99	A	NP-18	NP-020550	N1-022093	approved	Coding of the	3.13.0	3.14.0	N1	Multiband
24.008	709		Rel-4	A	NP-18	NP-020550	N1-022094	approved	Coding of the	4.8.0	4.9.0	N1	Multiband
24.008	716	4	Rel-5	F	NP-18	NP-020674		approved	Downloading of local	5.5.0	5.6.0	N1	TEI5
24.008	719	1	R99	F	NP-18	NP-020549	N1-022417	approved	Correcting errors and	3.13.0	3.14.0	N1	TEI
24.008	720	1	Rel-4	F	NP-18	NP-020549	N1-022418	approved	Correcting errors and	4.8.0	4.9.0	N1	TEI4
24.008	721	1	Rel-5	A	NP-18	NP-020549	N1-022419	approved	Correcting errors and	5.5.0	5.6.0	N1	TEI4
24.008	722		R99	A	NP-18	NP-020547	N1-022354	approved	Clarification on revision	3.13.0	3.14.0	N1	GSM/UMTS interworking
24.008	723		Rel-4	A	NP-18	NP-020547	N1-022355	approved	Clarification on revision	4.8.0	4.9.0	N1	GSM/UMTS interworking
24.008	724		Rel-5	A	NP-18	NP-020547	N1-022356	approved	Clarification on revision	5.5.0	5.6.0	N1	GSM/UMTS interworking
24.011	024	2	Rel-5	F	NP-18	NP-020570	N1-022498	approved	SMS over GPRS	5.0.0	5.1.0	N1	TEI5
24.228	047	2	Rel-5	F	NP-18	NP-020555	N1-021915	approved	Relationship of	5.2.0	5.3.0	N1	IMS-CCR
24.228	048	3	Rel-5	F	NP-18	NP-020555	N1-022145	approved	Addition of tokenization	5.2.0	5.3.0	N1	IMS-CCR
24.228	054	3	Rel-5	F	NP-18	NP-020555	N1-022146	approved	Removal of editor's	5.2.0	5.3.0	N1	IMS-CCR
24.228	071	1	Rel-5	F	NP-18	NP-020555	N1-022096	approved	Add P-headers to	5.2.0	5.3.0	N1	IMS-CCR
24.228	072	4	Rel-5	F	NP-18	NP-020555	N1-022441	approved	Add charging P-header	5.2.0	5.3.0	N1	IMS-CCR
24.228	073	4	Rel-5	F	NP-18	NP-020555	N1-022390	approved	Corrections to the Path	5.2.0	5.3.0	N1	IMS-CCR
24.228	074		Rel-5	F	NP-18	NP-020555	N1-021952	approved	General clean-up of	5.2.0	5.3.0	N1	IMS-CCR
24.228	075	1	Rel-5	F	NP-18	NP-020555	N1-022118	approved	Correction to 24.228	5.2.0	5.3.0	N1	IMS-CCR
24.228	076	1	Rel-5	F	NP-18	NP-020555	N1-022119	approved	Correction to 24.228	5.2.0	5.3.0	N1	IMS-CCR
24.228	078		Rel-5	F	NP-18	NP-020556	N1-021986	approved	General update of	5.2.0	5.3.0	N1	IMS-CCR
24.228	080		Rel-5	F	NP-18	NP-020556	N1-022015	approved	Correction on P-	5.2.0	5.3.0	N1	IMS-CCR
24.228	083	1	Rel-5	F	NP-18	NP-020556	N1-022291	approved	Clause 17.6 Error	5.2.0	5.3.0	N1	IMS-CCR
24.228	088	1	Rel-5	F	NP-18	NP-020556	N1-022480	approved	Addition of missing	5.2.0	5.3.0	N1	IMS-CCR
24.228	089	1	Rel-5	F	NP-18	NP-020556	N1-022448	approved	Call transfer update	5.2.0	5.3.0	N1	IMS-CCR
24.228	090	1	Rel-5	F	NP-18	NP-020556	N1-022437	approved	Changing tel URL to	5.2.0	5.3.0	N1	IMS-CCR
24.228	091	1	Rel-5	F	NP-18	NP-020556	N1-022457	approved	Addition of Message	5.2.0	5.3.0	N1	IMS-CCR
24.228	092	1	Rel-5	F	NP-18	NP-020556	N1-022460	approved	SA related procedures	5.2.0	5.3.0	N1	IMS-CCR
24.228	093		Rel-5	F	NP-18	NP-020557	N1-022386	approved	PCF to PDF	5.2.0	5.3.0	N1	IMS-CCR
24.229	140	4	Rel-5	F	NP-18	NP-020558	N1-022446	approved	Support of non-IMS	5.2.0	5.3.0	N1	IMS-CCR
24.229	144	2	Rel-5	F	NP-18	NP-020565	N1-022114	approved	Identification of	5.2.0	5.3.0	N1	IMS-CCR
24.229	161	3	Rel-5	F	NP-18	NP-020558	N1-022412	approved	Clarifications and	5.2.0	5.3.0	N1	IMS-CCR
24.229	175	5	Rel-5	F	NP-18	NP-020558	N1-022494	approved	Clarifications of the	5.2.0	5.3.0	N1	IMS-CCR
24.229	179	2	Rel-5	F	NP-18	NP-020558	N1-022106	approved	Support of originating	5.2.0	5.3.0	N1	IMS-CCR
24.229	197		Rel-5	D	NP-18	NP-020558	N1-021902	approved	Wrong references in	5.2.0	5.3.0	N1	IMS-CCR
24.229	198		Rel-5	F	NP-18	NP-020558	N1-021903	approved	Alignment of the MGCF	5.2.0	5.3.0	N1	IMS-CCR
24.229	199	1	Rel-5	F	NP-18	NP-020558	N1-022080	approved	Service Route Header	5.2.0	5.3.0	N1	IMS-CCR
24.229	202		Rel-5	F	NP-18	NP-020558	N1-021919	approved	Addition of clause 6	5.2.0	5.3.0	N1	IMS-CCR
24.229	203	1	Rel-5	F	NP-18	NP-020558	N1-022115	approved	URL and address	5.2.0	5.3.0	N1	IMS-CCR
24.229	204	3	Rel-5	F	NP-18	NP-020559	N1-022426	approved	Fix gprs-charging-info	5.2.0	5.3.0	N1	IMS-CCR
24.229	206		Rel-5	F	NP-18	NP-020559	N1-021930	approved	Alignment of the SDP	5.2.0	5.3.0	N1	IMS-CCR

Spec	CR	Rev	Phase	Cat	Meeting-	Plenary doc	WG doc	TSG status	Subject	CR	Resulti	WG	Workitem
24.229	207	1	Rel-5	F	NP-18	NP-020559	N1-022116	approved	Update of the 3GPP-	5.2.0	5.3.0	N1	IMS-CCR
24.229	208	1	Rel-5	F	NP-18	NP-020559	N1-022098	approved	Handling of INVITE	5.2.0	5.3.0	N1	IMS-CCR
24.229	209	2	Rel-5	F	NP-18	NP-020559	N1-022471	approved	UE Registration	5.2.0	5.3.0	N1	IMS-CCR
24.229	211	1	Rel-5	F	NP-18	NP-020559	N1-022083	approved	Usage of private user	5.2.0	5.3.0	N1	IMS-CCR
24.229	212	1	Rel-5	F	NP-18	NP-020559	N1-022084	approved	P-CSCF subscription to	5.2.0	5.3.0	N1	IMS-CCR
24.229	213	2	Rel-5	F	NP-18	NP-020559	N1-022154	approved	Handling of MT call by	5.2.0	5.3.0	N1	IMS-CCR
24.229	215		Rel-5	F	NP-18	NP-020559	N1-021939	approved	P-CSCF acting as a	5.2.0	5.3.0	N1	IMS-CCR
24.229	216	1	Rel-5	F	NP-18	NP-020559	N1-022085	approved	S-CSCF handling of	5.2.0	5.3.0	N1	IMS-CCR
24.229	217	1	Rel-5	F	NP-18	NP-020560	N1-022086	approved	S-CSCF handling of	5.2.0	5.3.0	N1	IMS-CCR
24.229	218	1	Rel-5	F	NP-18	NP-020560	N1-022102	approved	Determination of MO or	5.2.0	5.3.0	N1	IMS-CCR
24.229	220		Rel-5	F	NP-18	NP-020560	N1-021944	approved	Definition of the NAI	5.2.0	5.3.0	N1	IMS-CCR
24.229	222	4	Rel-5	F	NP-18	NP-020560	N1-022495	approved	Go related error codes	5.2.0	5.3.0	N1	IMS-CCR
24.229	223	1	Rel-5	F	NP-18	NP-020560	N1-022120	approved	Clarifications on	5.2.0	5.3.0	N1	IMS-CCR
24.229	225	2	Rel-5	F	NP-18	NP-020560	N1-022156	approved	Clarifications on	5.2.0	5.3.0	N1	IMS-CCR
24.229	228	3	Rel-5	F	NP-18	NP-020560	N1-022425	approved	Clarifications on the	5.2.0	5.3.0	N1	IMS-CCR
24.229	232	1	Rel-5	F	NP-18	NP-020560	N1-022095	approved	Expires information in	5.2.0	5.3.0	N1	IMS-CCR
24.229	235	2	Rel-5	C	NP-18	NP-020560	N1-022129	approved	Indication of successful	5.2.0	5.3.0	N1	IMS-CCR
24.229	237		Rel-5	F	NP-18	NP-020560	N1-021998	approved	P-CSCF sending 100	5.2.0	5.3.0	N1	IMS-CCR
24.229	239	1	Rel-5	F	NP-18	NP-020561	N1-022100	approved	Correction on P-	5.2.0	5.3.0	N1	IMS-CCR
24.229	240	1	Rel-5	F	NP-18	NP-020561	N1-022137	approved	Clarifications to	5.2.0	5.3.0	N1	IMS-CCR
24.229	242		Rel-5	F	NP-18	NP-020561	N1-022020	approved	ENUM translation	5.2.0	5.3.0	N1	IMS-CCR
24.229	243	1	Rel-5	F	NP-18	NP-020561	N1-022107	approved	AS routing	5.2.0	5.3.0	N1	IMS-CCR
24.229	245	1	Rel-5	F	NP-18	NP-020561	N1-022108	approved	Warning header	5.2.0	5.3.0	N1	IMS-CCR
24.229	246	3	Rel-5	F	NP-18	NP-020561	N1-022497	approved	S-CSCF procedure	5.2.0	5.3.0	N1	IMS-CCR
24.229	247	1	Rel-5	F	NP-18	NP-020561	N1-022125	approved	P-CSCF procedure	5.2.0	5.3.0	N1	IMS-CCR
24.229	248	2	Rel-5	F	NP-18	NP-020561	N1-022472	approved	UE procedure tidyup	5.2.0	5.3.0	N1	IMS-CCR
24.229	249	3	Rel-5	F	NP-18	NP-020561	N1-022455	approved	MESSAGE corrections	5.2.0	5.3.0	N1	IMS-CCR
24.229	250	2	Rel-5	F	NP-18	NP-020561	N1-022456	approved	MESSAGE corrections	5.2.0	5.3.0	N1	IMS-CCR
24.229	251	2	Rel-5	F	NP-18	NP-020562	N1-022440	approved	Security association	5.2.0	5.3.0	N1	IMS-CCR
24.229	252	1	Rel-5	F	NP-18	NP-020562	N1-022433	approved	The use of security	5.2.0	5.3.0	N1	IMS-CCR
24.229	253	1	Rel-5	F	NP-18	NP-020562	N1-022434	approved	UE integrity protected	5.2.0	5.3.0	N1	IMS-CCR
24.229	255	3	Rel-5	F	NP-18	NP-020562	N1-022496	approved	Handling of default	5.2.0	5.3.0	N1	IMS-CCR
24.229	263		Rel-5	F	NP-18	NP-020562	N1-022266	approved	Fixing ioi descriptions	5.2.0	5.3.0	N1	IMS-CCR
24.229	264	1	Rel-5	F	NP-18	NP-020562	N1-022447	approved	Fix descriptions for	5.2.0	5.3.0	N1	IMS-CCR
24.229	266	2	Rel-5	F	NP-18	NP-020562	N1-022493	approved	Alignment with draft-	5.2.0	5.3.0	N1	IMS-CCR
24.229	267	1	Rel-5	F	NP-18	NP-020563	N1-022449	approved	Correction to network	5.2.0	5.3.0	N1	IMS-CCR
24.229	268	1	Rel-5	F	NP-18	NP-020563	N1-022439	approved	Registration Expires	5.2.0	5.3.0	N1	IMS-CCR
24.229	269	1	Rel-5	F	NP-18	NP-020563	N1-022465	approved	Clarification on Sh	5.2.0	5.3.0	N1	IMS-CCR
24.229	270	2	Rel-5	F	NP-18	NP-020563	N1-022500	approved	Clarifications on the	5.2.0	5.3.0	N1	IMS-CCR
24.229	273	1	Rel-5	F	NP-18	NP-020563	N1-022467	approved	Add charging info for	5.2.0	5.3.0	N1	IMS-CCR
24.229	274	1	Rel-5	F	NP-18	NP-020563	N1-022413	approved	Profile revisions for	5.2.0	5.3.0	N1	IMS-CCR

