3GPP TSG CN Plenary Meeting #17   **NP-020333**
Biarriz, FRANCE, 4th–6th September 2002

Source:	**CN4 Chairman**
Title:	**3GPP TSG CN WG4 Status Report**
Agenda item:	**6.4.1**
Document for:	**INFORMATION**

1   Introduction

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CN4 have had only one meeting since the last CN plenary meeting: CN4 #15 was held in Helsinki, Finland, on 29 July – 2 August, kindly hosted by Elisa, Ficora, the Finnet Group, Nokia and Sonera; I hope they will forgive me if I think of them as the "Finnish Friends of 3GPP"! As usual the vice chairmen, Peter Schmitt (Siemens) and Toshiyuki Tamura (NEC), earned their keep; we had to have several parallel sessions to deal with the large number of input documents, and the vice-chairmen looked after one of the series of parallel sessions. Kimmo Kymäläinen (MCC) has asked me not to be extravagant in my praise of his support, but without people like him the job of a WG chairman would be a lot more difficult! The contributors were very active: allowing for revisions withdrawals, there were about **300** documents tabled, and we broke through the "1000 barrier" of documents this year without much slackening of pace (yes, I know that CN1 are well ahead of us, but they have had more meetings…). We agreed **96** CRs (plus **6** more CRs approved by email correspondence after the meeting), **14** liaison statements and **1** work item description. There were **35** participants representing **26** companies.

The draft meeting report of CN4 #15 was distributed to the CN4 email list (3GPP_TSG_CN_WG4@list.etsi.fr) for approval; it is still under review, but it is provided in Tdoc NP-020441 for information. The CN4 outgoing liaison statements are provided in Tdoc NP-020442 for information.

2   Management summary

After the big push at the last meeting to prepare our outputs for Release 5, one might have expected the pace to become less frantic, but we have been very busy tidying up the loose ends. We have also agreed the first change requests against the GTP specification to produce version 6, but CN may decide to put on hold the creation of this new version.

SA2 have asked CN4 to start work on defining the protocol to be used on the Lr interface (GMLC – GMLC). We decided to endorse SA2's recommendation that the protocol should be an extension of that developed by LIF for the Le interface. Further, CN4 recommend that the work of adapting the protocol for the Le interface for use on the Lr interface should be done in LIF; CN will need to decide how this development process should be managed, in order to provide visibility of progress to CN.

Several open issues on the specifications of the protocols for the Cx/Dx and Sh interfaces have been resolved; in particular, the definitions of location information and subscriber state for transfer from the HSS to the SIP application server have been agreed, and the CRs are presented here for approval.

One area of concern is the status of vendor-specific (as far as IETF is concerned, 3GPP are a vendor) command codes in the Diameter protocol. Following the strong pressure from one of the IETF Area Directors to remove the possibility for vendor-specific Diameter **applications**, we seem to be moving towards a compromise which would allow 3GPP to use vendor-specific Diameter **command codes** taken from an "experimental" range. This is seen as less than ideal, but we can live with it (until the lease on the "experimental" command codes expires…).

The CRs to 29.002 and 23.003 which are required as part of the package for CAMEL control of IMS services were revised to base them on the current versions of the specifications (moving goalposts…); they are presented again for approval. To complete the package we also have a CR to 23.008. This completes the work in CN4 on CAMEL control of IMS.

After some long discussions in CN2, which were continued into a joint session with CN4, agreement has been reached on a mechanism to support partial implementations of CAMEL phase 4. CN2 will present the CR to the CAMEL phase 4 stage 2; CN4 present the companion CRs to 29.002 and 23.008.

We have prepared the change requests for two possible solutions for Network Sharing. These change requests are in three packages:

- One package contains the CR to 23.003 which is common to both solutions. A companion CR to 23.009 will be presented by CN1; it has been endorsed by CN4.

- A second package contains the CRs to 29.002 and 29.010 for the solution which is based on transport of the SNA access information as parameters in MAP messages. This solution is independent of any CRs from groups outside CN.

- The third package contains a single CR to 29.010 for the solution which is based on transport of the SNA access information encapsulated in BSSAP signalling. This is the solution preferred by CN4, but it depends on GERAN approving a linked CR to 48.008. At the time of drafting this report, the GERAN meeting where this CR would be discussed lies in the future.