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24.229	275		Rel-5	F	NP-18	NP-020563	N1-022345	approved	Consistency changes	5.2.0	5.3.0	N1	IMS-CCR
24.229	276		Rel-5	F	NP-18	NP-020563	N1-022350	approved	Proxy support of	5.2.0	5.3.0	N1	IMS-CCR
24.229	277		Rel-5	F	NP-18	NP-020563	N1-022351	approved	Clarification of	5.2.0	5.3.0	N1	IMS-CCR
24.229	278	3	Rel-5	F	NP-18	NP-020663	N1-022499	approved	P-CSCF does not strip	5.2.0	5.3.0	N1	IMS-CCR
24.229	279	1	Rel-5	F	NP-18	NP-020564	N1-022444	approved	Meaning of refresh	5.2.0	5.3.0	N1	IMS-CCR
24.229	280		Rel-5	F	NP-18	NP-020564	N1-022362	approved	Removal of Caller	5.2.0	5.3.0	N1	IMS-CCR
24.229	281	1	Rel-5	F	NP-18	NP-020564	N1-022445	approved	P-Access-Network-Info	5.2.0	5.3.0	N1	IMS-CCR
24.229	282		Rel-5	F	NP-18	NP-020564	N1-022370	approved	Clarification on use of	5.2.0	5.3.0	N1	IMS-CCR
24.229	284	4	Rel-5	F	NP-18	NP-020668	NP-020668	approved	SDP media policy	5.2.0	5.3.0	N1	IMS-CCR
24.229	285	1	Rel-5	F	NP-18	NP-020567	N1-022481	approved	Fallback for	5.2.0	5.3.0	N1	IMS-CCR
24.229	287	1	Rel-5	F	NP-18	NP-020564	N1-022459	approved	SA related procedures	5.2.0	5.3.0	N1	IMS-CCR
24.229	289		Rel-5	F	NP-18	NP-020557	N1-022387	approved	PCF to PDF	5.2.0	5.3.0	N1	IMS-CCR
24.229	290	1	Rel-5	C	NP-18	NP-020568	N1-022461	approved	Emergency Service	5.2.0	5.3.0	N1	IMS-CCR
29.018	032		Rel-5	F	NP-18	NP-020571	N1-021978	approved	Clarification of the	5.2.0	5.3.0	N1	IUFLEX
43.068	008	4	Rel-5	F	NP-18	NP-020675	NP-020653	approved	MS late entry	5.1.0	5.2.0	N1	TEI5
43.069	007	4	Rel-5	F	NP-18	NP-020676	NP-020654	approved	MS late entry	5.1.0	5.2.0	N1	TEI5
23.218	037	1	Rel-5	F	NP-18	NP-020554	N1-022464	rejected	Clarification on Sh	5.2.0		N1	IMS-CCR
24.008	701	3	Rel-5	F	NP-18	NP-020551	N1-022159	withdrawn	Flow Identifier	5.5.0		N1	IMS-CCR
24.008	701	3	Rel-5	F	NP-18	NP-020647	N1-022159	withdrawn	Flow Identifier	5.5.0		N1	IMS-CCR
24.008	716	2	Rel-5	F	NP-18	NP-020569	N1-022492	revised	Downloading of local	5.5.0		N1	TEI5
24.008	716	3	Rel-5	F	NP-18	NP-020652	NP-020652	revised	Downloading of local	5.5.0		N1	TEI5
24.229	278	3	Rel-5	F	NP-18	NP-020566	N1-022499	revised	P-CSCF does not strip	5.2.0		N1	IMS-CCR
24.229	284	3	Rel-5	F	NP-18	NP-020635		revised	SDP media policy	5.2.0		N1	IMS-CCR
43.068	008	1	Rel-5	F	NP-18	NP-020570	N1-022428	revised	MS late entry	5.1.0		N1	TEI5
43.068	008	2	Rel-5	F	NP-18	NP-020650		revised	MS late entry	5.0.1		N1	TEI5
43.068	008	3	Rel-5	F	NP-18	NP-020653	NP-020653	revised	MS late entry	5.1.0		N1	TEI5
43.069	007	1	Rel-5	F	NP-18	NP-020570	N1-022429	revised	MS late entry	5.1.0		N1	TEI5
43.069	007	2	Rel-5	F	NP-18	NP-020651		revised	MS late entry	5.0.1		N1	TEI5
43.069	007	3	Rel-5	F	NP-18	NP-020654	NP-020654	revised	MS late entry	5.1.0		N1	TEI5
23.078	418	4	Rel-5	F	NP-18	NP-020527	N2-021043	approved	Playing of Warning	5.1.0	5.2.0	N2	CAMEL4
23.078	427	2	Rel-5	F	NP-18	NP-020526	N2-020943	approved	Use of Release Call	5.1.0	5.2.0	N2	CAMEL4
23.078	449	1	Rel-5	F	NP-18	NP-020526	N2-020809	approved	Correction of handling	5.1.0	5.2.0	N2	CAMEL4
23.078	452	2	Rel-5	F	NP-18	NP-020526	N2-020930	approved	Clarification of	5.1.0	5.2.0	N2	CAMEL4
23.078	453		Rel-5	F	NP-18	NP-020526	N2-020812	approved	Correction of handling	5.1.0	5.2.0	N2	CAMEL4
23.078	454		Rel-5	F	NP-18	NP-020526	N2-020814	approved	Correction of IDPs in	5.1.0	5.2.0	N2	CAMEL4
23.078	456		Rel-5	F	NP-18	NP-020526	N2-020832	approved	Add result from GPRS	5.1.0	5.2.0	N2	CAMEL4
23.078	457	1	Rel-5	F	NP-18	NP-020526	N2-020902	approved	Detach report in inter-	5.1.0	5.2.0	N2	CAMEL4
23.078	461		Rel-5	A	NP-18	NP-020525	N2-021002	approved	Correction to	5.1.0	5.2.0	N2	CAMEL3
23.078	466	1	Rel-5	F	NP-18	NP-020527	N2-021045	approved	Correction to VLR	5.1.0	5.2.0	N2	CAMEL4
23.078	468	3	R99	F	NP-18	NP-020523	N2-020937	approved	Alignement between	3.14.0	3.15.0	N2	CAMEL3
23.078	469	2	Rel-4	A	NP-18	NP-020523	N2-020938	approved	Alignement between	4.6.1	4.7.0	N2	CAMEL3

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23.078	470	2	Rel-5	C	NP-18	NP-020526	N2-020942	approved	Resolving of open	5.1.0	5.2.0	N2	CAMEL4
23.078	478		R99	F	NP-18	NP-020523	N2-020931	approved	Correction to QoS	3.14.0	3.15.0	N2	CAMEL3
23.078	479		Rel-4	A	NP-18	NP-020523	N2-020939	approved	Correction to QoS	4.6.1	4.7.0	N2	CAMEL3
23.078	480		Rel-5	A	NP-18	NP-020523	N2-020940	approved	Correction to QoS	5.1.0	5.2.0	N2	CAMEL3
23.078	482		Rel-5	F	NP-18	NP-020527	N2-020974	approved	Correction on DP name	5.1.0	5.2.0	N2	CAMEL4
23.078	483		Rel-5	D	NP-18	NP-020529	N2-020975	approved	Figure and table	5.1.0	5.2.0	N2	CAMEL4
23.078	484	1	Rel-5	D	NP-18	NP-020528	N2-021075	approved	Better SDL	5.1.0	5.2.0	N2	CAMEL4
23.078	485	1	Rel-5	F	NP-18	NP-020527	N2-021027	approved	Correction of "Support	5.1.0	5.2.0	N2	CAMEL4
23.078	487	1	R99	F	NP-18	NP-020524	N2-021036	approved	Number comparison	3.14.0	3.15.0	N2	CAMEL3
23.078	488	1	Rel-4	A	NP-18	NP-020524	N2-021037	approved	Number comparison	4.6.1	4.7.0	N2	CAMEL3
23.078	489	1	Rel-5	A	NP-18	NP-020524	N2-021038	approved	Number comparison	5.1.0	5.2.0	N2	CAMEL3
23.078	490	1	Rel-5	F	NP-18	NP-020528	N2-021078	approved	Handling of Apply	5.1.0	5.2.0	N2	CAMEL4
23.078	494		Rel-5	F	NP-18	NP-020527	N2-020994	approved	Inconsistent description	5.1.0	5.2.0	N2	CAMEL4
23.078	495	1	Rel-5	F	NP-18	NP-020528	N2-021074	approved	Correction to ATI	5.1.0	5.2.0	N2	CAMEL4
23.078	498	3	R99	F	NP-18	NP-020524	N2-021087	approved	Clarification on ATM ->	3.14.0	3.15.0	N2	CAMEL3
23.078	499	1	Rel-5	F	NP-18	NP-020528	N2-021079	approved	MSC-number in MAP	5.1.0	5.2.0	N2	CAMEL4
23.078	500	1	Rel-5	F	NP-18	NP-020527	N2-021081	approved	ASN default for	5.1.0	5.2.0	N2	CAMEL4
23.078	504		Rel-5	F	NP-18	NP-020527	N2-021021	approved	Removal of redundant	5.1.0	5.2.0	N2	CAMEL4
23.078	506	2	Rel-4	A	NP-18	NP-020524	N2-021088	approved	Clarification on ATM ->	4.6.1	4.7.0	N2	CAMEL3
23.078	507	2	Rel-5	A	NP-18	NP-020524	N2-021089	approved	Clarification on ATM ->	5.1.0	5.2.0	N2	CAMEL3
23.078	508	1	R99	F	NP-18	NP-020524	N2-021056	approved	Correction to dialled	3.14.0	3.15.0	N2	CAMEL3
23.078	509		R99	F	NP-18	NP-020525	N2-021041	approved	Correction to	3.14.0	3.15.0	N2	CAMEL3
23.078	510		Rel-4	A	NP-18	NP-020525	N2-021042	approved	Correction to	4.6.1	4.7.0	N2	CAMEL3
23.078	511		Rel-4	A	NP-18	NP-020524	N2-021057	approved	Correction to dialled	4.6.1	4.7.0	N2	CAMEL3
23.078	512		Rel-5	A	NP-18	NP-020524	N2-021058	approved	Correction to dialled	5.1.0	5.2.0	N2	CAMEL3
23.278	001	2	Rel-5	F	NP-18	NP-020530	N2-020941	approved	Correction and	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	002		Rel-5	F	NP-18	NP-020530	N2-020826	approved	Correction and	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	003	2	Rel-5	F	NP-18	NP-020532	N2-021049	approved	Correction and	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	004	3	Rel-5	F	NP-18	NP-020532	N2-021091	approved	Correction and	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	005		Rel-5	F	NP-18	NP-020530	N2-020829	approved	Correction and	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	006		Rel-5	F	NP-18	NP-020530	N2-020830	approved	Clarification in the case	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	007	1	Rel-5	F	NP-18	NP-020530	N2-020945	approved	Inconsistent description	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	008		Rel-5	F	NP-18	NP-020530	N2-020865	approved	Remove support of SCI	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	009		Rel-5	F	NP-18	NP-020530	N2-020866	approved	Removal of ETC	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	010	1	Rel-5	F	NP-18	NP-020530	N2-020933	approved	Correction of InitialDP	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	012	1	Rel-5	F	NP-18	NP-020532	N2-021047	approved	IF Description for	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	014		Rel-5	D	NP-18	NP-020529	N2-020965	approved	Figure and table	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	015		Rel-5	D	NP-18	NP-020531	N2-020966	approved	For better document	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	016		Rel-5	D	NP-18	NP-020531	N2-020967	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	017		Rel-5	D	NP-18	NP-020531	N2-020968	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	018		Rel-5	D	NP-18	NP-020531	N2-020969	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL

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23.278	019		Rel-5	D	NP-18	NP-020531	N2-020970	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	020		Rel-5	D	NP-18	NP-020531	N2-020971	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	021		Rel-5	D	NP-18	NP-020531	N2-020972	approved	Editorial improvement -	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	022		Rel-5	F	NP-18	NP-020532	N2-020987	approved	SDL Procedure for	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	023	1	Rel-5	F	NP-18	NP-020532	N2-021051	approved	Stage 2 specifications	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	024	2	Rel-5	F	NP-18	NP-020532	N2-021090	approved	Clarification of DP	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	025		Rel-5	F	NP-18	NP-020532	N2-021039	approved	Number comparison	5.0.0	5.1.0	N2	IMS-CAMEL
23.278	026		Rel-5	F	NP-18	NP-020532	N2-021059	approved	Correction to dialled	5.0.0	5.1.0	N2	IMS-CAMEL
29.078	276		Rel-5	F	NP-18	NP-020527	N2-021000	approved	Correction to GPRS	5.1.0	5.2.0	N2	CAMEL4
29.078	277		Rel-5	F	NP-18	NP-020526	N2-020842	approved	Correction to SMS	5.1.0	5.2.0	N2	CAMEL4
29.078	283	1	Rel-5	F	NP-18	NP-020526	N2-020910	approved	ASN.1 syntax basic	5.1.0	5.2.0	N2	CAMEL4
29.078	288	1	Rel-5	F	NP-18	NP-020528	N2-021076	approved	Use of Continue With	5.1.0	5.2.0	N2	CAMEL4
29.078	289	1	Rel-5	F	NP-18	NP-020528	N2-021077	approved	Missing Call Segment	5.1.0	5.2.0	N2	CAMEL4
29.078	290	1	R99	F	NP-18	NP-020523	N2-021033	approved	Correction to CAP	3.13.0	3.14.0	N2	CAMEL3
29.078	291		Rel-5	F	NP-18	NP-020527	N2-021015	approved	ASN default for	5.1.0	5.2.0	N2	CAMEL4
29.078	293		Rel-4	A	NP-18	NP-020523	N2-021034	approved	Correction to CAP	4.6.0	4.7.0	N2	CAMEL3
29.078	294		Rel-5	A	NP-18	NP-020523	N2-021035	approved	Correction to CAP	5.1.0	5.2.0	N2	CAMEL3
29.078	295	2	Rel-5	F	NP-18	NP-020528	N2-021086	approved	Reintroduction of local	5.1.0	5.2.0	N2	CAMEL4
29.278	001	1	Rel-5	F	NP-18	NP-020530	N2-020934	approved	Correction of ASN.1	5.0.0	5.1.0	N2	IMS-CAMEL
29.278	002	1	Rel-5	F	NP-18	NP-020530	N2-020916	approved	ASN.1 syntax basic	5.0.0	5.1.0	N2	IMS-CAMEL
29.278	003	1	Rel-5	F	NP-18	NP-020532	N2-021048	approved	Correction of	5.0.0	5.1.0	N2	IMS-CAMEL
09.61	A039	1	R97	F	NP-18	NP-020613	N3-021005	approved	RADIUS enhancement	6.8.0	6.9.0	N3	TEI
09.61	A040	1	R98	A	NP-18	NP-020613	N3-021006	approved	RADIUS enhancement	7.7.0	7.8.0	N3	TEI
23.172	001		Rel-5	F	NP-18	NP-020618	N3-020816	approved	Lawful Interception For	5.0.0	5.1.0	N3	SCUDIF
23.172	003	3	Rel-5	F	NP-18	NP-020619	N3-020999	approved	Mobile originating BC	5.0.0	5.1.0	N3	SCUDIF
23.172	004	2	Rel-5	F	NP-18	NP-020619	N3-021000	approved	Service Change	5.0.0	5.1.0	N3	SCUDIF
23.910	039	1	Rel-5	B	NP-18	NP-020617	N3-020801	approved	CS Data Services	5.1.0	5.2.0	N3	CS Data
23.910	042	1	Rel-5	A	NP-18	NP-020616	N3-020847	approved	Usage of Iu UP in	5.1.0	5.2.0	N3	CSSPLIT
23.910	043	1	Rel-4	F	NP-18	NP-020616	N3-020846	approved	Usage of Iu UP in	4.5.0	4.6.0	N3	CSSPLIT
24.022	007	1	Rel-5	B	NP-18	NP-020617	N3-020802	approved	CS Data Services	5.0.0	5.1.0	N3	CS Data
27.001	081	1	Rel-5	B	NP-18	NP-020617	N3-020804	approved	CS Data Services	5.3.0	5.4.0	N3	CS Data
27.001	082	4	Rel-5	F	NP-18	NP-020619	N3-021001	approved	Mobile originating BC	5.3.0	5.4.0	N3	SCUDIF
27.060	028	1	Rel-5	F	NP-18	NP-020627	N3-020843	approved	IMS related functions	5.2.0	5.3.0	N3	E2EQoS
27.060	077		Rel-5	F	NP-18	NP-020627	N3-020929	approved	Multiplexing IMS media	5.2.0	5.3.0	N3	E2EQoS
27.060	078	1	Rel-5	F	NP-18	NP-020627	N3-021016	approved	Editorial improvments	5.2.0	5.3.0	N3	E2EQoS
27.060	079	1	Rel-5	F	NP-18	NP-020627	N3-021017	approved	Policy control rejection	5.2.0	5.3.0	N3	E2EQoS
29.007	056	1	Rel-5	B	NP-18	NP-020617	N3-020803	approved	CS Data Services	5.3.0	5.4.0	N3	CS Data
29.007	057	1	Rel-4	F	NP-18	NP-020616	N3-020844	approved	Usage of Iu UP in	4.5.0	4.6.0	N3	CSSPLIT
29.007	058	1	Rel-5	A	NP-18	NP-020616	N3-020845	approved	Usage of Iu UP in	5.3.0	5.4.0	N3	CSSPLIT
29.007	059		Rel-5	F	NP-18	NP-020615	N3-020811	approved	Correction on mapping	5.3.0	5.4.0	N3	TEI
29.007	060	3	Rel-5	F	NP-18	NP-020619	N3-020998	approved	Mobile originating BC	5.3.0	5.4.0	N3	SCUDIF