CN will be asked to approve the first package, and to choose between the second and third packages, in the light of the decision in GERAN on the linked CR to 48.008. To forestall the inevitable question, the transport of SNA access information for inter-MSC handover between 3G access networks is based on encapsulation in RANAP signalling; RAN have already approved the necessary CRs to their specifications. These CRs complete the work in CN4 on Network Sharing.

The CRs to align our specifications (23.153, 23.205, 29.002 and 29.010) with other specifications for GERAN Iu mode are presented for approval. This completes the work in CN4 on GERAN Iu mode.

Following on from the approval of CR 29.007-048r1 in CN #16, we agreed CRs to 23.018 and 23.083 to replace the explicit definition of procedures to determine the basic service for an MT call with references to 29.007. This required a linked CR to 29.007 to achieve full alignment between the three specifications; the CR (053) to 29.007 was agreed in CN3, and they will present it for approval in this meeting.

We agreed several Release 5 corrections to align the specification set for Global Text Telephony.

Following the discussion on the CN1 status report to CN #16, we agreed some additional text to 29.002 to give a "health warning" to operators not to send the error cause from the HLR to the SGSN which would trigger the SGSN to send cause #14 to the MS if the SGSN is in the HLR operator's network.

We have taken careful note of the guidance from CN #16, and applied a stricter filter to proposals for corrections to Release 4 and earlier. As a result, we have several change requests for corrections to Release 5, without the corresponding changes to Release 4 and earlier.

We have at last been able to complete the change requests to 24.080 and 29.002, to use the 1997 version of the ASN.1 specifications from ITU-T, rather than the 1988 version, which is now obsolete.

We agreed two corrections (with their mirrors to Release 5) for the Release 4 Bearer Independent Architecture specifications.

GPRS attracted a total of seven corrections to Release 99, each with mirrors to Release 4 and Release 5.

The handling of codecs at inter-MSC relocation/handover was a difficult topic, which was discussed at length both in a joint session with CN1 and later in CN4. In the end we were able to reach agreement on one solution (somewhat less than optimal, but with low impact on existing implementations) for Release 99 and Release 4; this solution required changes to 23.009, which were endorsed by CN4, and will be presented by CN1 for approval. A more comprehensive solution, which requires changes to both 23.009 and 29.002, was agreed by email correspondence for Release 5.

We have agreed on the way forward to deal with the expected arrival of the M3UA specification as a standards track RFC. Currently, 29.202 includes draft 7 of the M3UA RFC as a normative annex, but when the RFC is published we will need to cite it as a normative reference. However we believe that simply citing it as a normative

reference would impose two many unnecessary requirements in 29.202, so we plan to define which of the requirements of the M3UA RFC are applicable for 29.202. This work is expected to be concluded in time for CRs to be presented to CN #18.

The subject of bearer modification when IP (as opposed to AAL2) transport is used proved very contentious. Several contributions were received, but it was not possible to reach consensus, despite a long discussion during the meeting and an ad hoc discussion moderated by one of the vice-chairmen.

Subscriber data handling for the Call Deflection supplementary service attracted the only CR to be agreed for GSM (Release 98). We also agreed another essential correction for the Explicit Call Transfer service for Release 4.

The interworking of (real!) MAP signalling with access signalling for location updating was missing from 29.010 for Release 99; we have agreed a correction to this omission, with mirror CRs for Releases 4 and 5.

Kimmo Kymäläinen decided that we should do some housekeeping on our list of rapporteurs for CN4 specifications. The current list of rapporteurs is now separated too far for comfort from reality. Kimmo started off with a gentle reminder of the current situation, and an invitation for volunteers to come forward to fill the vacancies, but the response has been rather underwhelming, so I shall have to take my thumbscrews to the next CN4 meeting…

3 Questions for advice and decision

3.1 Production of 3GPP TS 29.060 version 6.0.0

CN4 approved two CRs for Release 6 to TS 29.060 (i.e. these are intended to be implemented in Release 6 but not in Release 5). CN are asked to decide whether these CRs should be implemented to cause the creation of TS 29.060 v6.0.0 immediately after CN #17, or whether the CRs should be put on hold for implementation later.

3.2 Development of the protocol for the Lr interface

CN are asked to approve CN4's recommendation that the protocol for the Lr interface should be developed in LIF, by adapting the protocol for the Le interface. CN will also need to decide how the development process should be managed.

4 Change Requests

CN4 produced 102 Change Requests which are submitted for ratification. An overview of the CR packages is provided in Table 1.

Table 1: CRs submitted by CN4 for approval at CN #17 (sorted by work item)

Tdoc	Agenda item	Subject
NP-020443	7.3	23 CRs on GPRS
NP-020444	7.7	4 CRs on TrFO
NP-020463	7.8	6 CRs on Bearer Independent CS architecture
NP-020445	7.11	2 CRs on TEI For Release 4
NP-020446	7.11	6 CRs on TEI for Release 99
NP-020447	7.11	3 CRs on Addition of an error mapping table for MAP Update Location operation
NP-020448	7.11	4 CRs on TEI for Release 98
NP-020449	8.1	10 CRs on Provisioning of IP-based multimedia services (Cx/Dx protocol)
NP-020450	8.1	8 CRs on Provisioning of IP-based multimedia services (Sh protocol)
NP-020451	8.1	4 CRs on Provisioning of IP-based multimedia services (CAMEL control)
NP-020452	8.3	3 CRs on CAMEL phase 4 (general corrections)
NP-020453	8.3	2 CRs on CAMEL phase 4 (partial implementation)
NP-020460	8.4	1 CR on Location services
NP-020454	8.8	12 CRs on TEI for Release 5
NP-020455	8.9	1 CR on Shared Networks: independent of transport method for SNA access information
NP-020456	8.9	2 CRs on Shared Networks: SNA access information transported at MAP level
NP-020457	8.9	1 CR on Shared Networks: SNA access information transported at MAP level
NP-020458	8.8	4 CRs on GERAN Iu mode
NP-020459	8.9	5 CRs on Global Text Telephony
NP-020461	9.9	3 CRs on TEI for Release 6

4.1 Release 4 (and earlier) CRs

Corrective CRs to Release 4 and earlier were agreed as essential corrections, unless there is an indication to the contrary.

4.1.1 GPRS (NP-020443)

NP-020443 contains 3 corrective CRs to the Numbering and Addressing stage 2 specification: one to Release 99, with mirror CRs for Release 4 & Release 5. It also contains 20 corrective CRs to the GTP specification: 6 to Release 99, each with mirror CRs for Release 4 & Release 5, and one to Release 4, with a mirror to Release 5.

CR 23.003-046r2 (R99, with Rel-4 mirror in CR 23.003-047r2 and Rel-5 mirror in CR 23.003-048r3) removes an ambiguity in the definition of how to derive a URI from the Routing Area Identity.

CR 29.060-326r1 (R99, with Rel-4 mirror in CR 29.060-327r1 and Rel-5 mirror in CR 29.060-328r1) defines the way in which the RANAP cause value is encoded for transmission in GTP. These CRs are linked to CR 25.413-507r1 (R99, with Rel-4 mirror in CR 25.413-508r1 and Rel-4 mirror in CR 25.413-509r1), which have been agreed in RAN3 and will be presented to RAN #17 for approval.

CR 29.060-330r1 (R99, with Rel-4 mirror in CR 29.060-331r1 and Rel-5 mirror in CR 29.060-332r1) defines a dummy value to be used to populate the PDP Context Identifier IE after an inter-SGSN RAU using GTP v0.

CR 29.060-334 (R99, with Rel-4 mirror in CR 29.060-335 and Rel-5 mirror in CR 29.060-336) removes an internal inconsistency in the definition of the length of the PDP Address.

CR 29.060-337 (R99, with Rel-4 mirror in CR 29.060-338 and Rel-5 mirror in CR 29.060-339) removes an internal inconsistency in the definition of the length of PDCP sequence numbers.

CR 29.060-340r1 (R99, with Rel-4 mirror in CR 29.060-341r1 and Rel-5 mirror in CR 29.060-342r1) allows the Forward Relocation Response message to omit the RAB setup information if no PDP contexts are being transferred.

CR 29.060-345 (R99, with Rel-4 mirror in CR 29.060-346 and Rel-5 mirror in CR 29.060-347) introduces a GTP cause code to map to the access signalling cause code "PDP context without TFT already activated".