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29.007	062		R99	F	NP-18	NP-020615	N3-020841	approved	Correction on mapping	3.10.0	3.11.0	N3	TEI
29.007	063		Rel-4	A	NP-18	NP-020615	N3-020842	approved	Correction on mapping	4.5.0	4.6.0	N3	TEI
29.007	063		Rel-4	A	NP-18	NP-020615	N3-020842	approved	Correction on mapping	4.5.0	4.6.0	N3	TEI
29.061	064		R99	F	NP-18	NP-020613	N3-020769	approved	Correction of Radius	3.10.0	3.11.0	N3	TEI
29.061	065		Rel-4	A	NP-18	NP-020613	N3-020770	approved	Correction of Radius	4.5.0	4.6.0	N3	TEI
29.061	066		Rel-5	A	NP-18	NP-020613	N3-020771	approved	Correction of Radius	5.3.0	5.4.0	N3	TEI
29.061	067	3	Rel-5	F	NP-18	NP-020623	N3-020935	approved	Handling of binding	5.3.0	5.4.0	N3	E2EQoS
29.061	068		R99	F	NP-18	NP-020614	N3-020902	approved	Correction related to	3.10.0	3.11.0	N3	TEI
29.061	069		Rel-4	F	NP-18	NP-020614	N3-020903	approved	Corrections related to	4.5.0	4.6.0	N3	TEI
29.061	070		R99	A	NP-18	NP-020613	N3-020920	approved	RADIUS enhancement	3.10.0	3.11.0	N3	TEI
29.061	071		Rel-4	A	NP-18	NP-020613	N3-020921	approved	RADIUS enhancement	4.5.0	4.6.0	N3	TEI
29.061	072		Rel-5	A	NP-18	NP-020613	N3-020922	approved	RADIUS enhancement	5.3.0	5.4.0	N3	TEI
29.207	034	1	Rel-5	F	NP-18	NP-020625	N3-020867	approved	Validating binding	5.1.0	5.2.0	N3	E2EQoS
29.207	035		Rel-5	F	NP-18	NP-020621	N3-020776	approved	Go PIB revision and	5.1.0	5.2.0	N3	E2EQoS
29.207	039	4	Rel-5	F	NP-18	NP-020623	N3-020983	approved	Handling of binding	5.1.0	5.2.0	N3	E2EQoS
29.207	040	4	Rel-5	F	NP-18	NP-020623	N3-020980	approved	Connection failure	5.1.0	5.2.0	N3	E2EQoS
29.207	041	2	Rel-5	F	NP-18	NP-020625	N3-020876	approved	Clarification on Flow	5.1.0	5.2.0	N3	E2EQoS
29.207	045		Rel-5	F	NP-18	NP-020625	N3-020826	approved	Clarifications on GGSN	5.1.0	5.2.0	N3	E2EQoS
29.207	047	1	Rel-5	F	NP-18	NP-020625	N3-020848	approved	Clarification on multiple	5.1.0	5.2.0	N3	E2EQoS
29.207	049	3	Rel-5	F	NP-18	NP-020625	N3-021024	approved	Clarifications on Early	5.1.0	5.2.0	N3	E2EQoS
29.207	050		Rel-5	F	NP-18	NP-020621	N3-020877	approved	Go PIB revision and	5.1.0	5.2.0	N3	E2EQoS
29.207	051	2	Rel-5	F	NP-18	NP-020620	N3-021025	approved	Clarification on the	5.1.0	5.2.0	N3	E2EQoS
29.207	052		Rel-5	D	NP-18	NP-020625	N3-020905	approved	Added reference to	5.1.0	5.2.0	N3	E2EQoS
29.207	053	1	Rel-5	F	NP-18	NP-020621	N3-020985	approved	Re-Using filters from	5.1.0	5.2.0	N3	E2EQoS
29.207	056	1	Rel-5	F	NP-18	NP-020625	N3-020978	approved	Update reference [11]	5.1.0	5.2.0	N3	E2EQoS
29.207	057	1	Rel-5	F	NP-18	NP-020621	N3-020987	approved	IANA numbers: COPS	5.1.0	5.2.0	N3	E2EQoS
29.207	059	1	Rel-5	F	NP-18	NP-020621	N3-020989	approved	PIB references and	5.1.0	5.2.0	N3	E2EQoS
29.207	060	2	Rel-5	F	NP-18	NP-020625	N3-020990	approved	Changes to GGSN	5.1.0	5.2.0	N3	E2EQoS
29.207	061	1	Rel-5	F	NP-18	NP-020625	N3-020993	approved	Clarification on use of	5.1.0	5.2.0	N3	E2EQoS
29.207	063	1	Rel-5	F	NP-18	NP-020623	N3-021004	approved	GTP cause code for	5.1.0	5.2.0	N3	E2EQoS
29.207	064	3	Rel-5	F	NP-18	NP-020622	N3-021026	approved	Replacement of	5.1.0	5.2.0	N3	E2EQoS
29.207	065	2	Rel-5	F	NP-18	NP-020625	N3-021023	approved	Update of Device	5.1.0	5.2.0	N3	E2EQoS
29.207	066		Rel-5	F	NP-18	NP-020625	N3-020946	approved	Corrections in	5.1.0	5.2.0	N3	E2EQoS
29.207	067		Rel-5	F	NP-18	NP-020624	N3-020948	approved	PCF to PDF Change	5.1.0	5.2.0	N3	E2EQoS
29.207	068		Rel-5	F	NP-18	NP-020625	N3-020953	approved	DiffServ Class	5.1.0	5.2.0	N3	E2EQoS
29.207	069	1	Rel-5	F	NP-18	NP-020623	N3-020995	approved	Go FailDecReason	5.1.0	5.2.0	N3	E2EQoS
29.207	071	2	Rel-5	F	NP-18	NP-020621	N3-021022	approved	Go PIB clarifications	5.1.0	5.2.0	N3	E2EQoS
29.207	072		Rel-5	F	NP-18	NP-020623	N3-020988	approved	Coding for Go related	5.1.0	5.2.0	N3	E2EQoS
29.208	009	1	Rel-5	F	NP-18	NP-020626	N3-020852	approved	QoS mapping in the	5.1.0	5.2.0	N3	E2eQoS
29.208	010	2	Rel-5	F	NP-18	NP-020626	N3-020866	approved	Terminology in TS	5.1.0	5.2.0	N3	E2eQoS
29.208	013	1	Rel-5	F	NP-18	NP-020624	N3-021010	approved	PCF to PDF Change	5.1.0	5.2.0	N3	E2EQoS

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29.208	014		Rel-5	F	NP-18	NP-020620	N3-020932	approved	Removal of editors	5.1.0	5.2.0	N3	E2EQoS
29.208	018		Rel-5	F	NP-18	NP-020622	N3-021014	approved	Replacement of	5.1.0	5.2.0	N3	E2EQoS
43.010	007	1	Rel-5	B	NP-18	NP-020617	N3-020800	approved	CS Data Services	5.1.0	5.2.0	N3	CS Data
44.021	004	1	Rel-5	B	NP-18	NP-020617	N3-020805	approved	CS Data Services	5.1.1	5.2.0	N3	CS Data
48.020	003	4	Rel-5	B	NP-18	NP-020617	N3-020950	approved	CS Data Services	5.1.0	5.2.0	N3	CS Data
09.02	A329		R98	F	NP-18	NP-020582	N4-021166	approved	Correction of partly	7.11.0	7.12.0	N4	TEI
09.60	A117		R97	F	NP-18	NP-020576	N4-021147	approved	Removing	6.12.0	6.13.0	N4	GPRS
09.60	A118		R98	A	NP-18	NP-020576	N4-021148	approved	Removing	7.9.0	7.10.0	N4	GPRS
09.60	A119	2	R97	A	NP-18	NP-020581	N4-021527	approved	Enabling control of	6.12.0	6.13.0	N4	TEI
09.60	A120	3	R98	F	NP-18	NP-020581	N4-021526	approved	Enabling control of	7.9.0	7.10.0	N4	TEI
23.003	055	1	Rel-5	F	NP-18	NP-020596	N4-021271	approved	Iur-g Introduction	5.4.0	5.5.0	N4	TEI5
23.003	056	1	Rel-5	F	NP-18	NP-020596	N4-021283	approved	Editorial clean-up	5.4.0	5.5.0	N4	TEI5
23.003	057		Rel-5	F	NP-18	NP-020586	N4-021233	approved	Editorial correction of	5.4.0	5.5.0	N4	IMS-CCR
23.003	058		Rel-5	F	NP-18	NP-020596	N4-021344	approved	Addition of a reference	5.4.0	5.5.0	N4	TEI5
23.003	059		Rel-5	F	NP-18	NP-020586	N4-021386	approved	Correction to the form	5.4.0	5.5.0	N4	IMS-CCR
23.003	062	1	Rel-5	A	NP-18	NP-020596	N4-021565	approved	Fix miss-interworking	5.4.0	5.5.0	N4	TEI5
23.008	058		Rel-5	F	NP-18	NP-020587	N4-021160	approved	Addition of Barring	5.2.0	5.3.0	N4	IMS-CCR
23.008	060		Rel-5	F	NP-18	NP-020595	N4-021384	approved	Deleting codeword	5.2.0	5.3.0	N4	LCS1-PS
23.008	061	1	Rel-5	F	NP-18	NP-020586	N4-021507	approved	Correction to the form	5.2.0	5.3.0	N4	IMS-CCR
23.018	112	1	Rel-5	F	NP-18	NP-020596	N4-021500	approved	Clarification of	5.4.0	5.5.0	N4	TEI5
23.079	020	1	Rel-5	F	NP-18	NP-020596	N4-021297	approved	Optimal routeing and	5.1.0	5.2.0	N4	TEI5
23.079	022	1	R99	F	NP-18	NP-020575	N4-021291	approved	Correction to figrue 7a	3.7.0	3.8.0	N4	CAMEL3
23.079	023	1	Rel-4	A	NP-18	NP-020575	N4-021292	approved	Correction to figrue 7a	4.1.0	4.2.0	N4	CAMEL3
23.079	024	1	Rel-5	A	NP-18	NP-020575	N4-021293	approved	Correction to figrue 7a	5.1.0	5.2.0	N4	CAMEL3
23.153	038	2	Rel-4	F	NP-18	NP-020578	N4-021284	approved	Correction/clarification	4.5.0	4.6.0	N4	OoBTC
23.153	039	2	Rel-5	A	NP-18	NP-020578	N4-021285	approved	Correction/clarification	5.2.0	5.3.0	N4	OoBTC
23.153	048		Rel-4	F	NP-18	NP-020578	N4-021389	approved	Alignment on the	4.5.0	4.6.0	N4	OoBTC
23.153	049		Rel-5	A	NP-18	NP-020578	N4-021390	approved	Alignment on the	5.2.0	5.3.0	N4	OoBTC
23.205	031	3	Rel-5	F	NP-18	NP-020597	N4-021554	approved	Iu-cs over IP related	5.3.0	5.4.0	N4	ETRAN-Iptrans
23.205	035	2	Rel-5	F	NP-18	NP-020596	N4-021544	approved	CAMEL4 Call Party	5.3.0	5.4.0	N4	TEI5
23.205	036	1	Rel-5	F	NP-18	NP-020596	N4-021268	approved	Clarification of the	5.3.0	5.4.0	N4	TEI5
24.080	026	2	Rel-5	F	NP-18	NP-020595	N4-021310	approved	Exception handling for	5.2.0	5.3.0	N4	LCS1
29.002	442	3	Rel-5	F	NP-18	NP-020599	N4-021299	approved	Description of MT SM	5.3.0	5.4.0	N4	TEI5
29.002	474	2	Rel-5	F	NP-18	NP-020594	N4-021294	approved	Correction of handling	5.3.0	5.4.0	N4	CAMEL4
29.002	475		Rel-5	F	NP-18	NP-020599	N4-021124	approved	ODB and CB for SMS	5.3.0	5.4.0	N4	TEI5
29.002	486		Rel-5	F	NP-18	NP-020599	N4-021153	approved	Correction of IMEI	5.3.0	5.4.0	N4	TEI5
29.002	490		Rel-5	F	NP-18	NP-020594	N4-021194	approved	Clarification of the use	5.3.0	5.4.0	N4	CAMEL4
29.002	491	1	Rel-6	F	NP-18	NP-020603	N4-021260	approved	Addition of LCS Format	5.3.0	6.0.0	N4	LCS2
29.002	492	5	Rel-5	F	NP-18	NP-020599	N4-021467	approved	Available codecs list	5.3.0	5.4.0	N4	TEI5
29.002	494	1	R99	F	NP-18	NP-020575	N4-021288	approved	Correction to	3.14.0	3.15.0	N4	CAMEL3
29.002	495		Rel-5	F	NP-18	NP-020594	N4-021252	approved	Correction to RCH –	5.3.0	5.4.0	N4	CAMEL4