CR 29.060-349 (Rel-4, with Rel-5 mirror in CR 29.060-324r1) replaces the reference to an obsolete charging specification with a reference to the correct charging specification. This charging specification (32.215) was introduced in Release 4, so the reference in 29.060 for R99 is correct.

4.1.2 TrFO (NP-020444)
NP-020444 contains 4 corrective CRs to the TrFO stage 2 specification: 2 to Release 4, each with a mirror CR for Release 5.

CR 23.153-040 (Rel-4, with Rel-5 mirror in CR 23.153-041) adds the missing definition of the procedure to determine the initial bit rate to be used at call establishment.

CR 23.153-042r1 (Rel-4, with Rel-5 mirror in CR 23.153-043r1) defines the rules for negotiating a compatible codec mode between peers, one of which supports UMTS AMR and the other of which supports UMTS AMR 2

4.1.3 Bearer Independent CS Architecture (NP-020463)
NP-020463 contains 6 corrective CRs to the Bearer Independent CS Architecture stage 2 & 3 specifications: 2 to Release 4, each with a mirror CR for Release 5.

CR 23.205-032r1 (Rel-4, with Rel-5 mirror in CR 23.205-033r1) corrects errors in the names of the messages which trigger inter-MSC handover.

CR 29.202-002r1 (Rel-4, with Rel-5 mirror in CR 29.202-003r1) refers to a new RFC for the calculation of the checksum for SCTP.

CR 29.232-043r1 (Rel-4, with Rel-5 mirror in CR 29.232-044r1) adds a package to allow inter-MSC relocation of circuit switched data calls.

4.1.4 TEI (Release 4) (NP-020445)
NP-020445 contains 2 corrective CRs to the Explicit Call Transfer stage 2 specification: 1 to Release 4, with a mirror CR for Release 5.

CR 23.091-004 (Rel-4, with Rel-5 mirror in CR23.091-005) corrects an error in the treatment of the Service Interaction Indicator for Explicit Call Transfer.

4.1.5 TEI (Release 99) (NP-020446 & NP-020447)
NP-020446 & NP-020447 contain a total of 9 corrective CRs to various specifications: 3 to Release 99, each with mirror CRs for Release 4 & Release 5.

CR 23.081-004 (R99, with Rel-4 mirror in CR 23.081-005 and Rel-5 mirror in CR 23.081-006) adds a call to the procedure which provides the reason for the CLI being restricted. **This CR is a remedy for the incorrect implementation of a previously approved CR**.

CR 29.002-477 (R99, with Rel-4 mirror in CR 29.002-478 and Rel-5 mirror in CR29.002-471r1) removes ambiguities in the dialogue structure for retrieval of authentication vectors between VLRs at location updating.

CR 29.010-057r1 (R99, with Rel-4 mirror in CR 29.010-058r1 and Rel-5 mirror in CR 29.010-059r1) provides the mapping between the MAP signalling VLR<->HLR and the access signalling at location updating. This CR was approved by email correspondence after CN4 #15, but some minor concerns were raised, and Orange France, Ericsson and Lucent will present revised versions to answer those concerns, as a direct company input to CN plenary, in NP-020396, NP-020397 & NP-020398.

4.1.6 TEI (Release 98) (NP-020448)
NP-020448 contains 4 corrective CRs to the stage 2 specification for subscriber data handling: one to Release 98, with mirror CRs for Release 99, Release 4 & Release 5.

CR 03.16-A045 (R98, with R99 mirror in CR 23.016-027, Rel-4 mirror in CR 23.016-028 and Rel-5 mirror in CR 23.016-029) adds the missing definition of Call Deflection subscriber data to the stage 2 for subscriber data handling.

4.2 Release 5 CRs

4.2.1 Provisioning of IP-based multimedia services(Cx/Dx protocol) (NP-020449)
NP-020449 contains 10 corrective CRs, mostly to the protocol specifications for the Cx and Dx interfaces.

CR 23.008-055r1 defines the Subscribed Media parameter in the data stored in the HSS.

CR 29.228-001r2 clarifies the procedure for implicit registration.

CR 29.228-002r1 clarifies the procedure for handling a query on the user registration status.

CR 29.228-003r1 clarifies the procedure for HSS-initiated update of the user profile.

CR 29.228-004r2 clarifies the handling of the MAR command.

CR 29.228-005r1 allows the possibility of user registration without asking for authentication vectors.

CR 29.228-006r2 defines the Subscribed Media parameter in the information transferred between the HSS and the S-CSCF.

CR 29.229-001 adds a reference to the new RFC which defines the procedure for calculating the SCTP checksum.

CR 29.229-003 corrects an error in the format of the charging address.

CR 29.229-005 corrects an error in the definition of the MAA command.

4.2.2 Provisioning of IP-based multimedia services(Sh protocol) (NP-020450)
NP-020450 contains 8 corrective CRs to the protocol specifications for the Sh interface.

CR 29.328r1 corrects some misalignments in the subclause numbering and internal references.

CR 29.328-002r1 corrects the description of the handling of subscription to notification of changes in subscriber profile information.

CR 29.328-003r1 adds the definition of subscriber location information.

CR 29.328-004r2 adds the definition of subscriber state.

CR 29.328-005 adds the required reference to the XML schema for the Sh interface protocol.

CR 29.328-006 adds a mechanism for backwards-compatible extensions to the XML schema for the Sh interface protocol.

CR 29.329-002r1 defines the procedure for cancelling subscription to notification of changes in subscriber profile information.

CR 29.329-003r1 adds the possibility for the SIP application server to define the domain for which information is requested, and to request the retrieval of current location information.

4.2.3 Provisioning of IP-based multimedia services(CAMEL control) (NP-020451)

NP-020451 contains 4 CRs to various specifications to support CAMEL control of IMS services. 3 of these CRs were presented to CN #16 for approval, but they were postponed because the stage 2 & stage 3 (CAP) specifications were not ready for approval; they have been revised to base them on the latest versions of the specifications to which they are directed. Because of some confusion with the status of the CRs which were presented to CN #16 and then postponed, new CR numbers have been allocated for the CRs against 23.003 and 29.002. The other CR is presented for the first time to CN #17.

CR 23.003-054 defines a subsystem number for the IM-SSF, to support SS7 signalling between the IM-SSF and other entities.

CR 23.008-054r1 defines the subscriber data to be stored in location registers for CAMEL control of IMS services.

CR 29.002-482 defines the additions to the MAP protocol required to support CAMEL control of IMS services.

CR29.002-481 defines further additions to the MAP procedures for Any Time Modification of subscriber data to support CAMEL control of IMS services.

4.2.4 CAMEL phase 4 (general corrections) (NP-020452)

NP-020452 contains 3 corrective CRs for CAMEL phase 4 to various specifications.

CR 23.008-057 adds the possibility for the HLR and VLR to store some CAMEL subscription Information specific to CAMEL phase 4.

CR 23.018-111 corrects an error in the setting of a status variable used for Call Party Handling.

CR29.002-480 removes the Charging Notification feature from the list of supported CAMEL phase 4 subsets; this is to align with the decision taken in SA1 that this feature shall not be part of CAMEL phase 4.

4.2.5 CAMEL phase 4 (partial implementation) (NP-020453)

NP-020453 contains 2 CRs to support the possibility of partial implementation of CAMEL phase 4 in serving nodes. These CRs are linked to CRs on the same subject from CN2.

CR 23.008-056r1 defines the changes to the data stored in location registers to support the possibility of partial implementation of CAMEL phase 4 in serving nodes.

CR 29.002-479r2 defines the MAP changes required to support the possibility of partial implementation of CAMEL phase 4 in serving nodes.

4.2.6 Location services (NP-020460)

NP-020460 contains 1 corrective CR to the definition of interworking between MAP and access signalling.

CR 29.010-067 clarifies the parameter mapping between the MAP protocol and access signalling protocols in the Location Acquisition procedure.

4.2.7 TEI (Release 5) (NP-020454)

NP-020454 contains 9 corrective CRs to various specifications.

CR 23.003-053 tidies up the annex of 23.003 which defines the procedure to calculate the Luhn check digit for the IMEI, to align it with the restructuring of the IMEI (approved in CN #16). An error in this CR has been noted after it was approved by CN4. CR 23.003-053r1 corrects this error; it is submitted by the original source company (Vodafone) as a direct input to CN plenary in NP-020419.