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29.002	496		Rel-5	F	NP-18	NP-020594	N4-021264	approved	Additional MM-Code	5.3.0	5.4.0	N4	CAMEL4
29.002	497	1	Rel-5	D	NP-18	NP-020594	N4-021296	approved	Additional handling of	5.3.0	5.4.0	N4	CAMEL4
29.002	498		Rel-4	A	NP-18	NP-020575	N4-021289	approved	Correction to	4.9.0	4.10.0	N4	CAMEL3
29.002	499		Rel-5	F	NP-18	NP-020575	N4-021290	approved	Correction to	5.3.0	5.4.0	N4	CAMEL3
29.002	506		R99	F	NP-18	NP-020575	N4-021416	approved	ODB correction	3.14.0	3.15.0	N4	CAMEL3
29.002	507		Rel-4	A	NP-18	NP-020575	N4-021417	approved	ODB correction	4.9.0	4.10.0	N4	CAMEL3
29.002	508		Rel-5	A	NP-18	NP-020575	N4-021418	approved	ODB correction	5.3.0	5.4.0	N4	CAMEL3
29.002	510	1	Rel-4	F	NP-18	NP-020577	N4-021562	approved	Addtion of reference	4.9.0	4.10.0	N4	LCS1
29.002	511	1	Rel-5	A	NP-18	NP-020577	N4-021563	approved	Addtion of reference	5.3.0	5.4.0	N4	LCS1
29.002	512		Rel-5	F	NP-18	NP-020595	N4-021383	approved	Correcion of Codeword	5.3.0	5.4.0	N4	LCS1-PS
29.002	513		Rel-5	F	NP-18	NP-020594	N4-021443	approved	Reference to TS	5.3.0	5.4.0	N4	CAMEL4
29.002	514	2	R99	F	NP-18	NP-020580	N4-021571	approved	Correction to the	3.14.0	3.15.0	N4	Multicall
29.002	515	2	Rel-4	A	NP-18	NP-020580	N4-021572	approved	Correction to the	4.9.0	4.10.0	N4	Multicall
29.002	516	2	Rel-5	A	NP-18	NP-020580	N4-021573	approved	Correction to the	5.3.0	5.4.0	N4	Multicall
29.002	517	2	Rel-6	B	NP-18	NP-020603	N4-021504	approved	Addition of V-GMLC	5.3.0	6.0.0	N4	LCS2
29.002	518	3	Rel-6	B	NP-18	NP-020603	N4-021567	approved	Addition of V-GMLC	5.3.0	6.0.0	N4	LCS2
29.002	519	2	Rel-6	B	NP-18	NP-020603	N4-021506	approved	Addition of V-GMLC	5.3.0	6.0.0	N4	LCS2
29.002	521	1	Rel-5	F	NP-18	NP-020599	N4-021524	approved	Editorial Clean-Up	5.3.0	5.4.0	N4	TEI5
29.002	522		Rel-5	F	NP-18	NP-020594	N4-021531	approved	Introduction of the	5.3.0	5.4.0	N4	CAMEL4
29.010	072	1	Rel-4	F	NP-18	NP-020577	N4-021235	approved	LCS: Adding missing	4.4.0	4.5.0	N4	LCS1
29.010	073	1	Rel-5	A	NP-18	NP-020577	N4-021236	approved	LCS: Adding missing	5.1.0	5.2.0	N4	LCS1
29.010	076		Rel-4	F	NP-18	NP-020577	N4-021197	approved	Correction on the use	4.4.0	4.5.0	N4	LCS1
29.010	077		Rel-5	A	NP-18	NP-020577	N4-021198	approved	Correction on the use	5.1.0	5.2.0	N4	LCS1
29.010	078		Rel-5	F	NP-18	NP-020596	N4-021394	approved	Interworking between	5.1.0	5.2.0	N4	TEI5
29.010	082		R99	F	NP-18	NP-020580	N4-021579	approved	Correction to the	3.9.0	3.10.0	N4	Multicall
29.010	083		Rel-4	A	NP-18	NP-020580	N4-021580	approved	Correction to the	4.4.0	4.5.0	N4	Multicall
29.010	084		Rel-5	A	NP-18	NP-020580	N4-021581	approved	Correction to the	5.1.0	5.2.0	N4	Multicall
29.060	333	1	Rel-5	F	NP-18	NP-020598	N4-021140	approved	Support of mandatory	5.3.0	5.4.0	N4	TEI5
29.060	348	4	Rel-5	F	NP-18	NP-020598	N4-021266	approved	Introductionof PCO in	5.3.0	5.4.0	N4	TEI5
29.060	350	1	Rel-5	F	NP-18	NP-020598	N4-021265	approved	Clarification on the	5.3.0	5.4.0	N4	TEI5
29.060	354	1	Rel-5	F	NP-18	NP-020598	N4-021262	approved	Removal of limitation in	5.3.0	5.4.0	N4	TEI5
29.060	355		Rel-5	F	NP-18	NP-020598	N4-021137	approved	Introduction of PCO IE	5.3.0	5.4.0	N4	TEI5
29.060	356	1	Rel-5	F	NP-18	NP-020598	N4-021308	approved	Introduction of PCO IE	5.3.0	5.4.0	N4	TEI5
29.060	357	1	Rel-5	F	NP-18	NP-020598	N4-021309	approved	Introduction of PCO IE	5.3.0	5.4.0	N4	TEI5
29.060	358	1	R99	F	NP-18	NP-020576	N4-021301	approved	PDCP sequence	3.14.0	3.15.0	N4	GPRS
29.060	359	1	Rel-4	A	NP-18	NP-020576	N4-021302	approved	PDCP sequence	4.5.0	4.6.0	N4	GPRS
29.060	360	1	Rel-5	A	NP-18	NP-020576	N4-021303	approved	PDCP sequence	5.3.0	5.4.0	N4	GPRS
29.060	361		R99	F	NP-18	NP-020576	N4-021152	approved	Correction of	3.14.0	3.15.0	N4	GPRS
29.060	362	3	Rel-5	F	NP-18	NP-020598	N4-021427	approved	Clarification of the	5.3.0	5.4.0	N4	TEI5
29.060	363	4	Rel-5	A	NP-18	NP-020581	N4-021530	approved	Enabling control of	5.3.0	5.4.0	N4	TEI
29.060	364	2	Rel-4	A	NP-18	NP-020581	N4-021529	approved	Enabling control of	4.5.0	4.6.0	N4	TEI

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29.060	365	2	R99	F	NP-18	NP-020581	N4-021528	approved	Enabling control of	3.14.0	3.15.0	N4	TEI
29.060	373	2	Rel-5	A	NP-18	NP-020584	N4-021534	approved	Clarification on IP	5.3.0	5.4.0	N4	TEI4
29.060	374	1	Rel-4	F	NP-18	NP-020584	N4-021577	approved	Transfer of Charging	4.5.0	4.6.0	N4	TEI4
29.060	375	1	Rel-5	A	NP-18	NP-020584	N4-021578	approved	Transfer of Charging	5.3.0	5.4.0	N4	TEI4
29.060	380	1	R99	F	NP-18	NP-020583	N4-021541	approved	Clarification on	3.14.0	3.15.0	N4	TEI
29.060	381	1	Rel-4	A	NP-18	NP-020583	N4-021542	approved	Clarification on	4.5.0	4.6.0	N4	TEI
29.060	382	1	Rel-5	A	NP-18	NP-020583	N4-021543	approved	Clarification on	5.3.0	5.4.0	N4	TEI
29.060	383		Rel-4	F	NP-18	NP-020584	N4-021532	approved	Clarification on IP	4.5.0	4.6.0	N4	TEI4
29.202	006	2	Rel-4	F	NP-18	NP-020664	N4-021318	approved	M3UA for 3GPP	4.2.0	4.3.0	N4	SS7IP
29.202	007	2	Rel-5	A	NP-18	NP-020664	N4-021319	approved	M3UA for 3GPP	5.1.0	5.2.0	N4	SS7IP
29.202	008		Rel-4	F	NP-18	NP-020664	N4-021396	approved	IETF RFC Reference	4.2.0	4.3.0	N4	SS7IP
29.202	009	1	Rel-5	A	NP-18	NP-020664	N4-021397	approved	IETF RFC Reference	5.1.0	5.2.0	N4	SS7IP
29.228	008	2	Rel-5	F	NP-18	NP-020587	N4-021281	approved	Rejection of	5.1.0	5.2.0	N4	IMS-CCR
29.228	010		Rel-5	F	NP-18	NP-020587	N4-021163	approved	Removal of upper	5.1.0	5.2.0	N4	IMS-CCR
29.228	011		Rel-5	F	NP-18	NP-020587	N4-021183	approved	S-CSCF Assignment	5.1.0	5.2.0	N4	IMS-CCR
29.228	012		Rel-5	F	NP-18	NP-020587	N4-021231	approved	NAS-Session-Key	5.1.0	5.2.0	N4	IMS-CCR
29.228	013	1	Rel-5	F	NP-18	NP-020587	N4-021511	approved	Correction to detailed	5.1.0	5.2.0	N4	IMS-CCR
29.228	014	1	Rel-5	F	NP-18	NP-020587	N4-021512	approved	Removing the DDF	5.1.0	5.2.0	N4	IMS-CCR
29.228	015	1	Rel-5	F	NP-18	NP-020587	N4-021513	approved	Clarification of	5.1.0	5.2.0	N4	IMS-CCR
29.228	016	1	Rel-5	F	NP-18	NP-020589	N4-021514	approved	Clarification of User-	5.1.0	5.2.0	N4	IMS-CCR
29.228	017		Rel-5	F	NP-18	NP-020587	N4-021372	approved	Correction to HSS	5.1.0	5.2.0	N4	IMS-CCR
29.228	019		Rel-5	F	NP-18	NP-020588	N4-021444	approved	Editorial correction in	5.1.0	5.2.0	N4	IMS-CCR
29.228	020	1	Rel-5	F	NP-18	NP-020590	N4-021517	approved	Error handling in S-	5.1.0	5.2.0	N4	IMS-CCR
29.228	021	1	Rel-5	F	NP-18	NP-020587	N4-021519	approved	Re-assignment of S-	5.1.0	5.2.0	N4	IMS-CCR
29.228	022		Rel-5	F	NP-18	NP-020591	N4-021547	approved	Correction of the SPI	5.1.0	5.2.0	N4	IMS-CCR
29.229	006		Rel-5	F	NP-18	NP-020587	N4-021158	approved	Addition of User-Name	5.1.0	5.2.0	N4	IMS-CCR
29.229	007		Rel-5	F	NP-18	NP-020587	N4-021232	approved	Editorial correction of	5.1.0	5.2.0	N4	IMS-CCR
29.229	008	1	Rel-5	F	NP-18	NP-020589	N4-021515	approved	Clarification of	5.1.0	5.2.0	N4	IMS-CCR
29.229	009		Rel-5	F	NP-18	NP-020588	N4-021445	approved	Editorial correction in	5.1.0	5.2.0	N4	IMS-CCR
29.229	010	1	Rel-5	F	NP-18	NP-020590	N4-021518	approved	Error handling in S-	5.1.0	5.2.0	N4	IMS-CCR
29.232	040	2	Rel-4	F	NP-18	NP-020579	N4-021556	approved	Termination ID Note	4.6.0	4.7.0	N4	CSSPLIT
29.232	041	2	Rel-5	A	NP-18	NP-020579	N4-021557	approved	Termination ID Note	5.3.0	5.4.0	N4	CSSPLIT
29.232	042	3	Rel-5	F	NP-18	NP-020597	N4-021555	approved	Iu-cs over IP related	5.3.0	5.4.0	N4	ETRAN-IPtrans
29.232	045	2	Rel-4	F	NP-18	NP-020578	N4-021286	approved	Addition of IuFP	4.6.0	4.7.0	N4	OoBTC
29.232	046	2	Rel-5	A	NP-18	NP-020578	N4-021287	approved	Addition of IuFP	5.3.0	5.4.0	N4	OoBTC
29.232	052	2	Rel-5	F	NP-18	NP-020594	N4-021395	approved	CAMEL4 flexible tone	5.3.0	5.4.0	N4	CAMEL4
29.328	007		Rel-5	F	NP-18	NP-020592	N4-021164	approved	Removal of upper	5.1.0	5.2.0	N4	IMS-CCR
29.328	008	1	Rel-5	F	NP-18	NP-020593	N4-021282	approved	Clarification on update	5.1.0	5.2.0	N4	IMS-CCR
29.328	009	1	Rel-5	F	NP-18	NP-020593	N4-021520	approved	Removing the DDF	5.1.0	5.2.0	N4	IMS-CCR
29.328	013	2	Rel-5	F	NP-18	NP-020592	N4-021553	approved	Error handling in HSS	5.1.0	5.2.0	N4	IMS-CCR
29.328	014		Rel-5	F	NP-18	NP-020591	N4-021548	approved	Correction of the SPI	5.1.0	5.2.0	N4	IMS-CCR

Spec	CR	Rev	Phase	Cat	Meeting-	Plenary doc	WG doc	TSG status	Subject	CR	Resulti	WG	Workitem
29.329	006		Rel-5	F	NP-18	NP-020592	N4-021450	approved	Error handling in HSS	5.1.0	5.2.0	N4	IMS-CCR
30.002	006		Rel-5	F	NP-18	NP-020596	N4-021122	approved	Alignment with use of	4.0.1	5.0.0	N4	TEI5
29.202	006	2	Rel-4	F	NP-18	NP-020585	N4-021318	withdrawn	M3UA for 3GPP	4.2.0		N4	SS7IP
29.202	007	2	Rel-5	A	NP-18	NP-020585	N4-021319	withdrawn	M3UA for 3GPP	5.1.0		N4	SS7IP
29.202	008		Rel-4	F	NP-18	NP-020585	N4-021396	withdrawn	IETF RFC Reference	4.2.0		N4	SS7IP
29.202	009		Rel-5	A	NP-18	NP-020585	N4-021397	revised	IETF RFC Reference	5.1.0		N4	SS7IP

Note:- Updated from master Spec_status dbase on 8th Dec 2002.