CR 23.018-109r1 and CR 23.083-010 replace the explicit definition of procedures to determine the basic service for an MT call with references to 29.007. These CRs are linked to each other, and to CR 29.007-053r2, which will be presented by CN3.

CR 23.018-110 corrects some minor errors in the SDL definition of the process in the MSC to handle an incoming call.

CR 24.080-019r3 replaces the references to the obsolete (1988) ASN.1 definitions in ITU-T recommendations with references to the current (1997) ITU-T recommendations.

CR 24.080-024 corrects errors in subclause numbers for internal references.

CR 29.002-437r2 replaces the references to the obsolete (1988) ASN.1 definitions in ITU-T recommendations with references to the current (1997) ITU-T recommendations.

CR 29.002-463 clarifies that Call Deflection is one of the group of Call Forwarding services.

CR 29.002-470r1 adds a "health warning" to HLR operators that they should avoid sending a MAP error cause which would provoke an SGSN in the HLR operator's network to send cause #14 to the MS.

CR 29.002-473r1 defines the codec information to be transferred between MSCs on inter-MSC handover. This CR is linked to CR 23.009-073r5, which will be presented by CN1.

CR 29.060-325r2 adds the possibility to supply both IPv4 and IPv6 address information in the RAB Setup Information in the Forward Relocation Response message.

CR 29.060-329r1 adds the Protocol Configuration Options to the information transferred in the procedure to update a PDP context when this procedure is triggered by a request from the MS.

4.2.8 Shared Networks (NP-020455, NP-020456 & NP-020457)

NP-020455, NP-020456 & NP-020457 contain a total of 4 CRs to various specifications for two possible implementations of shared networks.

CR 23.003-050 (in NP-020455) defines the Shared Network Area Identifier. This CR is required, independent of which of the two solutions is used for transport of SNA access information.

CR 29.002-466r1 and CR 29.010-058r1 (in NP-020456) define respectively the changes to the MAP protocol and the changes to the interworking between the MAP protocol and access signalling protocols required to transport SNA access information at the MAP level. These CRs are linked.

CR 29.010-075 (in NP-020457) defines the changes to the interworking between the MAP protocol and access signalling protocols required to transport SNA access information encapsulated in BSSAP PDUs. This CR is linked to a CR to 48.008 which (at the time of writing) will be discussed in GERAN in the week beginning 26 August.

If GERAN approve the linked CR to 48.008, then CN have to choose one of:

- Approve CR 29.002-466r1 and CR 29.010-058r1 and reject CR 29.010-075;
- Approve CR 29.010-075 and reject CR 29.002-466r1 and CR 29.010-058r1 (this is the option recommended by CN4).

If GERAN reject the linked CR to 48.008, then the only solution which CN can approve is the one in CR 29.002-466r1 and CR 29.010-058r1.

4.2.9 GERAN Iu mode (NP-020458)

NP-020458 contains 4 CRs to various specifications to support the introduction of GERAN Iu mode. These CRs are linked; they must be approved or rejected together.

CR 23.153-031r4 defines the changes to the stage 2 for Transcoder Free Operation

CR 23.205-026r4 defines the changes to the stage 2 for the Bearer Independent CS Architecture.

CR 29.002-462r1 defines the changes to the MAP protocol. A formal error in this CR was noted after it was approved by CN4. CR 29.003-462r2 corrects this error; it is submitted by the original source company (Siemens) as a direct input to CN plenary in NP-020399.

CR 29.010-060 defines the changes to the interworking between the MAP protocol and access signalling protocols.

4.2.10 Global Text Telephony (NP-020459)
NP-020459 contains 5 corrective CRs to the Bearer Independent CS Architecture stage 2 & 3 specifications.

CR 23.205-029r1 corrects misalignments between the stage 2 & 3 specifications for the Bearer Independent CS Architecture, related to the handling of Global Text Telephony.

CR 23.205-030r1 corrects misalignments between the stage 2 for the Bearer Independent CS Architecture and the Global Text Telephony stage 2 (23.226).

CR 29.232-037r1 corrects misalignments between the stage 3 for the Bearer Independent CS Architecture and the Global Text Telephony stage 2 (23.226).