For latest details please see the 3GPP specifications database at ftp://ftp.3gpp.org/Information/Databases/Spec_Status/

ANNEX B Tdoc List with Status

TDoc #	Ag.	Type	Tdoc Title	WI	Rel	Source	Spec	Status
NP-020500	2	AGENDA	Draft Agenda for CN#18 (New Orleans)	-	-	MCC		APPROVED
NP-020501	2	DAD	Allocation of documents to agenda items at start of meeting	-	-	CN V.chair		NOTED
NP-020502	2	DAD	Allocation of documents to agenda items at close of day 1	-	-	CN V.chair		NOTED
NP-020503	2	DAD	Allocation of documents to agenda items at close of day 2	-	-	CN V.chair		NOTED
NP-020504	2	DAD	Allocation of documents to agenda items at close of day 3	-	-	CN V.chair		NOTED
NP-020505	4.1	REPORT	Draft Meeting report from CN#17 (Biarritz)	-	-	MCC		APPROVED
NP-020506	12	WORK PLAN	3GPP Work Plan	-	-	MCC		NOTED
NP-020507	12	WORK PLAN	3GPP Work Plan [Slide Presentation]	-	-	MCC		NOTED
NP-020508	5.3	LS IN	Liaison to multiple SDOs requesting input for “Media Coding Summary Database” project [LS12-16]			ITU-T		NOTED
NP-020509	5.3	LS IN	LS on New Video Coding Standard H.264/AVC [LS15-16]			ITU-T		NOTED
NP-020510	5.3	LS IN	New Question on Use of Public Telecommunication Services for Emergency and Disaster Relief Operations [LS23-16]			ITU-T		NOTED
NP-020511	5.3	LS IN	LS to 3GPP TSG WG CN4, CN, SA3, SA2, and GSMA SerG on the protocol development for the GMLC Lr-interface [SI1102059]			LIF-Sig		NOTED
NP-020512	5.3	LS IN	LS on Document Review of DTR/MTS0082 UMTS Network Integration Testing Methodology and TSS&TP [TD020]			ETSI TC MTS		NOTED
NP-020513	8.1	LS IN	Response to IETF LS on Interoperability Issues and SIP in IMS [SP-020627]			SA		NOTED
NP-020514	8.1	LS IN	Liaison statement on Interoperability Issues and SIP in IMS [N1-022160]			CN1		NOTED
NP-020515	5.1	LS IN	LS on the protocol development for the GMLC – PPR, Lpp-interface [N4-021503]			CN4		NOTED
NP-020516	8.1	LS IN	Liaison statement on Interoperability Issues and SIP in IMS [S3-020578]			SA3		NOTED
NP-020517	5.1	LS IN	LS on Interworking between SIP/SDP and BICC/ISUP [N3-020878]			CN3		NOTED
NP-020518	6.6	LS IN	Request for new information for draft Recommendation Q.1741.3 (referencing of 3GPP Release 5) [SSG – LS 3 – E]			ITU-T SSG		NOTED

NP-020519	8.1	LS IN	Liaison statement on Interoperability Issues and SIP in IMS [N1-022503]			CN1		NOTED
NP-020520	6.2.1	REPORT	Status Report for TSG CN WG2			CN2 Chair		NOTED
NP-020521	6.2.1	REPORT	CN2#26 and CN2#27 Meeting Reports			MCC		NOTED
NP-020522	6.2.1	LS PACK	LSs sent from CN2 since TSG CN#17 Meeting			CN2		NOTED
NP-020523	7.1	CR PACK1	CRs to R99 WI CAMEL3	CAMEL3	R99	CN2		APPROVED
NP-020524	7.1	CR PACK2	CRs to R99 WI CAMEL3	CAMEL3	R99	CN2		APPROVED
NP-020525	7.1	CR PACK3	CRs to R99 WI CAMEL3	CAMEL3	R99	CN2		APPROVED
NP-020526	8.3	CR PACK1	CRs to Rel-5 WI CAMEL4	CAMEL4	Rel-5	CN2		APPROVED
NP-020527	8.3	CR PACK2	CRs to Rel-5 WI CAMEL4	CAMEL4	Rel-5	CN2		APPROVED
NP-020528	8.3	CR PACK3	CRs to Rel-5 WI CAMEL4	CAMEL4	Rel-5	CN2		APPROVED
NP-020529	8.3	CR PACK4	Editorial CRs to Rel-5 WI CAMEL4 and IMS-CAMEL (TS 23.078 and TS 23.278)	CAMEL4, IMS-CAMEL	Rel-5	CN2		APPROVED
NP-020530	8.3	CR PACK1	CRs to Rel-5 WI IMS-CAMEL	IMS-CAMEL	Rel-5	CN2		APPROVED
NP-020531	8.3	CR PACK2	CRs to Rel-5 WI IMS-CAMEL	IMS-CAMEL	Rel-5	CN2		APPROVED
NP-020532	8.3	CR PACK3	CRs to Rel-5 WI IMS-CAMEL	IMS-CAMEL	Rel-5	CN2		APPROVED
NP-020533	6.5.1	REPORT	Chairman's report from CN5 (slide presentation)	OSA		CN5 Chair		NOTED
NP-020534	6.5.1	LS OUT	LSs outgoing from CN5 between CN#17 and CN#18	OSA		CN5		NOTED
NP-020535	6.5.1	REPORT	Report of Meeting #20, Miami, FLORIDA, USA, 23 - 27 Sep 2002 (N5-020808)	OSA		CN5 Chair		NOTED
NP-020536	6.5.1	REPORT	Draft Report of CN5#21, Dublin, IRELAND, 28-31 Oct 2002 (N5-021007)	OSA		CN5 Chair		NOTED
NP-020537	9.7	WID	Updated Rel-6 Work Item Description for OSA Stage 3	OSA	Rel-6	CN5		APPROVED
NP-020538	6.4.1	REPORT	Status report from CN WG4 to CN #18			CN4 chairman		NOTED
NP-020539	6.1.1	REPORT	Status Report for TSG CN WG1			CN1 Chair		NOTED

NP-020540	6.1.1	REPORT	CN1#26 Meeting Report			MCC		NOTED
NP-020541	6.1.1	REPORT	CN1#26bis Meeting Report			MCC		NOTED
NP-020542	6.1.1	REPORT	CN1#27 Meeting Report			MCC		NOTED
NP-020543	6.1.1	LS PACK 1	All LSs sent from CN1 since TSG CN#17 Meeting			MCC		NOTED
NP-020544	6.1.1	LS PACK 2	All LSs sent from CN1 since TSG CN#17 Meeting			MCC		NOTED
NP-020545	7.2	CR PACK	CR to R99 (with mirror CRs) on Work Item Security towards 24.008	Security	R99	CN1		APPROVED
NP-020546	7.3	CR PACK	CRs to R97 (with mirror CRs) on Work Item GPRS towards 04.08 and 24.008	GPRS	R97	CN1		APPROVED
NP-020547	7.6	CR PACK	CRs to Phase2 (with mirror CRs) on Work Item GSM/UMTS interworking towards 04.08 and 24.008	GSM/UMTS interworking	Phase2	CN1		APPROVED
NP-020548	7.7	CR PACK	CRs to Rel-4 (with mirror CR) and Rel-5 on Work Item TRFO-OOB towards 23.009	TrFO	Rel4/5	CN1		APPROVED
NP-020549	7.11	CR PACK	CRs to R99 and Rel-4 (with mirror CRs) on Work Items TEI and TEI4 towards23.009, 23.122 and 24.008	TEI/TEI4	R99/Rel-4	CN1		APPROVED
NP-020550	7.12	CR PACK	CR to R96 (with mirror CRs) on Work Item Multiband towards 04.08 and 24.008	Multiband	R96	CN1		APPROVED
NP-020551	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.008	IMS-CCR	Rel-5	CN1		WITHDRAWN [Replaced by
NP-020552	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 1	IMS-CCR	Rel-5	CN1		APPROVED
NP-020553	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 2	IMS-CCR	Rel-5	CN1		APPROVED
NP-020554	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 23.218,- pack 3	IMS-CCR	Rel-5	CN1		NOT APPROVED -
NP-020555	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.228,- pack 1	IMS-CCR	Rel-5	CN1		APPROVED
NP-020556	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.228,- pack 2	IMS-CCR	Rel-5	CN1		APPROVED
NP-020557	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.228 and 24.229,- PCF/PDF	IMS-CCR	Rel-5	CN1		CONDITIONALLY APPROVED
NP-020558	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 1	IMS-CCR	Rel-5	CN1		APPROVED
NP-020559	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 2	IMS-CCR	Rel-5	CN1		APPROVED
NP-020560	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 3	IMS-CCR	Rel-5	CN1		APPROVED