CR 29.232-038r1 corrects internal misalignments in the stage 3 for the Bearer Independent CS Architecture, related to the handling of Global Text Telephony.

CR 29.232-039r1 aligns the procedures for prepare bearer and reserve bearer in the stage 3 for the Bearer Independent CS Architecture, related to the handling of Global Text Telephony.

4.3   Release 6 CRs

4.3.1 GPRS (NP-020461)
NP-020461 contains 2 CRs to the GTP specification.

CR 29.060-322r1 clarifies the way in which the source IP address in Response messages is populated.

CR 29.060-323r2 adds an internal reference to clarify the handling of the Version Not Supported message.

If either or both of these CRs are approved, CN need to decide when they should be implemented, to trigger the creation of 29.060 v6.0.0.

5   Draft Technical specifications and reports

CN4 have no technical specifications or reports to offer for approval.

6   Work organisation

6.1   Work Item descriptions

We have one work item description to offer for approval, which is in NP-020462: the protocol definition for the Mn (Media Gateway Control Function to MM-Media Gateway.) interface.

6.2   Review of the work plan

We have reviewed the progress on activities in CN4 against the work plan (version of 9 April 2002). The updated information in table 2 below was drafted in CN4 #15 and our MCC expert, Kimmo Kymäläinen, has incorporated it in the updated work plan. The table does not include information on work plan items which were shown as complete in the status report to CN #16.

Table 2: Updates to the work plan from CN4

Unique ID	Description	Updated status
2028	Enhanced HE control of security (including positive authentication reporting): Feasibility study on network impacts	We are still waiting for input from SA3.
14001	Mc interface (IM-MGW – MGCF) enhancements	Work Item Description is presented for approval.
14008	Generic User Profile: stage 3 – Network	No contributions received in CN4
33005	MAP application layer security: stage 3 for key distribution	Requirements analysis work is ongoing in CN4; end date is not yet determined. WID expected to be presented for discussion in CN4 #16.

7   CN4 meeting calendar

The invitations have gone out for the last two meetings of CN4 in 2002; we have a confirmed host and venue for the first meeting in 2003, and an offer from our Far Eastern colleagues (in China and Japan) to host the last meeting in 2003, somewhere in Asia (which gives a wide range of latitude and longitude!). The calendar is still open for the middle three meetings!

Table 3: CN4 meeting calendar to the end of 2002

Date	Meeting	Venue	Host
23 – 27 September 2002	CN4 #16	Miami Beach, Florida, USA	North American Friends of 3GPP
11 – 15 November 2002	CN4 #17	Bangkok, THAILAND	Japanese Friends of 3GPP
10 – 14 February 2003	CN4 #18	Dublin, EIRE	European Friends of 3GPP
7 – 11 April 2003	CN4 #19		
19 – 23 May 2003	CN4 #20		
18 – 22 August 2003	CN4 #21		
27 – 31 October 2003	CN4 #22	"Somewhere in Asia"	Japanese Friends of 3GPP & CWTS

7   Acknowledgments

First, I have to thank Kimmo Kymäläinen for providing the excellent support which we have come to expect from the MCC. Kimmo had something of an unusual experience for our last meeting: he went to Helsinki as a visitor…

The two vice-chairmen, Peter Schmitt and Toshiyuki Tamura, have again been busy chairing sessions both formal and informal, which has allowed us to deal with most of the documents which were submitted; it will be interesting to see who is elected to which office in CN4 when I retire.

The CN4 participants have produced an amazing number of documents; by the time we reached the document deadline for the last meeting, we had consumed almost 200 document numbers (although there was a scattering of withdrawals and revisions of earlier documents, which meant that we had about 180 documents to handle), and by the end of the meeting we had used exactly 330 numbers: based on the number which we have had so far, we will almost certainly break the barrier of 1500 documents during the year. We have worked some long days – apart from the Wednesday, when we had to finish at a half-way sensible time to let people go to the social event!

Finally, I would like to thank the hosts of our meeting. We managed to catch good weather from the short Finnish summer (that's the way our Finnish hosts described it!) for almost the whole week, and most importantly for the social event on the Wednesday evening, a very enjoyable barbecue outside, with entertainment from a live band, who showed that musical talent is part of the repertoire for a communications company!