NP-020561	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 4	IMS-CCR	Rel-5	CN1		APPROVED
NP-020562	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 5	IMS-CCR	Rel-5	CN1		APPROVED
NP-020563	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 6	IMS-CCR	Rel-5	CN1		APPROVED
NP-020564	8.1	CR PACK	CRs to Rel-5 on Work Item IMS-CCR towards 24.229,- pack 7	IMS-CCR	Rel-5	CN1		APPROVED
NP-020565	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR144r2	IMS-CCR	Rel-5	CN1		APPROVED
NP-020566	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR278r3	IMS-CCR	Rel-5	CN1		REVISED TO 0663
NP-020567	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR285r1	IMS-CCR	Rel-5	CN1		APPROVED
NP-020568	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR290r1	IMS-CCR	Rel-5	CN1		APPROVED
NP-020569	8.8	CR PACK	CR to Rel-5 on Work Item TEI5 towards 24.008,- CR716r2	TEI5	Rel-5	CN1		REVISED TO 0674
NP-020570	8.8	CR PACK	CRs to Rel-5 on Work Item TEI5 towards 23.034, 24.008, 24.011, 43.068 and 43.069	TEI5	Rel-5	CN1		PART APPROVED
NP-020571	8.9	CR PACK	CR to Rel-5 on Work Item IUFLEX towards 29.018	IUFLEX	Rel-5	CN1		APPROVED
NP-020572	9.11	WID	Interoperability and Commonality between IP Multimedia Systems using different "IP-connectivity Networks"; stage 3		Rel-6	CN1		APPROVED
NP-020573	6.4.1	Info	CN4 meeting reports after CN#17			CN4		NOTED
NP-020574	6.4.1	Info	CN4 Output LSs after CN#17			CN4		NOTED
NP-020575	7.1	CR Pack	Corrections on Camel Phase 3	Camel3		CN4		APPROVED
NP-020576	7.3	CR Pack	Corrections on GPRS Release 4 & earlier	GPRS		CN4		APPROVED
NP-020577	7.4	CR Pack	Corrections on Location Service Enhancements Release 4	LCS1		CN4		APPROVED
NP-020578	7.7	CR Pack	Corrections on Transcoder Free Operation Release 4	OoBTC		CN4		APPROVED
NP-020579	7.8	CR Pack	Corrections on Enable bearer independent CS architecture Release 4	CSSPLIT		CN4		APPROVED
NP-020580	7.9	CR Pack	Corrections on Multicall Release 4 & earlier	Multicall		CN4		APPROVED
NP-020581	7.11	CR Pack	Small corrections on technical enhancements and improvements for R97	TEI		CN4		APPROVED

NP-020582	7.11	CR Pack	Small corrections on technical enhancements and improvements for R98	TEI		CN4		APPROVED
NP-020583	7.11	CR Pack	Small corrections on technical enhancements and improvements for R99	TEI		CN4		APPROVED
NP-020584	7.11	CR Pack	Small corrections on technical enhancements and improvements for Rel-4	TEI4		CN4		APPROVED
NP-020585	7.12	CR Pack	Corrections on Signalling over IP in Core Network	SS7IP		CN4		PART APPROVED
NP-020586	8.1	CR Pack	Corrections on IP-based Multimedia Services	IMS-CCR		CN4		APPROVED
NP-020587	8.1	CR Pack	Corrections on IP-based Multimedia Services Cx/Dx-interface	IMS-CCR		CN4		APPROVED
NP-020588	8.1	CR Pack	Corrections on Charging Information; IMS Cx/Dx-interface	IMS-CCR		CN4		APPROVED
NP-020589	8.1	CR Pack	Corrections on User-Authorization-Type AVP; IMS Cx/Dx-interface	IMS-CCR		CN4		APPROVED
NP-020590	8.1	CR Pack	Corrections on Error handling in S-CSCF; IMS Cx/Dx-interface	IMS-CCR		CN4		APPROVED
NP-020591	8.1	CR Pack	SPI Corrections on IP-based Multimedia Services	IMS-CCR		CN4		APPROVED
NP-020592	8.1	CR Pack	Corrections on Error handling in HSS; IMS Sh-interface	IMS-CCR		CN4		APPROVED
NP-020593	8.1	CR Pack	Corrections on IP-based Multimedia Services Sh-interface	IMS-CCR		CN4		APPROVED
NP-020594	8.3	CR Pack	Corrections on Camel Phase 4	Camel4		CN4		APPROVED
NP-020595	8.4	CR Pack	Corrections on Location Service Enhancements Release 5	LCS1		CN4		APPROVED
NP-020596	8.8	CR Pack	Small Technical Enhancements and Improvements for Rel-5	TEI5		CN4		APPROVED
NP-020597	8.8	CR Pack	Small Technical Enhancements and Improvements for Rel-5 ETRAN-IPtrans	TEI5		CN4		APPROVED
NP-020598	8.8	CR Pack	Small Technical Enhancements and Improvements for GTP specification Rel-5	TEI5		CN4		APPROVED
NP-020599	8.8	CR Pack	Small Technical Enhancements and Improvements for MAP specification Rel-5	TEI5		CN4		APPROVED
NP-020600	9.1	WID	Updated WID for Media Gateway Control Function (MGCF) - IM Media Gateway (IMS-MGW) Mc Interface between IMS-MGW	IMS-CCR-Mn	Rel-6	CN4		APPROVED
NP-020601	9.1	WID	Updated WID for Mp interface protocol definitions	IMS-CCR-Mp	Rel-6	CN4		APPROVED
NP-020602	9.3	WID	Protocol definition for automatic distribution of MAP security keys	SEC1		CN4		REVISED TO 0666

NP-020603	9.9	CR Pack	Location Service Enhancement for Release 6	LCS2		CN4		APPROVED
NP-020604	9.2	WID	Support of the Presence Service in Core Network Signalling Protocols	PRESNC	Rel-6	CN1		REVISED TO 0679
NP-020605	9.11	WID	Enhancement of dialled service for CAMEL4 Work Item Description (WID) for TSG-CN	Camel4		Samsung Electronics , SK		NOTED
NP-020606	6.3.1	REPORT	Chairman's report from CN3			CN3 Chair		NOTED
NP-020607	6.3.1	LS PACK	LSs outgoing from CN3 between CN#17 and CN#18			CN3		NOTED
NP-020608	6.3.1	REPORT	Report of CN3#25			CN3		NOTED
NP-020609	6.3.1	REPORT	Draft Report of CN3#26			CN3		NOTED
NP-020610	9.1	DRAFT TR	TR on 'Signalling Interworking between the 3GPP Profile of SIP and non-3GPP SIP Usage [N3-021028]	IMS-CCR-IWIP	Rel-6	CN3		NOTED
NP-020611	8.5	List	Open issues for TS29.207, Version 5.0.0	e2eQoS	Rel-5	CN3		NOTED
NP-020612	8.5	List	Open issues for TS29.208 Version 5.0.0	e2eQoS	Rel-5	CN3		NOTED
NP-020613	7.3	CR PACK	CRs to TS 09.61 and 29.061 back to R97 on GPRS	GPRS	<=Rel-4	CN3		APPROVED
NP-020614	7.11	CR PACK	CRs to TS 29.061 back to R99 on IPv6	TEI	<=Rel-4	CN3		APPROVED
NP-020615	7.11	CR PACK	CRs to TS 29.007 back to R99 on CS multimedia	TEI	<=Rel-4	CN3		APPROVED
NP-020616	7.8	CR PACK	CRs to TS 29.007 and TR 23.910 back to Rel-4 on CSSPLIT	CSSPLIT	<=Rel-4	CN3		APPROVED
NP-020617	8.9	CR PACK	CRs to TS 43.010, TR 23.910, TS 24.022, 29.007, 27.001, 44.021 and 48.020 on CS Data	CS Data	Rel-5	CN3		APPROVED
NP-020618	8.7	CR PACK	CR to TS 23.172 on SCUDIF	SCUDIF	Rel-5	CN3		APPROVED
NP-020619	8.7	CR PACK	CRs to TS 23.172, 27.001 and 29.007 on SCUDIF	SCUDIF	Rel-5	CN3		APPROVED
NP-020620	8.5	CR PACK	CRs to TS 29.207 and TS 29.208 on RTCP headers	e2eQoS	Rel-5	CN3		APPROVED
NP-020621	8.5	CR PACK	CRs to TS 29.207 on updates to the Go PIB	e2eQoS	Rel-5	CN3		APPROVED
NP-020622	8.5	CR PACK	CRs to TS 29.207 and TS 29.208 on DIFFSERV	e2eQoS	Rel-5	CN3		APPROVED
NP-020623	8.5	CR PACK	CRs to TS 29.207 and TS 29.061 on error handling in the GGSN	e2eQoS	Rel-5	CN3		APPROVED

NP-020624	8.5	CR PACK	CRs to TS 29.207 and TS 29.208 on PCF / PDF terminology	e2eQoS	Rel-5	CN3		CONDITIONALLY APPROVED
NP-020625	8.5	CR PACK	CRs to TS 29.207 on various e2EQoS topics	e2eQoS	Rel-5	CN3		APPROVED
NP-020626	8.5	CR PACK	CRs to TS 29.208 on various e2EQoS topics	e2eQoS	Rel-5	CN3		APPROVED
NP-020627	8.5	CR PACK	CRs to TS 27.060 on various e2EQoS topics	e2eQoS	Rel-5	CN3		APPROVED
NP-020628	9.1	CR PACK	CRs to TS 29.163 on IMS-CCR-IWCS	IMS-CCR-IWIP	Rel-6	CN3		WITHDRAWN
NP-020629	7.3	CR PACK	CRs to R99 (with mirror CRs) on Work Item GPRS towards 24.008	GPRS	R99	CN1		APPROVED
NP-020630	7.6	CR PACK	CRs to R99 (with mirror CRs) on Work Item GSM/UMTS interworking towards 23.009	GSM/UMTS interworking	R99	CN1		APPROVED
NP-020631	9.1	DISCUSSION DOC	A proposal for baseline SIP-BICC/ISUP interworking text	IMS2	Rel-6	LM Ericsson		NOTED
NP-020632	5.3	LS IN	In response to your views and requirements concerning SIP-ISUP/BICC interworking [COM11-LS10]	IMS2	Rel-6	ITU-T SG11		NOTED
NP-020633	8.1	DISCUSSION DOC	Download of local emergency numbers		Rel-5	Ericsson		NOTED
NP-020634	8.1	CR	Support of comp=sigcomp parameter	IMS-CCR	Rel-5	Dynamicsoft, Ericsson, Nokia,	24.229	APPROVED
NP-020635	8.1	CR	SDP media policy rejection	IMS-CCR	Rel-5	Dynamicsoft, Ericsson,	24.229	REVISED TO 0668
NP-020636	11	CR	CR 012 to 21.101: "Correction to list of specs"			JMM, MCC	21.101	NOTED
NP-020637	11	CR	CR 009 to 21.102: "Correction to list of specs"			JMM, MCC	21.102	NOTED
NP-020638	11	CR	CR 002 to 21.103: "Correction to list of specs"			JMM, MCC	21.103	NOTED
NP-020639	11	CR	CR 009 to 01.01: "GSM Release 1999 specifications.			JMM, MCC	01.01	WITHDRAWN
NP-020640	11	CR	CR 008 to 41.102: "GSM Release 4 Specifications"			JMM, MCC	41.102	WITHDRAWN
NP-020641	11	CR	CR 002 to 41.103: "Correction to list of specs"			JMM, MCC	41.103	NOTED
NP-020642	11	CR	CR 010 to 01.01: "List of R99 work items"			JMM, MCC	01.01	NOTED
NP-020643	11	CR	Specs status list prior to TSGs#18			JMM, MCC	21.101	NOTED
NP-020644	11	LIST	Spec numbers and titles			JMM, MCC		NOTED

NP-020645	4.3	REPORT	IETF status report			CN Chair		NOTED
NP-020646	5.3	LS IN	LIAISON RESPONSE ON SIGNALLING REQUIREMENTS FOR IP-QOS			ITU-T SG11		NOTED
NP-020647	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.008	IMS-CCR	Rel-5	CN1		REVISED TO 0670
NP-020648	5.2	LS IN	Subscriber and Equipment Trace concepts and requirements [S5-028626]			SA5		NOTED
NP-020649	5.3	LS IN	Update on ITU-T SSG Vision WorkUpdate of Q.1/SSG's Work Activities In The Area of IMT-2000 and Beyond Vision [SSG – LS			ITU-T		NOTED
NP-020650	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		REVISED TO 0653
NP-020651	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		REVISED TO 0654
NP-020652	8.1	CR	CR716r3 to 24.008 on Downloading of local emergency numbers to the mobile station		Rel-5	Ericsson, Lucent		Replaced by 0674
NP-020653	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		REVISED TO 0675
NP-020654	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		REVISED TO 0676
NP-020655	5.2	LS IN	LS on CN related work on 3GPP-WLAN Interworking [S2-023649]			SA2		NOTED
NP-020656	5.2	LS IN	IMS Access via SIM in 3G UEs [s2-023677]			SA2		NOTED
NP-020657	5.2	LS IN	SA2 response to "Response to IETF LS on Interoperability Issues and SIP in IMS" [S2-023678rev3]			SA2		NOTED
NP-020658	9.11	LS IN	LS on Enhanced Dialled Services [S1-022383]			SA1		NOTED
NP-020659	10.5	CALENDAR	2003 Meeting Schedule for TSG_CN and CN WGs			MCC		REVISED TO 0681
NP-020660	5.2	LS OUT	LS OUT TO SA1, SA2 on SS barring of SMs transfer over GPRS			CN		REVISED TO 0672
NP-020661	5.3	LS OUT	to SDOs on ITU-T Rel-5 content			CN ITU-T Ad Hoc		REVISED TO 0673
NP-020662	9.1	DISCUSSION DOC	Handling of IMS/CS Interworking			Nortel		NOTED
NP-020663	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR278r4	IMS-CCR	Rel-5	CN1		POSTPONED until Thurs morn.
NP-020664	7.12	CR	Corrections on Signalling over IP in Core Network	SS7IP		CN4		APPROVED
NP-020665	8.1	DISCUSSION DOC	Implementation sequence for Crs to 24.229			CN1 Chair		NOTED

NP-020666	9.1	WID	Protocol definition for automatic distribution of MAP security keys	SEC1		CN4		REVISED TO 0680
NP-020667	8.1	DISCUSSION DOC	IMS Open items list for CN1	IMS	Rel-5	Dynamicsoft		NOTED
NP-020668	8.1	CR	SDP media policy rejection	IMS-CCR	Rel-5	Dynamicsoft, Ericsson,	24.229	CONDITIONALLY APPROVED
NP-020669	8.1	LS OUT	LS to IETF			CN		REVISED TO 0678
NP-020670	8.1	CR PACK	CR to Rel-5 on Work Item IMS-CCR towards 24.008	IMS-CCR	Rel-5	CN1		APPROVED
NP-020671		LS OUT	LS OUT TO SA1 - guidance on subscriber media handling			CN		REVISED TO 0677
NP-020672	5.2	LS OUT	LS on SS barring for SMS transfer over GPRS			CN		APPROVED
NP-020673	5.3	LS OUT	to SDOs on ITU-T Rel-5 content			CN ITU-T Ad Hoc		FORWARDED TO THE ITU-T
NP-020674	8.8	CR PACK	CR to Rel-5 on Work Item TEI5 towards 24.008,- CR716r2	TEI5	Rel-5	CN1		APPROVED
NP-020675	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		APPROVED
NP-020676	8.8	CR	Updated Late Entry CRs		Rel-5	Nortel, Siemens, Kapsch, SAGEM		APPROVED
NP-020677		LS OUT	LS OUT TO SA1 - guidance on subscriber media handling			CN		APPROVED
NP-020678	8.1	LS OUT	Liaison statement on Interoperability Issues and SIP in IMS			CN		APPROVED
NP-020679	9.2	WID	Support of the Presence Service in Core Network Signalling Protocols	PRESNC	Rel-6	CN1		APPROVED
NP-020680	9.1	WID	Protocol definition for automatic distribution of MAP security keys	SEC1	Rel-6	CN4		APPROVED
NP-020681	10.5	CALENDAR	2003 Meeting Schedule for TSG_CN and CN WGs			MCC		NOTED

ANNEX C. TSG CN meeting Participants List

Title	Firstname	Surname	Role	Organization	Country	Status	Partner
Mr.	Peter	Adams		BT Group Plc	GB	3GPPMEMBER	ETSI
Mr.	Andrew	Allen		dynamicsoft Inc.	US	3GPPMEMBER	T1
Mr.	Niels Peter Skov	Andersen		MOTOROLA A/S	DK	3GPPMEMBER	ETSI
Mr.	Arturo	Arreaga		Rogers Wireless Inc.	CA	3GPPMEMBER	T1
Mr.	Hyo Chul	Bang		Samsung Electronics Co., Ltd	KR	3GPPMEMBER	TTA
Mr.	Nigel	Barnes		MOTOROLA Ltd	GB	3GPPMEMBER	ETSI
Mr.	Nigel. H	Berry		Lucent Technologies N. S. UK	GB	3GPPMEMBER	ETSI
Mr.	David	Boswarthick	SECRETARY	ETSI Secretariat	FR	3GPPORG_REP	ETSI
Mr.	Richard	Brook		SAMSUNG Electronics	GB	3GPPMEMBER	ETSI
Mr.	Ian	Doig		MOTOROLA S.A.S	FR	3GPPMEMBER	ETSI
Mr.	Keith	Drage		Lucent Technologies N. S. UK	GB	3GPPMEMBER	ETSI
Mr.	François	Dronne		ORANGE FRANCE	FR	3GPPMEMBER	ETSI
Mr.	Ed	Ehrlich		Nokia Telecommunications Inc.	US	3GPPMEMBER	T1
Mr.	Jan	Ellsberger		Ericsson Korea	KR	3GPPMEMBER	TTA
Mr.	Rouzbeh	Farhoumand		Nippon Ericsson K.K.	JP	3GPPMEMBER	ARIB
Mr.	Chris	Fitzgerald		DISA	US	3GPPGUEST	T1
Mr.	Wolfgang	Fleischer		Megisto Systems Inc.	US	3GPPMEMBER	ETSI
Mr.	Marc	Grant		Cingular Wireless LLC	US	3GPPMEMBER	T1
Mr.	Francesco	Grilli		QUALCOMM EUROPE S.A.R.L.	FR	3GPPMEMBER	ETSI
Mr.	Mark	Harrison		Motorola Inc.	US	3GPPMEMBER	T1
Mr.	Stephen	Hayes	Chairman	Ericsson Inc.	US	3GPPMEMBER	T1
Mr.	Ludwig	Hiebinger		SIEMENS AG	DE	3GPPMEMBER	ETSI
Mr.	Hannu	Hietalahti		NOKIA Corporation	FI	3GPPMEMBER	ETSI
Mr.	Tomas	Holmström		Nippon Ericsson K.K.	JP	3GPPMEMBER	TTC
Mr.	Kazumasa	Hori		NTT DoCoMo Inc.	JP	3GPPMEMBER	TTC
Mr.	Andrew	Howell		MOTOROLA GmbH	DE	3GPPMEMBER	ETSI
Mr.	Dieter	Jacobsohn		T-MOBILE DEUTSCHLAND	DE	3GPPMEMBER	ETSI
Mr.	Per Johan	Jorgensen		ETSI Secretariat	FR	3GPPORG_REP	ETSI
Mrs.	Andrijana	Jurisic		ETSI Secretariat	FR	3GPPORG_REP	ETSI
Ms.	Susanna	Kallio		Nokia Korea	KR	3GPPMEMBER	TTA

Mr.	Mikko	Kanerva		NOKIA Corporation	FI	3GPPMEMBER	ETSI
Mrs.	Soo Jin	Kim		SK Telecom	KR	3GPPMEMBER	TTA
Mr.	Norbert	Klehn		SIEMENS AG	DE	3GPPMEMBER	ETSI
Mr.	Kimmo	Kymalainen		ETSI Secretariat	FR	3GPPORG_REP	ETSI
Miss	Sharon	Lim		HEWLETT-PACKARD France	FR	3GPPMEMBER	ETSI
Dr.	Hashem	Madadi		3	GB	3GPPMEMBER	ETSI
Mr.	Steve	Mecrow		mmO2 plc	GB	3GPPMEMBER	ETSI
Dr.	Ard-Jan	Moerdijk		ERICSSON L.M.	SE	3GPPMEMBER	ETSI
Mr.	Hiroshi	Nakamura		NTT DoCoMo Inc.	JP	3GPPMEMBER	TTC
Mr.	Akishige	Noda		Fujitsu Limited	JP	3GPPMEMBER	TTC
Mr.	Keijo	Palviainen		NOKIA Corporation	FI	3GPPMEMBER	ETSI
Mr.	Ian David Chalmers	Park	ViceChairman	VODAFONE Group Plc	GB	3GPPMEMBER	ETSI
Mr.	Joong gunn	Park		SK Telecom	KR	3GPPMEMBER	TTA
Mr.	Steffen	Ring		MOTOROLA JAPAN LTD	JP	3GPPMEMBER	ARIB
Mr.	Nick	Sampson		ORANGE PCS LTD	GB	3GPPMEMBER	ETSI
Dr.	Gary	Schlanger		AT&T Wireless Services, Inc.	US	3GPPMEMBER	T1
Mr.	Peter	Schmitt		SIEMENS AG	DE	3GPPMEMBER	ETSI
Mr.	Iain	Sharp		NORTEL NETWORKS (EUROPE)	GB	3GPPMEMBER	ETSI
Mr.	Sajid	SOORMALLY		ALCATEL S.A.	FR	3GPPMEMBER	ETSI
Mr.	Kunihiko	Taya	ViceChairman	NEC Corporation	JP	3GPPMEMBER	TTC
Mr.	Stefan	Toth		ERICSSON L.M.	SE	3GPPMEMBER	ETSI
Mr.	Jose Antonio	Ubeda		TELEFONICA de España S.A.	ES	3GPPMEMBER	ETSI
Mr.	Hans	van der Veen		NEC EUROPE LTD	GB	3GPPMEMBER	ETSI
Mr.	XiaoYun	Wang		China Mobile Com. Corporation	CN	3GPPMEMBER	CWTS
Mr.	Peter	Wild		Vodafone D2 GmbH	DE	3GPPMEMBER	ETSI
Mr.	Martin	Winau		TEKTRONIX GmbH & Co KG	DE	3GPPMEMBER	ETSI
Dr.	Albert	Yuhan		Samsung Electronics Co., Ltd	KR	3GPPMEMBER	TTA
Mr.	Adrian	Zoicas		ETSI Secretariat	FR	3GPPORG_REP	ETSI

History

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up to 10th Dec 2002	DRAFT v0.0.1, 002, 003 distributed in meeting. v0.0.3 send to TSG_CN Officials for comments
10th December 2002	DRAFT v1.0.0 Presented to TSG-SA#18 (SP-020804)
	DRAFT v1.0.0 dispatched to the TSG-CN mail exploder for comments. Comments to be addressed to: Mr. David Boswarthick, 3GPP TSG CN MCC Support MCC - ETSI Secrétariat Tel :+33 (0)4 92 94 42 78 E-mail: david.boswarthick@ETSI.fr A deadline of 2 weeks was given to the CN delegates for e-mail comments on the draft report. **E-mail comments back by xxx**
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